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Childcare as a barrier to completion of a short-term certificate training program: The role of the community college, community organizations, and the impact on local workforce needs

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**Childcare as a barrier to completion of a short-term certificate training program:
The role of the community college, community organizations, and the impact on local
workforce needs**

by

Erin Powers Daley

A dissertation submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of
DOCTOR OF PHILOSOPHY

Major: Education (Educational Leadership)

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The student author, whose presentation of the scholarship herein was approved by the program of study committee, is solely responsible for the content of this dissertation. The Graduate College will ensure this dissertation globally accessible and will not permit alterations after a degree is conferred.

Iowa State University

Ames, Iowa

2020

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DEDICATION

This dissertation is dedicated to:

Ava Daley- To my daughter who inspires me to fight for what I believe, who feels everything and loves so big. May you always know your worth, may you always follow your heart, and may you always speak for those who do not have a voice.

Liam Daley- To my son who fills my cup each day with your endless love and always knows when I need a hug. May you always bring a smile to everyone's face, may you never lose your sense of exploration and wonder, and may you always keep your determination and drive.

Preston Daley- To my son who has a fierce spirit. May you always know how brave you are, may you always keep your inquisitive mind, and may you always know what pure joy you bring to the world.

Matt Daley- To my husband who helped hold everything together while I pursued my dreams, who is my constant support and driving force to be better, and who always tells me anything is possible.

Craig Powers- To my dad. You taught me what hard work was, how waking up early is the key to success, and how to never back down from what I believe in. Thank you for being my biggest fan, no matter what I was doing.

Cheryl Powers- To my mom who raised me and taught me that not everything will be easy, but that everything happens for a reason. Thank you for showing me strength and commitment to reaching a goal.

Ashley Powers- To my sister, who doesn't see her own worth, nearly enough. You have been a driving force throughout my journey to do better and stay strong. May you someday see all the beauty and joy you bring to the world and see what greatness you have to share.

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ABSTRACT

This qualitative case study examined one community college's attempt to better meet the needs of the single mother student population and create a better understanding of the barriers encountered by single mothers in their access to and completion of a short-term certificate program at a community college. Through a qualitative case study of single mothers at a rural community college, community college administrators, and workforce partners, the study sought to understand barriers encountered by single mothers accessing higher education at a community college and how the development of a child care assistance program brought the community college and multiple community partners together to help increase supports for single mothers, while simultaneously attempting to increase the workforce pipeline by providing child care assistance to participants in a short-term certificate training program.

The research questions guiding this study sought to identify the role the community college can play in increasing access to education by eliminating the perceived barrier of lack of childcare for the targeted population of single mothers. While examining a unique program developed to help support single mothers' educational access, the study sought to better understand the unique challenges single mothers face while pursuing both higher education and employment.

Results of the study showed that single mothers faced a myriad of barriers in their pathway to educational attainment and that these barriers extended to the workforce. The childcare assistance program, while successful in eliminating a barrier during the short-term training program, was not enough to eliminate the barrier for single mothers while in the workforce. The pilot program examined in this study was successful in creating an awareness of the need to think differently about how to serve single mothers and of the importance of a

community partnership to develop a program to successfully serve single mothers at community college.

CHAPTER 1. PROBLEM, PURPOSE, AND SIGNIFICANCE

Single mothers are a target population that post-secondary institutions must look at ways to help support, which would help shift the perception that women are a less valuable asset to the economy when compared to men (Abramovitz, 1996, p. 38). Examining single mothers' access to higher education in terms of its historical background and the stereotypes through which society has portrayed single mothers creates an opportunity for community colleges to help change the narrative of single mothers. It is well-documented in many studies that single mothers encounter barriers to completion of post-secondary education that are different from those of their male or married female counterparts (Hegewisch et. al., 2018; Kramer et al., 2015). The barriers faced by single mothers often fall outside of their educational or work environment yet have a direct impact on their ability to participate in either education or work (Beeler, 2016). Community colleges, as open-access institutions, provide a platform to create innovative and forward-thinking programs, partnerships, and delivery methods that support college-going among single mothers.

Post-secondary institutions have the opportunity to support single mothers to pursue higher education through innovative programming that supports them both academically and socially while they pursue a post-secondary degree. Women are the majority among full-time workers whose earnings leave them trying to support a family with near-poverty level incomes (Hegewisch et al., 2016). One in four Hispanic women (24.2 percent) and close to one in five Black women (18.1 percent) work full-time and earn less than \$400 per week (*Women in the labor force: a Databook: BLS Reports* 2019). In 2015, the median earnings for women working full-time, year-round amounted to only 79 percent of men's full-time, year-round median

earnings. Yet, women in the workforce are more likely than men to have finished high school, have some post-secondary college qualifications, and have a two-year or four-year degree (*Women in the labor force: Databook : BLS Reports 2019*).

Single mothers are completing post-secondary education at a lower rate than married or partnered post-secondary counterparts; this lack of degree completion leads to continued employment in low paying jobs or not participating in the workforce (Haleman, 2004). The participation of single mothers in low paying jobs or lack of participation in the workforce contributes to a poverty cycle among single mothers, thus impacting the generations to follow by continuing the cycle of poverty (Zhan & Pandey, 2004). Increasing access to post-secondary education for historically marginalized populations, in this case, single mothers, would create a mutually beneficial relationship between single mothers, community colleges, and workforce partners. Expanding access to post-secondary education, primarily training offered at community colleges, develops a more diversified workforce and provides education to single mothers bound by location. The landscapes of the workforce and community college education have long been closely connected and bridging the gap between colleges and employers is essential to maintaining a well-trained, diverse workforce pipeline to help fill skills gaps.

With historically low unemployment rates and high demand for middle-skills employees, the country is facing a workforce shortage (National Skills Coalition, 2017). The National Skills Coalition, which was formed in 1998 after a series of federal policies diverted money away from investing in skilled trades, provides insight into the growing skills gap in the United States. The National Skills Coalition 2017 report indicates that between 2014-2024, 48% of the jobs available in the United States will require a credential beyond a high school diploma but not a four-year degree (National Skills Coalition, 2017). Community colleges must examine the

format, access, and demand for programs that will help meet the needs of the changing workforce. Community colleges have the opportunity to expand their course format offerings; whether online, competency-based, or in traditional classroom settings, community colleges can adapt their classes to the needs of the changing student population. Format changes alone will not help change access for all students, so community colleges will benefit from examining how they can partner with various agencies outside of higher education to help support the completion of post-secondary education among the single mother population.

State of Iowa Workforce Initiatives

From a workforce perspective, women have long been underpaid when compared to their male counterparts; this undertone of “women as a weaker sex” has long played out in job openings and pay as employers view women as secondary earners, ignoring the population of single mothers who are the sole income earners in the family unit (Abramovitz, 1996, p. 38). With historically low unemployment rates across the United States, the growing middle-skills gap has created a shortage of skilled U.S. citizens who can fill the job demand. Currently, the nation is facing a middle-skills gap of 10%, indicating that 53% of the jobs available in the United States require middle-skills, but according to the National Skills Coalition (2018), only 43% of the nation's citizens have the skills required to meet these demands (National Skills Coalition, 2018).

According to the State of Iowa, since the 2008 Great Recession, when unemployment rose to nearly 7.0%, a slow decline in the unemployment rate over the last 11 years has indicated a healthier economy but has led to historically low unemployment rates in the State of Iowa (Iowa Workforce Development, 2019). In May of 2019, the state average unemployment rate was around 2.1%. Coupled with the steady rate of the labor force, which has remained steady

since 2008, this means that the State of Iowa is at near full employment of its residents who are capable of working (Iowa Workforce Development, 2019). This indicates that those Iowa residents who can participate in the workforce are already participating. According to the U.S. Bureau of Labor Statistics, the trend of full employment across the nation is steady. It is estimated that from 2016-2026, the average age of workforce participation will decrease due to the exit of baby boomers. This exit will lead to a gap in middle-skills as most are exiting fields that require less than a four-year post-secondary education but more than a high school diploma (Bureau of Labor Statistics, 2017).

A workforce initiatives proposal by Governor Kim Reynolds in 2017, known as the "Future Ready Iowa Act," aims to increase the number of Iowa residents with post-secondary education to 70% by 2025 (futurereadyiowa.gov, 2019). The Future Ready Iowa initiative is comprised of three main components to increase workforce training, subsequently increasing the number of Iowans who receive some form of post-secondary education training. The Last Dollar Scholarship component of Future Ready Iowa aims to help provide financial support to recent high school graduates and adult learners in their pursuit of a post-secondary credential in high-demand career areas (Iowa College Aid, 2019). The Last Dollar Scholarship component is aimed at supplementing state and federal grant dollars and helping to fill the financial gap for students. The Last Dollar Scholar program is intended to help decrease the financial barriers that recent high school graduates and adult learners experience when deciding to pursue post-secondary education (Iowa College Aid, 2019).

The second component of Future Ready Iowa is the Future Ready Iowa Grant program. This program is geared towards adult learners who have earned at least half of the required credits towards a bachelor's degree in a high-demand field. The Future Ready Iowa Grant

program is a renewable scholarship program that provides financial assistance to current Iowa residents who have not been enrolled in a post-secondary college program for at least two years and are able to enroll in at least 6 credits per semester (Iowa College Aid, 2019). The Future Ready Iowa Grant program will provide financial assistance, up to \$3500 annually, after the student has applied all other state and federal financial aid sources towards their tuition (Iowa College Aid, 2019).

The third component of the Future Ready Iowa Initiative is the Employer Innovation Fund. The Employer Innovation Fund allows employers, community organizations, and others to partner and creates opportunities to expand training for Iowa Residents to earn credit or non-credit training credentials that will lead to employment in a high-demand career (Future Ready Iowa, 2019). The Employer Innovation Fund will offer awards through competitive grant applications, with recipients of the grant being selected by Iowa Workforce Development. The Employer Innovation grant intends to expand opportunities for Iowa residents to complete training that will lead to employment in a high-demand area (Future Ready Iowa, 2019).

All three components of the Future Ready Iowa Initiative reflect national movements directed at increasing the post-secondary education of the population in high-demand, high-skill areas (Futurereadyiowa.gov 2018; National Skills Coalition 2018). The Future Ready Iowa Initiative is aimed specifically at both upskilling current residents in high-demand areas and encouraging completion of post-secondary degrees. The Future Ready Iowa Initiative will impact the opportunities provided to many Iowans in accessing and completing post-secondary education and has the potential to reduce the financial burden placed on Iowans receiving post-secondary education. The current state initiatives are focused on increasing the skilled workforce in the state of Iowa. The current policies support the education of low-income students to

increase access and completion of post-secondary education by eliminating the financial burden. The single mother population living in Iowa may have an increased opportunity to receive no-cost education in a high-demand area, thus likely increasing their earning potential and decreasing their financial risk and burden in pursuing post-secondary education.

The demands of the workforce are changing quickly, and employers need employees who can think outside the box, address the growing range of problems in our society, and provide technical skills. Community colleges are the connecting piece to foster economic progress and growth while providing innovative thinkers who will strengthen the workforce and society (Mettler, 2014).

History of Community Colleges and the Workforce

The connection between completion and workforce participation is closely linked to the success rates of single mothers and access to quality education that supports their unique lifestyle when compared to that of partnered or single students. Single mothers represent a potential workforce population; however due to barriers to flexible scheduling or supports outside of education, they are often not only unable to complete their education but less likely to participate in the workforce upon completion (Cerven et al., 2013). Therefore, community colleges can utilize their workforce missions to help support single mothers both inside and outside of the institutions if they are able to leverage enough relationships and resources.

Community colleges have long been institutions of open access, opening their doors to historically underrepresented student populations across the nation and collectively sending the message that anyone can be allowed to pursue post-secondary education. Bragg and Durham (2012) argue that if it were not for community colleges, the overall higher education system would enroll fewer students from racial and ethnic minority groups, as well as fewer students

who identify as first-generation, low-income, or immigrant students. The open-door policy that community colleges practice not only makes them essential access points for under-represented students and community members but for many, living in a rural area, this is the only point of education they may access after high school. The ease of access of community colleges in rural Iowa, specifically, makes the community college an affordable option for students who may be bound by transportation or living needs due to their rural living environment.

Although community colleges' open access policies make it easier for single mothers to attend post-secondary education, these institutions have limited policies, programs, or procedures that ensure the single mother will persist through completion of a degree (Cerven et al., 2013). Single mothers need supports that provide stable housing, employment with reliable income, transportation, and childcare (Beeler, 2016; Goldrick-Rab, 2015). In addition to the basic needs identified, the single mother is also the sole provider for her children, thus adding a layer of needing to feel confident that the basic needs of her children are being met (Cerven et al., 2013). Yakaboski (2010) examined what single mothers experience while pursuing post-secondary education and identified barriers such as financial challenges in paying for daycare and student fees, and faculty and staff attitudes toward their roles as single mother students. Findings indicate that single mothers look for childcare assistance, family-friendly campus events, and schedules that align with their children's school schedules (Yakaboski, 2010).

Community colleges are the access point for rural communities because of a structure that centers around industries that need specific vocational training (Brown & Schaft, 2011). For rural communities, education plays a crucial role in sustaining a community through tough economic times (Sherman & Sage, 2011). Sherman and Sage (2011), identified rural "brain drain" as the exodus of educated people from certain places. This out-migration of educated

populations from rural areas impacts rural communities and the population that is crucial to maintaining their tax base (Carr & Kefalas, 2009). Single mothers are among the population of students that are hoping to begin the post-secondary education journey at a rural community college due to ease of access, in terms of both entrance standards and location.

The historical context of community colleges and their direct connection to the workforce initiatives in the State of Iowa is important to note for the context of this study. The community college mission in Iowa has been to support the local workforce needs and provide training to help increase the workforce pipeline. The single mother population has historically been under-represented among those completing degrees at the post-secondary level when compared to partnered or single non-parent students' completion rates (Beeler, 2016).

History of Iowa Community Colleges

Iowa's community college system consists of 15 unique community colleges, with a shared common mission of advancing the welfare of the state and its residents. Built upon open access and considered the most egalitarian post-secondary educational institutions, Iowa's community colleges have provided access to education to diverse populations and adapted to community needs for over fifty years (Varner, 2006). The community college model was modeled after junior colleges and vocational programs that had been established by local school districts (Varner, 2006). According to Friedel (2010), the development of Iowa community colleges was dependent upon the connection between workforce development and college development, coordination of local and statewide governance, and legislative initiatives and state policies that supported college growth (Friedel, 2010).

The first two-year post-secondary institution in the State of Iowa was established in 1918. The first junior college, established by Mason City schools in 1918, successfully proved a model

of post-secondary education that could be implemented by Iowa's public schools. By 1930, 32 junior colleges were organized in Iowa, offering the first two years of a Baccalaureate program (Friedel et al., 2015). Through the 1940s the junior colleges served the state; however, with the passage of the G.I. Bill in 1944, creating a demand for higher education in Iowa and nationally, the Truman Commission recommended publicly supported two-year institutions that would provide open access to education for the nation. Studies conducted to determine how to meet the growing demand for education and training indicated that the school-based junior colleges were struggling to remain open. Due to the location of the junior colleges, inadequate enrollment, faculty, and guidance from the state, more than half were closed by the end of the Korean War (Friedel et al., 2015).

With several university studies between 1938-1953 recommending the establishment of new regional colleges, no new junior colleges were established after 1953 (Varner, 2006). In a 1961 legislative session, it was recommended that a comprehensive regional community college system be developed, governed by local boards and financially supported by the state. The Iowa Department of Public Instruction (now called the Iowa Department of Education), directed by legislation, conducted an 18-month study that led to the recommendation of creating 16 regions with specific boundaries and central campuses that would provide all Iowans access to a campus within an hour's drive (Friedel et al., 2015). These recommendations led the General Assembly to form an interim committee to continue to study the recommendations. This interim committee report recommended "permitting areas to form merged area schools, governed by a local board with the authority to tax and charge tuition, and state funds allocated for operations and capital outlay" (Friedel et al., 2015). Junior college deans and vocational directors opposed combining

transfer and vocational programming in one comprehensive institution; however, the committee eventually supported coupling the programs.

In 1965 the Merged Area Schools Act was passed and signed. This permitted the development of a statewide system of public two-year institutions (Lowery, 1982). These institutions were developed as either comprehensive community colleges or area vocational education schools. In 1965, eleven of the fifteen schools were functioning as comprehensive community colleges while the other four were vocational institutions. By 1967, fifteen self-identified area districts were formed and approved by the Iowa Board of Public Instruction. (Friedel et al., 2015). By 1992, all of the fifteen schools had expanded to the comprehensive community college model (Friedel et al., 2015). According to Iowa Code Chapter 260C.1, the community colleges must provide training, retraining, and necessary preparation for productive employment of all citizens (Iowa Code Chapter 260C.1). This requirement supported local governance structures, and the community colleges were able to work closely with local employers in their regions to develop and implement new vocational training programs that supported the workforce needs of each community (Friedel, 2010).

This local approach to forming region-based institutions democratized post-secondary education in the state of Iowa. As adult learner demand increased, Iowa community colleges began to offer more adult learner and high school completion programs (Varner, 2006). This workforce preparation focus for Iowa community colleges was strengthened with the Iowa Industrial New Jobs Training Act of 1983, which allowed community colleges to offer customized training and economic development programs that could be responsive in offering training to the local communities (Varner, 2006). The community colleges' involvement in local communities and ability to address local needs allowed the community college model of local

governance to remain. The New Jobs Training Act of 1983 would later become known as Iowa Code Chapter 260E and enabled community colleges or third-party trainers to provide customized training to new employees of business startups or businesses expanding in their sector (Friedel, 2010). Community colleges would issue tax exempt or taxable bonds for up to ten years for eligible businesses, and the proceeds from the sale of the bonds would cover the training and administrative costs (Friedel, 2010).

In 1985, the Iowa Legislature passed the Iowa Industrial Jobs Training Act, later known as Iowa Code Chapter 260F. The 260F program expanded the customized training opportunities offered to new businesses in the 260E program to existing businesses and incumbent workers (Friedel, 2010). The 260F program supported forgivable loans being given to businesses or a consortium of businesses to offer training ranging from English as second language through specialized custom trainings. Once training programs were completed within the agreed upon time and an adequate number of employees had been trained, the loans provided to the business were forgiven (Friedel, 2010).

Oversight of both 260E and 260F dollars was given to the Iowa Department of Economic Development rather than the Iowa Department of Education. The oversight of the funds, granted through legislation, by the Department of Economic Development helped the community colleges become recognized as important contributors to the economic growth and stability of the State of Iowa (Friedel, 2010). These two programs helped community colleges become established and recognized providers of quality, customized training for new and existing businesses and their employees. In 1995, the development of Workforce Development funds insured that the 260E and 260F programs were sustainably funded with a permanent and predictable funding stream (Friedel, 2010).

In addition to the state's 260E and 260F funding streams dedicated to workforce initiatives provided by community colleges, state programs such as the GAP tuition assistance program and the Pathways for Academic Career and Employment (PACE) program were created to help support the workforce initiatives helping to encourage Iowans to receive employment training. The GAP Tuition Assistance program was established to help provide Iowa community colleges with tuition assistance on the basis of need for students pursuing short-term training in a high-demand career field (*GAP Tuition Assistance Program, 2019*)

The GAP Tuition Assistance Program is a part of the Iowa Skilled Worker and Job Creation Fund (*GAP Tuition Assistance Program, 2019*). The GAP Tuition Assistance Program provides funding to community colleges to help fill the tuition gap for eligible Iowans who are enrolled in a certificate training program for in-demand occupations (*GAP Tuition Assistance Program 2019*). Eligibility for GAP tuition assistance is dependent on financial need and the applicant's capacity to complete the certificate, gain employment, and maintain full-time employment over time (*GAP Tuition Assistance Program, 2019*). The GAP Tuition Assistance Program allows community colleges to provide tuition assistance, including the cost of required books and equipment, as well as pay for background checks and testing fees. The program helps alleviate the financial burden on eligible participants choosing to pursue a non-credit certificate training program through the Iowa community college system (*GAP Tuition Assistance Program, 2019*)

The Pathways for Academic Career and Employment (PACE) program also supports workforce initiatives in the state of Iowa by providing funding for academic and employment programs (*Pathways for Academic Career and Employment (PACE), 2020*). The PACE program target population encompasses persons who are deemed to have low skills, persons with incomes

below two hundred and fifty percent of the federal poverty level, unemployed or underemployed workers, and dislocated workers (*PACE, 2020*). Under the PACE program, eligible programs should further partnerships between community colleges and industry or non-profit organizations that support PACE outcomes. Identified PACE outcomes for the target population are the acquisition and demonstration of competency in basic skills, acquisition and demonstrated competency in a specialized technical field, completion of a post-secondary education, attainment of a national career readiness certificate, obtaining an employer validated credential, or securing gainful employment in a high-quality local job (*PACE, 2020*). In addition to providing financial assistance to students pursuing education at a community college, the PACE program can also be used to financially support the employment of Pathway Navigators. Pathway Navigators assist students by providing services and assistance to ensure that students successfully complete their programs (Iowa Department of Education, 2019). The PACE program differs from the GAP Tuition Assistance Program as it is applied to both credit and non-credit programming at the community college. The community college system in Iowa has a strong system that supports local economic efforts to increase the workforce, while supporting the traditional mission of community colleges as institutions that provide education ranging from transfer programs, to vocational education, to adult programming (Friedel, 2010).

Previous research suggests that the impact of the completion of education by single mothers is a topic that should matter to higher education, policy makers, and the workforce. Single mothers are a growing population of potentially skilled and trainable citizens who can help fill the workforce pipeline. The growing number of a single female head of household families indicates that the family context is changing. Post-secondary education systems, social

welfare systems, and workforce systems must adapt to meet the needs of single mother households to support a workforce and college-going mentality for all.

To summarize, over the last 54 years, Iowa's community college system has successfully formed close working relationships with local employers that allow community colleges to gain technical expertise, develop facilities, and procure equipment and technology to develop and implement training programs to support the changing workforce demands of each community college region (Friedel, 2010). The use of statewide GAP dollars provided tuition assistance for the single mothers who participated in this study. These dollars helped to cover the full cost of the single mothers' training program. Without these GAP dollars, the cost of the training would have been passed onto the single mothers, likely impacting their ability to afford the class. The PACE program pays for the salary of the staff that assisted the single mothers during their program at Aurora Community College (ACC; a pseudonym) while also providing additional supports such as transportation and supplies. The braided funding stream, with the versatility of the PACE dollars, allows the dollars to be used in a variety of ways that helped to provide coaching supports for single mothers while also providing supports to help reduce the barriers to completion.

This study is intended to fill the gaps in previous research related to short-term certificate training programs geared towards providing training for entry-level jobs in the local region as well as the role a community college and community partners can play in enhancing successful completion of short-term training programs. Previous research on single mothers' participation in higher education has focused on traditional 1- to 2-year programs associated with post-secondary education. The goal of this study is to provide community colleges and state policy writers a better understanding of the need to support single mothers on their journey to completing a short-

term training program in order to meet the changing needs of the current workforce and thus help to not only alleviate a skills gap in employment but also decrease unemployment rates in rural areas across the state.

Purpose

This study will fill research gaps regarding post-secondary completion among single mothers by exploring specifically the attainment of a short-term training certificate geared towards workforce participation by single mothers at a community college. Previous research has not examined short-term certificate programs and the barriers encountered by single mothers in completion, specifically at community colleges. Historically, Iowa community colleges were founded on their connection to the workforce needs of local communities and provided workforce preparation programs at the local community level (Varner, 2006). Community colleges, in the state of Iowa, cover a wide area across the state. With only three regents' universities, two of which are in eastern Iowa, rural students are geographically closer to a community college than a university (Gillon, 2015). The geographical accessibility of community colleges in Iowa makes the community college environment relevant to research on the role community colleges can play in reducing barriers and increasing access by leveraging partnerships in local communities.

The goal is to provide community colleges and state policy makers with an understanding of the importance of increasing support for single mothers to complete short-term certificates in order to meet the demands of the changing workforce and combat unemployment in rural communities.

The intent of the study was to identify how Aurora Community College designed a childcare assistance program by leveraging community partnerships to increase the participation

of single mothers in post-secondary education and the workforce. The childcare assistance program was aimed at increasing access to and completion of a short-term certificate training program by eliminating the barrier of lacking reliable childcare in order for single mothers to access a post-secondary short-term certificate training program. A close examination of the childcare assistance program was conducted via interviews with the community college administrators, workforce administrators, and key community partners involved in the development of a pilot program, providing a holistic examination of the community approach to building a skilled workforce and creating a unique program to eliminate barriers to both the workforce and education in the community. Two single mothers, one of whom participated in the child care assistance program while she completed her training at ACC and the other of whom had received a short-term training certificate but was not eligible to participate in the program provide the single mother perspective on accessing education and workforce challenges they confront due to their single mother status.

The purpose of this qualitative case study is to examine a childcare assistance program that was developed by Aurora Community College and community organizations to help increase access to education for self-identified single mothers. The study will examine the partnerships that were needed to develop the program and the program development process, while also providing insight from single mothers who have completed a short-term certificate training program at ACC. The single mother perspective is meant to expand knowledge about the intent and experiences of the childcare assistance program through the lens of the population the program is intended to serve. The study seeks to understand the experiences of single mothers who completed a short-term certificate training program and participated in the child care assistance program while closely examining the challenges they encountered while attending

post-secondary training and entering the workforce. The study seeks to answer the following research questions:

1. What is the role of the community college in providing supports outside of education to help increase access, completion, and placement into employment of the single mother student population?
2. What is the role of workforce partners in helping support initiatives to increase the enrollment of single mothers in community college short-term certificate training programs?
3. What was the impact of the childcare assistance program that was designed to help support single mothers in accessing education at the community college?
4. How was the childcare program developed, adapted, and modified to meet the needs of the single mother student population?
5. What workforce and educational barriers are faced by single mothers who have completed a short-term certificate program at a rural community college?

Definitions

For purposes of this set of preliminary questions, post-secondary education will be defined as a two-year community college where the student is pursuing a short-term certificate training. A short-term certificate is an education in a high-skill, high-demand area that leads to employment or continued education.

Child Care Assistance Program: A pilot program started by Aurora Community College that provided free childcare during short-term certificate training in the program areas of Childcare, Phlebotomy, Industrial Sewing, and Customer Service.

Single Mother: A self-reported single mother, between the ages of 18- 35, with children under the age of 18 who is pursuing, has completed, or has stopped out of a non-credit short-term career pathway certificate.

Single Parent: An individual who is unmarried or legally separated from a spouse and has a minor child or children for which the parent has either custody or joint custody; or an individual who is pregnant.

Middle-Skills Jobs: Jobs that require more education and training than a high school diploma but less than a four-year college degree

Short-Term Certificate: A credential that is obtained at a community college that can be completed in 12 months or less. This credential leads directly to employment or ladders into a credit program at the community college.

CHAPTER 2. LITERATURE REVIEW

Research on single mothers pursuing post-secondary education has primarily focused on a two- or four-year educational pathway and on the challenges encountered in the pursuit. Limited research has focused on the impact of lower completion rates of single mothers in post-secondary education on workforce needs. Limited research has examined short-term certificate training programs and the role that barriers play in the completion rates of single mothers and their decision to persist in or enter the workforce. As a whole, the research indicates that a completion problem rather than an access problem exists for single mothers and that single mothers encounter barriers to completion of a post-secondary education that are different from barriers encountered by married students or unmarried students without children.

I began my literature search using both Google Scholar and the Iowa State University online library. Common terms used in the search included “single mothers and community colleges,” “workforce participation rates and single mothers,” and “economic impact post-secondary education training among single mothers.” Further searches were expanded based on a review of references cited in original set of materials found. I expanded my search to EBSCO, JSTOR, and SAGE Journals. I also expanded my research beyond education and included sociological searches focused on family and economics. The figure below showcases my literature search by breaking down the categories of areas researched, and articles cited in the literature review. The primary areas searched included Single Mothers, Community Colleges, Rurality, Workforce, and Welfare Reform. Each area identified in my search process held a key area of focus to help develop a holistic understanding of the history of single mothers in both higher education and society. The collection of research gathered on student support programs at

community colleges helped me to better understand the current practices and historical programs meant to support students accessing education at community colleges.

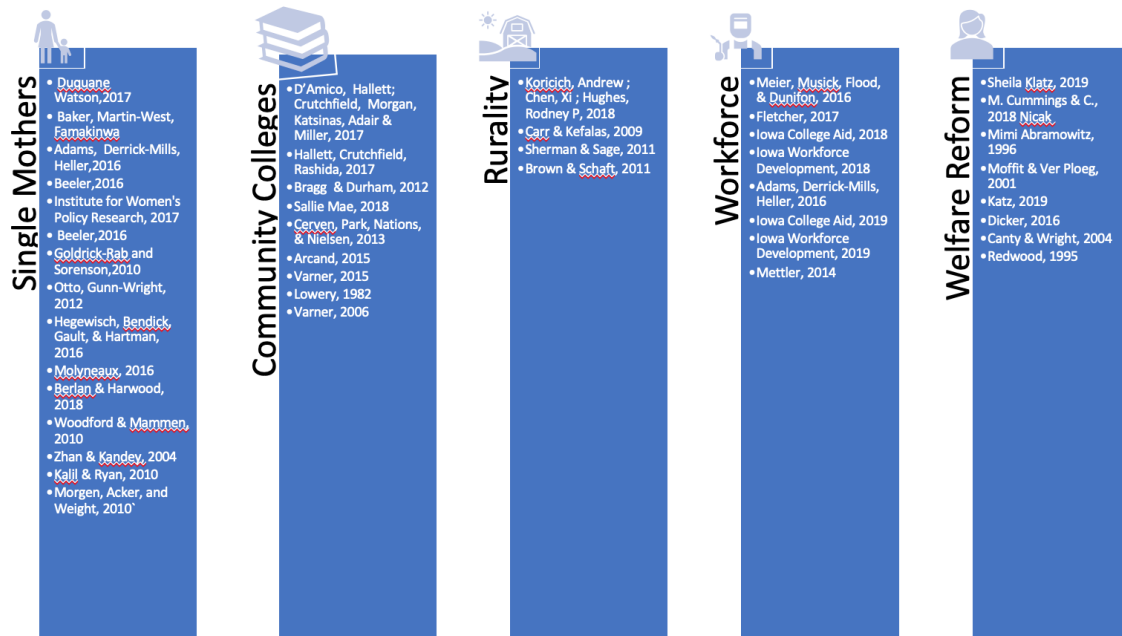


Figure 1. Literature Review Mapping

History of Welfare Reform

Based on research related to single mothers' completion of post-secondary education and workforce participation, it is necessary to provide a historical review of the role played by community colleges, workforce initiatives, and welfare reforms that lead a single mother to pursue the workforce, post-secondary education, or both. The historical review of the workforce and welfare helps to frame the opportunities that are presented to the single mother in her attempt to increase her social mobility. The history of both social welfare reform and workforce initiatives provides a reference to the barriers that single mothers encounter and helps provide the reader with a frame of reference regarding the choice the single mother must make in her pursuit of education or workforce training. Historically, the single mother was limited in her educational

pursuits because of the work first requirements of social welfare programs. The next section outlines the historical context of the workforce and welfare reform to help inform the literature review on single mothers pursuing post-secondary education.

History of Welfare Reform and Single Mothers

In order to examine post-secondary education access and completion by single mothers, it is important to review the close relationship between welfare programs, post-secondary education, and the work requirements that impact the single mother's opportunity to participate in post-secondary education. I will examine the intersection between welfare reform policies over the past 30 years and waves of feminism to examine more closely the social roles of women in past and current society.

Throughout the next sections, I provide a deeper examination of social roles and the development of welfare to work programs to support families. I then examine single mothers' access to and participation in post-secondary education, specifically at the community college level, along with the racial demographics of single mother households in America today. The goal of presenting the role of social welfare reform and higher education participation of single mothers is to help readers better understand the ways in which single mothers are faced with barriers to improving their quality of life and are often forced to choose between participating in the workforce or education, while being provided limited support. Throughout history, women have been impacted by the various forms of welfare reform. The following historical perspective on welfare reform provides background on women's roles in society with the hope of creating a better understanding of how single mothers are provided access to social programs that may lift them out of poverty. Women have experienced changes in social status, access to higher-income

employment opportunities, and through various waves of feminism, the role of women in society has begun to be more inclusive.

From a historical perspective, women in society have been viewed as “weaker sex,” reliant on men for support and protection (Abramovitz, 1996, p. 36). The historical belief in women being dependent upon men resulted in economic insecurity due to only low paying jobs being available to women, thus perpetuating the myth that a woman must rely on a man for economic support. The family ethic, or the development of women’s roles and rules in society, created a means to maintain the status quo of women in society (Abramovitz, 1996). The family ethic created a division between male and female roles, determining that women's roles of production in society resided in the home, thus supporting the male-dominated workforce allowing men's societal worth to be measured by their productivity outside of the home. From a psychological perspective, the perpetuation of the myth that a woman must rely on a man for economic security made women's access to programs that would accommodate economic independence harder and harder. As women were forced to fit the mold of what Western society expected of them, women slowly became dependent on men for needs beyond the financial, thus creating a subordinate role both in the home and in society (Abramovitz, 1996; Morgen et al., 2010).

The family ethic theory provided white middle-class women who were married the opportunity to embrace society's image of a good mother or a good wife while denying the same to women of color and women from poverty. (Abramovitz, 1996). Women of color and women from poverty were forced to enter the workforce to mitigate the risks of low-income living while simultaneously needing to accept lower wages and longer hours when compared to their working male counterparts (Abramovitz, 1996; Morgen et al., 2010). The family ethic created a space for

welfare programs to create stratification among women by creating classes of those deserving of social welfare programs (i.e. married, stay at home mothers) and those deemed undeserving of social welfare programs (i.e. single, working mothers). Single mothers have been the target of ethical, moral, and political exclusions from public social welfare programs for many years. Social welfare programs have historically been written around a nuclear family of one father and one mother, thus favoring the conventional family unit (Abramovitz, 1996; Katz, 2019).

The Social Security Act of 1935 marked the beginning of political policies that would allow the transfer of economic resources from households that held a surplus to households that were in deficit to create a balance between income and jobs creation (Abramovitz, 1996; Moffit & Ver Ploeg, 2001). Social welfare programs have long favored the women who stay at home with their children while neglecting working women who are single earners for their families. In the early 20th century, during what has been identified as the first wave of feminism, women were working towards equal legal rights and voting rights for women. This first wave of feminism overlapped with the implementation of the Social Security Act of 1935.

The long history of social support programs that were developed for a family unit consisting of a father and mother has created a society in which single mothers are often forced to choose between working a low wage job while receiving little to no assistance or staying home with their children and increasing the likelihood that they will receive the assistance they need to provide a slightly better quality of life to their children (Moffit & Ver Ploeg, 2001; Morgen et al., 2010; Katz, 2019). This model of assistance has led to the perpetuation of the stereotype that single mothers choose not to work so that they may continue to receive public assistance.

The second feminist wave began in the early 1960s, with a focus on reducing the inequalities in sex, family, and the workplace that prevailed in the 19th and early 20th centuries. By 1967, the number of single mothers receiving welfare aid had created what we now refer to as the “Welfare Crisis” (Abramovitz, 1996, p. 334; Morgen et al., 2010). This welfare crisis shifted welfare policy to include the provision that work must accompany welfare benefits. In 1967, amendments to the Work Incentive Program (WIN) made work mandatory for all recipients of Aid to Family with Dependent Children (AFDC). From 1965-1972, anti-poverty and social welfare expenses doubled and access to AFDC grew, especially among families of color (Katz, 1996; Moffit & Ver Ploeg, 2001; Morgen et al., 2010). This anti-poverty investment was successful as the United States saw poverty rates cut nearly in half between 1959 and 1973, especially among groups with historically high rates of poverty (Morgen et al., 2010).

Under WIN, the unofficial work policy for recipients of AFDC was more clearly defined and required if recipients wished to continue to receive benefits (Abramovitz, 1996; Moffit & Ver Ploeg, 2001; Katz, 2019). Despite the implementation of WIN, the program itself was unsuccessful in helping to support a workforce-going mentality amongst its recipients, primarily single mothers. Because of the lack of adequately paying jobs to help lift single mothers out of poverty, WIN did little to increase the long-term participation of women in the workforce among those receiving public assistance.

The large majority of women participating in the workforce were only able to access temporary, low paying jobs that did little to decrease their reliance on public assistance programs, a trend that continued through much of the 1980’s. This led more women to continue receiving public assistance rather than pursue low wage jobs that did little to increase their financial independence to support their dependent children (Katz, 2019; Morgen et al., 2010).

During this time, the recognition that poverty was produced by historical race and gender discrimination, inequitable access to education, and low wage jobs with limited health insurance created a period of a decline in poverty rates by providing welfare programs (Moffit & Ver Ploeg, 2001; Morgen et al., 2010). However, this lasted only until the 1980s, when the Reagan era began in the United States (Morgen et al., 2010).

In 1996, the Personal Responsibility and Work Opportunity Act (PRWORA) became federal law. PRWORA reformed the welfare program to encourage welfare-dependent mothers to enter the workforce (Lee, 2009; Katz, 2019). PRWORA eliminated open-ended programs under AFDC, which resulted in programs that could support low-income families with time-limited cash assistance programs which now fell under the Temporary Assistance to Needy Families (TANF) block grant (Office of Family Assistance, 1996). The reform encouraged single mothers to enter the workforce to decrease the number of recipients of welfare; however, single mothers were still paid low wages that often did not bring them above the poverty line (Katz, 2019). Single mothers were forced to choose low paying jobs because TANF tightened the rules around eligibility. The definition of workforce preparation changed with TANF and the period during which cash assistance was available to welfare recipients was cut to 60 months, which restricted the amount of time available to welfare recipients to participate in post-secondary education (Katz, 2019). During this same time, the third wave of feminism was taking shape across the nation with a larger focus on equity across gender and races.

The third wave of feminism focused on abolishing gender role stereotypes and expanded feminism to all races, social classes, and cultures (Mack-Canty & Wright, 2004; Dicker, 2016). This third wave of feminism highlighted the intersectionality of women and the many layers of oppression that they faced related to their gender, race, and social class (Dicker, 2016).

Concerning the workforce, the third wave of feminism addressed workforce equity for women by addressing the glass ceiling and unfair maternity leave standards. The glass ceiling is defined as a barrier to advancement in a profession, with a focus on women and minorities. In 1991, as a part of Title II of the Civil Rights Act of 1991, the Glass Ceiling Commission was created to examine the perceived barriers to achieving advancement in the workforce encountered by women (Redwood, 1996). This initiative to address the notion of a glass ceiling indicated that there was a recognition of gender differences in the workplace and that the issue was no longer considered a myth. The Glass Ceiling Commission created twelve recommendations for improving the workplace by increasing diversity in organizations and reducing discrimination through policy changes. The work done by the Glass Ceiling Commission helped to identify means by which to support a more diverse workforce across gender and racial backgrounds (Dicker, 2016). The acknowledgment of a glass ceiling for women and minorities in employment helped spark conversations and to make more public the discrepancies in pay between men and women, and along racial lines.

The variations in welfare reform and public assistance programs, coupled with the waves of feminism, supported the advancement of women in society, education, and the workforce over the last 30 years. A myth about job mobility was perpetuated through the various welfare reforms; however, the majority of women were unable to find meaningful gains in employment that would lift them out of poverty (Moffit & Ver Ploeg, 2001; Morgen et al., 2010). The increased opportunities provided for increased financial gains in employment were often coupled with significant responsibilities that did not align with the pay increase. This discrepancy forced a woman to choose between family obligations and her career, with most welfare recipients

needing to choose the lower wage option and decreased responsibility to maintain their roles at home (Morgen et al., 2010).

Single Mother Participation in Higher Education

Single mothers make up an estimated 73% of single-parent students at higher education institutions (Thorman et al., 2012; IWPR, 2017). The Department of Education definition of a single parent is "an individual who is unmarried or legally separated from a spouse and has a minor child or children for which the parent has either custody or joint custody; or is pregnant" (Department of Education, 2019). When compared to men, women are more likely to invest in their education beyond high school; however, at every level of earnings, women's earnings are lower than men's (Hegewisch et al., 2016). The Pathways to Equity study completed by the Institute for Women's Policy Research in 2016 reports that in order for a woman to raise her family out of near poverty, she must obtain at minimum a bachelor's degree, while men must earn only a high school diploma (Hegewisch et al., 2016). From a social support perspective, a single mother who graduates with a post-secondary credential is likely to save society an estimated \$1.838 in public benefits for her and her family over four years (Gault et al., 2017). The role that is played by the completion of post-secondary education cannot be overstated when examining the impact on the single mother and the economy in which she can participate in because of the completion of a post-secondary degree.

According to 2010 Census data, 3 in 10 Black or African American households were headed by a single woman. This number is three times higher than for white households and Asian American households (U.S. Census, 2011). With an overall increase of 18.2% since 2000 in households headed by single women across identified racial and ethnic groups, this trend indicates that women are being faced with challenges to provide support to their children, many

times on a single income and with limited assistance from social service agencies (U.S. Census, 2010). The share of U.S. children living with an unmarried parent has more than doubled since 1968, jumping from 13% in 1968 to 32% in 2017 (PEW, 2017) the number of single mothers in college more than doubled between 1999 and 2012 (Thorman et al., 2012; IWPR, 2017). More than half (58%) of Black children are living with an unmarried parent, 47% with a single mother. At the same time, 36% of Hispanic children are living with an unmarried parent, while 24% of white children are living with an unmarried parent (PEW, 2017). According to a 2017 policy briefing from the Institute for Women's Policy Research, 31% of single mothers aged 25 and older held a college degree, compared to 54% of married mothers and 40% of women overall (IWPR, 2017).

These statistics indicate that African American and poverty-level family households are often led by single females. The proportion of births occurring outside of marriage increased from 4% in 1940 to 41% in 2010, which indicates a trend that has begun to form in the United States (Molyneaux, 2016; Child Trends, 2015). The number of children living with their biological mother, absent their biological father, indicates a disparity among racial backgrounds, similar to the racial disparities in post-secondary education. The 2010 U.S. Census Bureau indicates that 13.1% of households are led by a single female. Of 13.1% of a single female head of households, only 7.2% of single females are living with their own children. This indicates that single females, while also providing for their children, are likely providing for other children (U.S. Census, 2010). As of 2018, it is estimated that 1 in 4 children are being raised without a father figure (U.S. Census, 2010). It is also estimated that 4 out of 10 children born in 2018 were born to unwed mothers (U.S. Census, 2010).

It is estimated that women of color are more likely to be single parents while pursuing some form of post-secondary education (IWPR, 2017). On average, the percentage of single female households identified as poor mirror the federal poverty demographics. The single female head of household numbers across demographics indicates that 37% of Black households, 41% of Latinx households, and 29% of White households are considered poor (Berlan & Harwood, 2018). The poverty levels across races, coupled with the increased burden of the single mother to be the primary income provider, compounds the cost of education as a barrier for the single mother. In 2017, it was estimated that 21% of White children lived in a home without their biological father present, while 31% of Latinx and 58% of Black children were living in a home without their biological father present (Molyneux, 2015; Child Trends, 2015) Studies indicate that 36.8% of single mothers are between the ages of 20-24 (Molyneux, 2015). Historically, this age group represents a population that is not able to afford the expenses associated with children on a single income (Molyneux, 2015, Beeler, 2016). Currently, 13.9% of single mothers have not completed a high school education, while only 34% have graduated from some form of post-secondary education (U.S. Census, 2010). The high cost of education and living expenses makes is nearly impossible for a single mother to complete her post-secondary education without some form of financial assistance.

More likely to be working and juggling work, school, and family responsibilities, single mothers are disadvantaged in accessing and completing post-secondary education when compared to their non-parenting peers (Beeler, 2016). Single mothers have difficulty in maintaining enrollment in consecutive terms at an institution, which delays degree completion (Beeler, 2016). Less likely to complete a post-secondary education when compared to married mothers or unmarried mothers, only 31% of single mothers 25 years or older held a bachelor's

degree or higher compared to the 54% of married mothers who held a bachelor's degree or more (IWPR, 2017). Research on single mothers and both participation in post-secondary education and responsibilities has identified that completion rates are lower for single mothers when compared to their married, or unmarried without children counterparts (Woodford & Mammen, 2010).

Woodford and Mammen (2010) examined rural low-income mothers' opportunities to pursue post-secondary education through a quantitative study using human capital theory. Human capital theory allowed the researchers to identify factors that affected rural low-income mothers' opportunity to pursue post-secondary education (Woodford & Mammen, 2010). The researchers utilized micro-level household variables and macro-level policy constraints to examine how low-income mothers utilized human capital theory to weigh the benefits and costs of investing in post-secondary education (Woodford & Mammen, 2010). Zhan and Pandey (2004) used data from the Panel Study of Income Dynamics (PSID), which is a survey given to 5,000 American families. From this dataset, Zhan and Pandey extracted 1,097 unmarried single female heads of household and examined economic well-being indicators such as labor income, welfare income, and asset income. Zhan and Pandey (2004) identified education as a strong and consistent predictor of a single mother's economic status, indicating that single mothers are more often left to decide if they will pursue post-secondary education or enter the workforce. Both quantitative studies indicate that completing a post-secondary degree helps the single mother to increase her earning potential, likely lifting her family from poverty; however, barriers encountered on her pathway to completion often derail her completion goals (Woodford & Mammen, 2010; Zhan & Pandey, 2004).

Merrill's (2015) research on single mothers pursuing post-secondary education examined how mothers dealt with the institutional constraints of higher education and the role they played as social agents for themselves in navigating the systems. Merrill's qualitative case study chronicles two single mothers and their experiences in higher education. Merrill's findings identified that mothers must have intrinsic motivation to complete a post-secondary education credential; Merrill also focused on the various ways post-secondary institutions support or hinder the mother's success at the institution. Collectively, all three studies indicated that single mothers have a strong sense of internal motivation to pursue post-secondary education and improve the quality of life for their children. Despite the internal motivation to persevere towards completion, the barriers encountered by single mothers were at times too many to overcome and the decision to withdraw from the institution was necessary.

Challenges for Single Mothers Pursuing Post-Secondary Education

Single mothers who are seeking to pursue post-secondary education face both educational and workforce demands that often create an unpredictable schedule, which in turn creates a challenge in finding reliable, affordable, and accessible daycare (Morgen et al., 2010). The lack of time that a single mother has to focus on her education is compounded by the high cost of daycare. In 2016, the national median cost of center-based childcare for an infant was \$10,400 per year for one infant (Hegewisch, 2018). The estimated annual income for a working single mother aged 35 and older in 2016 was \$32,000. The cost of infant childcare at a center is just under one-third of the mother's projected income (IWPR, May 2018). The cost of childcare for places a financial burden on the single mother that further exacerbates the time constraints she places on herself in efforts to decrease her financial commitment to childcare (Cerven et al., 2013).

The financial burden of childcare costs forces many single mothers to take on the sole responsibility for all caretaking needs of their children. In 2014, the Child Care Development Block Grant was passed by Congress. This initiative was an effort to help low-income families receive financial assistance for childcare while working or pursuing education. While the program is beneficial, it allows for only two years of financial support to a parent pursuing education (U.S. Department of Health and Human Services, 2013). This two-year limit does not cover the average length of enrollment of the single mother in post-secondary education. Only 8% of single mothers who enroll in post-secondary education graduate with an associate degree within six years, indicating that the Child Care Development Block grant program likely does not support a single mother for the duration of her post-secondary education program at a community college (Gault et al., 2018).

Single mothers who choose to pursue post-secondary education are faced with time demands that differ from those of their non-parent student counterparts. Aside from the time that the single mother must devote to pursuing her education, she must also devote time to the direct and indirect care of her children. The single mother must balance raising a family on her own, going to class and completing coursework, and many times holding a job. Four of ten women at two-year institutions indicate that they are likely to drop out of post-secondary education due to their obligations to provide care for their children (IWPR, 2017). All of these demands combined may help explain why 55% of single mothers who enroll in post-secondary education do not complete it (IWPR, 2017). This equates to roughly 28% of single mothers completing a degree within six years of enrollment (IWPR, 2017).

The Institute for Women's Policy Research's (2018) analysis of data collected from the United States Census Bureau American Time Use Survey of 2016 shows that single mothers

distribute their time differently than other women pursuing post-secondary education. It is estimated that single mothers enrolled in college full time spend an average of 15 hours per week on direct childcare activities (Hegewisch, 2018; Bureau of Labor Statistics, 2016). Examples of direct childcare activities are playing with children, reading to children, and feeding and bathing children. The majority of the time that a single mother spends with her children is supervisory time. This supervisory time accounts for nearly 43 hours per week (IWPR, 2018). This decreases the time a single mother can spend on important physical and psychological needs such as sleep, exercise, and socialization. This time demanded to take care of children, work, and take care of one's own well-being often leads to a single mother allocating less time towards her education, thus supporting the mindset that she may not have the time to complete her education.

The financial implications of attending post-secondary education are felt by all, but single mothers are impacted by these financial burdens to a greater extent. It is estimated that 30% of single mothers are living in poverty, while 17% of single fathers are living at poverty level (PEW, 2017); 89% of single mothers in post-secondary education are low-income, with 63% living at or below 100% of the poverty level (IWPR, 2017). According to the U.S. Census Bureau (2013), single mothers have a lower educational attainment level and lower incomes than married mothers. Single mothers are also more likely to be unemployed or under-employed (Meier et al., 2016).

The large percentage of single mothers living at or below poverty are often unable to make a financial contribution to the high costs of attending post-secondary education. Based on unmet need, 81% of single mothers have an estimated family contribution (EFC) of \$0 (IWPR, 2017). The EFC is just one component that is used to determine the financial aid package offered to a student and helps the student determine the need to rely on additional assistance from

scholarships, grants, or financial loan programs (Sallie Mae, 2018). Despite 81% of single mothers having a \$0 EFC, federal Pell Grant awards have not changed for decades, thus not matching the rising costs of tuition (Goldrick-Rab, 2016; Sallie Mae, 2018). This discrepancy in growth has changed the impact of Pell Grants for students. A Pell Grant now covers just over half of the average cost of a community college education (Sallie Mae, 2018). Financial aid awarding processes may indicate that a single mother can contribute financially; however, this may be flawed because financial aid awards are calculated only for the first year of attendance, not subsequent years. With lower completion percentages than married mothers or single women not parenting, only 28% of single mothers who entered college between 2003 and 2009 earned a degree or certificate within six years, compared with 40% of married mothers, and 57% of women students who were not parenting (IWPR, 2017).

Sources of Support for Single Mothers Pursuing Post-Secondary Education

Beeler (2016) identified that environmental influences to pursue and complete post-secondary education can be both positive and negative for the single mother. The single mother's post-secondary educational experience is influenced by the institutional environment and external factors such as local, state, and federal policies. Single mothers often use education as a way out of poverty; however, policies related to supports for single mothers such as the Personal Responsibility and Work Opportunity Reconciliation Act promote a work first policy, which can make it challenging for single mothers to pursue higher education (Beeler, 2016). Relevant policies often have unclear and confusing language that can inhibit single mothers' access to both higher education and social welfare programs that provide additional assistance to them and their children.

Outcomes for single mothers in higher education focus primarily on the ability of post-secondary education to help them escape poverty (Kalil & Ryan, 2010). Through the attainment of a post-secondary education credential, single mothers face reduced financial vulnerability through increased earning potential (Beeler, 2016, Kalil & Ryan, 2010). Single mothers who have obtained a post-secondary credential experience non-financial benefits such as an increase in family support, increased parenting time, and increased well-being. Across both studies, the benefit of increasing access to post-secondary education to the single mother population included impacts not only on the core family unit supported by the single mother but also on the workforce in which single mothers are choosing, or not choosing, to participate (Beeler, 2016, Kalil & Ryan, 2010).

Financial Support for Single Mothers at Community Colleges

Single mothers confront a myriad of challenges in accessing and completing post-secondary education, while simultaneously being challenged by a broad range of socio-economic factors not faced by traditional post-secondary students. This indicates that community colleges have an opportunity to expand the ways they provide financial support to their single mothers. Beyond tuition, single mothers must also pay for their books and supplies. In a pilot program at California Community Colleges, a partnership with the California Department of Human Services supported single mothers in a variety of ways, including offering them priority registration and book vouchers, and covering transportation costs (Cerven et al., 2013). Single mothers were also paired with a caseworker who helped them navigate the post-secondary environment. Recipients of these services reported that textbook costs created the greatest barrier to completing post-secondary education, with 42% of single mothers participating in the program identifying that the book voucher program allowed them to continue their education by reducing

the financial cost. The book voucher program allowed single mothers to enroll in more classes and stay enrolled when faced with other financial constraints while working towards a two-year degree (Cerven et al., 2013).

While tuition and supplies account for just one financial barrier for the single mother, it is important to examine the opportunity costs to a single mother while pursuing post-secondary education. Opportunity cost is defined in the Merriam-Webster dictionary as the added cost of using resources that is the difference between the actual value resulting from such use and that of an alternative (Merriam-Webster, 2019). The opportunity cost, as it pertains to the single mother, is the amount of time her education will take her away from her children and take her out of the full-time workforce (IWPR, 2018). While this opportunity cost cannot be avoided in its entirety, financial support to decrease a single mother's need to work while attending post-secondary education should account for the costs of attendance outside of tuition (Cornacchione & Dougherty, 2013; IWPR, 2018).

While scholarships and federal loan and grant programs help students to fund their education, especially students who come from economically challenged backgrounds, the rising cost of tuition is creating a bigger divide across social classes (Goldrick-Rab, 2006; Goldrick-Rab, 2016). The rising cost of tuition is leading towards a broader stratification among socioeconomic backgrounds, leading middle and lower-class populations to see a decrease in state and federal funding supports for access to and completion of a post-secondary credential (Goldrick-Rab, 2016).

Community colleges that are willing to examine costs outside of tuition and provide scholarships to support single mothers will help alleviate their financial burden and pressure to fund costs outside of tuition. Studies indicate that scholarships awarded early on in the college

term appear to be more effective at preventing stop-out when compared to scholarships awarded later in the college term (Goldrick-Rab, 2016). Post-secondary education institutions need to think more broadly and holistically to help address the barriers experienced by single mothers who are choosing to pursue post-secondary education as a means to change the socioeconomic trajectories of their families.

In summary, the financial costs of post-secondary education for single mothers is a major barrier to access and completion of a post-secondary credential. Supporting single mothers with financial options that may be applied towards costs outside of tuition such as daycare, books, and supplies allows the community college to help alleviate the additional financial burdens of single mothers while increasing support that will help reduce the need for them to work while pursuing post-secondary education (Adams et al., 2016). A decreased need to work while attending school allows the single mother to place her focus on her education rather than how she will pay the costs associated with obtaining a post-secondary credential. The outcome of this additional support outside of tuition is beneficial to the quality of life of the single mother and her children (Goldrick-Rab, 2009; Beeler, 2016). Community colleges need to examine not only how they are determining student financial aid, but also the unique ways in which they can support single mothers beyond tuition. This careful examination of funding support will allow community colleges to increase the retention and completion rates of single mothers who may otherwise be forced to work while pursuing post-secondary education.

Child Care Assistance Programs

The discrepancy in enrollment and completion of single mothers provides the community college with the opportunity to explore ways in which supports outside of financial assistance

can help single mothers complete their credentials. This section will focus on the opportunity for community colleges to provide daycare assistance programs for the single mother, thus likely decreasing her time devoted to childcare and allowing her more time to focus on her education. Currently, only 44% of community colleges have childcare centers on campus, and this number has been slowly declining (IWPR, 2018). Single mothers are the sole providers for childcare and healthcare needs for their children, and when their children are ill or unable to attend their arranged daycare, single mothers must change their work or school schedules to accommodate the burden of lack of childcare support (Beeler, 2016). Even if a community college has a daycare center on-site, many childcare centers have long waiting lists that delay the ability of single mothers to enroll their children (Beeler, 2016). Community colleges have the opportunity to address the daycare barrier for single mothers by increasing their financial commitment towards the cost of daycare (Beeler, 2016; IWPR, 2018; Cerven, 2013).

When examined from an economic standpoint, short-term investment in childcare assistance programs for single mothers equates to a long-term investment in the local economy. The Institute of Women's Policy Research identifies that single mothers with an associate degree who work full-time will earn an estimated \$329,498 more than single mothers with only a high school diploma (IWPR, 2018). If a post-secondary institution can identify financial means to support access to childcare, a single mother is likely to complete her education in a shorter period, thus increasing the speed with which she will participate in making tax contributions from her full-time employment (Cerven, 2013).

Community colleges need not take on the initiative to increase support of single mothers all on their own. Partnerships with outside agencies and local organizations to support an increase in post-secondary education completion and increased financial support to fund single

mothers' childcare needs during post-secondary enrolment is imperative if systems wish to collectively support an increase in the workforce participation of single mothers (Beeler, 2016; Goldrick-Rab & Sorenson, 2010). Formalized financial partnerships to support single mothers' access to daycare at licensed centers or on campus will likely lead to single mothers entering the workforce earlier as they will experience a decrease in a financial burden for childcare and focus more of their time on education (Beeler, 2016). This opportunity to utilize childcare not only for classroom time but also studying time will likely increase single mothers' ability to complete a schedule of classes each semester and complete in a shorter time frame with limited interruptions in the educational pathway. While increasing access to childcare is not the only means by which to increase completion rates of single mothers at community colleges, it is truly an easy area to consider when examining the return on investment for the single mother's lifetime earning potential, while also impacting the completion rates of single mothers pursuing post-secondary education at a community college (Cerven, 2013).

To summarize, the literature indicates that community colleges are uniquely positioned to increase the support of single mothers pursuing post-secondary education through childcare assistance programs. Community colleges can work to form partnerships within their local communities to help ease the financial and time burdens related to raising children as a single mother. If a community college can secure private funding from outside partner agencies, the opportunity to build a funding stream allocated to the provision of childcare services will strengthen its commitment to the single mother. In turn, the impact on the single mother will lead to an increased likelihood of completing a post-secondary education that will increase her chances to earn a wage that places her above the poverty level, thus increasing the quality of life for her and her children and the opportunity to escape generational poverty.

Integrated Campus and Community Support for Single Mothers

Choosing to pursue higher education can be a scary step for many prospective students. While community colleges are open-access institutions, higher education culture and verbiage can be intimidating to those who are not familiar with the institutional knowledge needed to successfully access education. Single mothers make up a large portion of the potential workforce that simply needs additional support to effectively and efficiently be prepared for work (Adams et al., 2016). Community colleges are uniquely positioned to serve the single mother population through an expansion of community partnerships, increased flexibility in course offerings, and expanded services that meet students where they are. By changing the culture of the college access mindset for all and focusing on the workforce participation outcomes of community college education, the shift in lifting the most underserved will help create an understanding that everyone has a place in higher education; some students may simply need a little more support, guidance, and understanding during their journey.

Through supportive methods of connecting students with public assistance programs such as food assistance, child care assistance, or rental assistance, students are able to decrease their costs of living and will likely be able to devote less time to working to pay for basic needs and spend more time in the classroom or studying to advance their skill sets. Programs such as the Extended Opportunity Program Services (EOPS CARE) and California Work Opportunity and Responsibility for Kids (CalWORKS) program, both from the state of California, provide financial and academic support to single mothers who are pursuing post-secondary education (Cerven et al., 2013). Fifty-five percent of the women using these programs identified that vouchers to help pay for books and supplies were most helpful, while forty-two percent of participants identified that priority registration helped them to complete their education (Cerven

et al., 2013). Public assistance programs increase financial support and will likely have a positive impact on a single mother's ability to focus on her attendance and academic performance, rather than on how she will pay for the cost of living and raising a family while attending college (Cerven, 2013; Adams et al., 2016).

Across the various studies on supports for single mothers in higher education, findings consistently show that providing additional support to single mothers, such as public assistance on-site or unique course offerings and funding streams, supports a convenience factor that helps alleviate stress. While community colleges have the opportunity to meet single mothers' needs, Arcand's (2015) research on for-profit colleges and the role they play in supporting single mothers can be looked at as a model to emulate. Arcand highlights the role that for-profit institutions have in providing convenience through integrated student services and eliminating remedial coursework (Arcand, 2015). While community colleges and for-profit institutions may not have the same open-door policy, community colleges could learn from the for-profit sector in providing a variety of course options that lead single mothers to a quicker path to completion, thus making the community college pathway more feasible and affordable (Arcand, 2015).

Community colleges must expand their offerings of institutional, workforce, and social support to better meet the needs of single mothers. Through collaborative partnerships to provide both institutional and social supports on campus, community colleges are decreasing the need for single mothers to spend less time off campus accessing the social and workforce services they need.

While community colleges are well-positioned to react nimbly to the needs of the single mother population choosing to pursue post-secondary education, the environment in which the single mother is living also plays a significant role in her pursuit and completion of post-

secondary education. The environment of the single mother outside of education likely has an impact on her ability to give her attention and focus to education. Coupled with the inherent challenges of single parenting, the stressors encountered by the single mother outside of education not only play a key role in the mother's ability to find motivation to succeed in education but also indicate the need to examine family stress associated with the single mother pursuing post-secondary education.

In summary, research indicates that despite the positives that have been won for women, single mothers, society, and educational institutions still have a long way to go if access to and completion of post-secondary education and employment is to be equitable across race and gender. Workforce demands will not be met if women are not paid a wage that can sustain a family. The welfare reforms that have been developed over the last 30 years have created policies that create a myth of mobility, yet single mothers are unable to access the training needed to increase their mobility at work without sacrificing their role as a single mother. Women, and single mothers, in particular, are more likely to be able to increase their social capital through achieving a post-secondary education that will lead to a higher wage job when compared to single mothers who do not pursue some form of post-secondary education (Morgen et al., 2010; Son & Bauer, 2009). This individual impact on the single mother and her children expands to workforce challenges faced by local employers.

Theoretical Framework

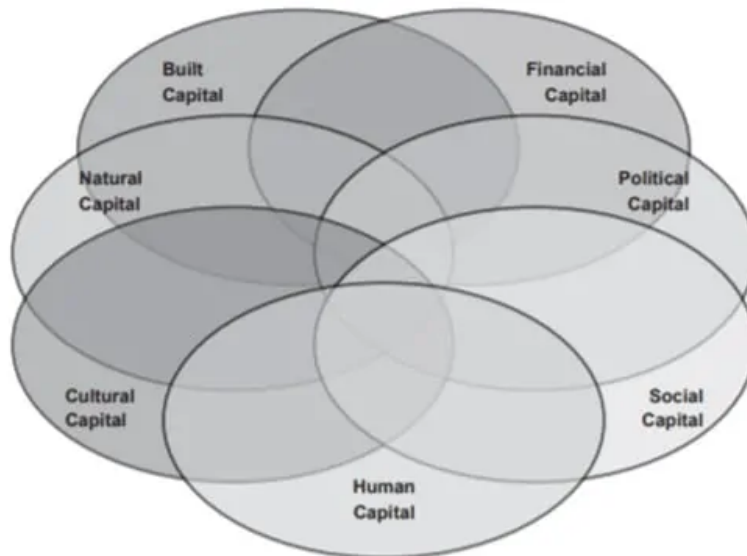


Figure 2. Community Capitals Framework

This study was guided by the Community Capitals Framework (Flora et al., 2016). The Community Capitals Framework examines communities and the interactions of various parts of communities. Emery & Flora (2006) identify seven different types of community capital in the framework: natural capital, cultural capital, human capital, social capital, political capital, built capital, and financial capital. I chose this framework because of the partnerships that were required to allow ACC to implement its childcare assistance program. The framework is applicable to single mothers and their unique experiences in the childcare assistance program and through their educational journey at ACC. The breadth of the childcare assistance program required multiple community organizations and student participation. It was truly a community initiative that was led by the community college but supported by a vast array of partner organizations. Because of the participation of multiple community partners, the Community Capitals Framework provides a lens with which to view the program more holistically and collaboratively. The framework will also provide a guide for other community colleges and their

partners to explore programs to support students outside of traditional higher education support systems.

Natural capital is the environment, such as lakes, rivers, and the local landscape of a community. Cultural capital is defined as ethnicity, generations, stories, and traditions of a community. Human capital is defined as all the skills and abilities of people, leadership, knowledge, and the ability to access resources (Emery & Flora, 2006). Social capital includes groups, organizations, and networks in the community, the sense of belonging, and bonds between people. Political capital is connections to people in power, access to resources, and leverage and influence to achieve goals (Emery & Flora, 2006). Built capital is defined as buildings and infrastructure such as schools, roads, and main streets in a community (Emery & Flora, 2006). Financial capital is defined as money, charitable giving, grants, access to funding and wealth (Emery & Flora, 2006).

For analysis of the data, I used each type of capital as a lens to view the themes that were identified by both the single mother participants and the community partners. I first examined the community partners' themes and separated the themes into the types of capital they aligned with. I did the same with the themes identified by the single mothers. When examined together, each of the types of capital in the Community Capitals Framework helps to create a better understanding of the role that the partners played in developing the childcare assistance program and the impact that was experienced by the single mothers. The use of this framework allowed me to gain a better understanding of the individual experiences of each participant as well as their collective experiences from implementation through completion.

CHAPTER 3. METHODS

This study closely examined how Aurora Community College partnered with a local workforce organization to help support single mothers through completion of a short-term certificate training program meant to lead to successful employment in a high-wage, high-demand, high-skill area. This research identified the specific support needed for single mothers to complete a short-term certificate program from a single mother's perspective while closely examining a childcare assistance and training program and the lessons learned by the implementation team. This study intended to impact the development of policies and programs that allow single mothers to access post-secondary education without the added worry of how they will afford to raise their children and attend school or participate in the workforce.

Methodology

A descriptive case study design was selected for this study to help expand the understanding of a unique program designed to help single mothers access education and enter the workforce by eliminating a barrier outside of both education and workforce. The phenomenon of the childcare assistance program was examined with the intent to educate other community colleges about the process of program implementation, while also attempting to inform policy to increase support of an under-represented student population. The descriptive case study provides knowledge to community partners looking to increase the workforce pipeline of skilled workers. The process of the case study involved real world, current, everyday settings which provide information about the real-life experiences of the single mothers involved in the program and the community partners who developed the program (Creswell, 2013). The case

study allowed me to gain an in-depth understanding of program intricacies and gather insight into the lived experienced of single mothers pursuing education at a community college.

Research Design

A descriptive case study design was chosen to gain an in-depth understanding of the childcare assistance program. Merriam (1998) identified that a descriptive case study in education presents a detailed account of the phenomenon of study. A descriptive case study was chosen as the design because the childcare assistance program is the first of its kind in the state of Iowa. Merriam (1998) identified that descriptive case studies are useful in presenting basic information about areas of education where little research has been conducted. The hope is that this descriptive case study design will lead to a framework for program development that may be replicated at other community colleges hoping to advance their support of the single mother student population.

For purposes of this research, the case study design was appropriate because the intent was to examine the single phenomenon of designing and implementing a college and community program aimed at supporting a specific population of potential students and workforce participants. The study involved interviews with single mothers, community college administrators, and community partner organizations. In-depth analysis of documents allowed me to identify processes and policy guidelines, marketing, and outcomes for the program, thus identifying strengths and limitations of the program's development. This case study is bounded by time and location: it was implemented in only a small area of the college district, and the participants and phenomenon were examined during the spring semester of 2019. The single mother participants in the research had previously completed a short-term certificate training

program and were either employed and/or continuing their education. The administrator participants were all employed at their organizations at the time of the study.

This study sought to identify ways in which the community college can increase the completion status of single mothers through innovative partnerships, program development, and understanding the barriers single mothers face. The research questions below guided the study but were also adapted as information was learned from both the single mothers and the community partners who participated in the study.

1. What is the role of the community college in providing supports outside of education to help increase access, completion, and placement into employment of the single mother student population?
2. What is the role of workforce partners in helping support initiatives to increase the enrollment of single mothers in community college short-term certificate training programs?
3. What was the impact of the childcare assistance program that was designed to help support single mothers in accessing education at the community college?
4. How was the childcare program developed, adapted, and modified to meet the needs of the single mother student population?
5. What workforce and educational barriers are faced by single mothers who have completed a short-term certificate program at a rural community college?

Positionality

As a researcher, it is important that I identify the role that I played in the relationship between not only me and the participants and the role I played in the narrative practice of the study. On a personal level, I monitored my reactions to the stories that were shared by single

mothers. While interviewing the community college administrators and workforce partners, I was cautious to maintain my researcher status and let the questions guide the interview, not relying on any previous knowledge I may have had about the program that might interfere with my research process.

While I was mindful of the relationship between me and the participants, I also was mindful of the perspective I brought to the study and how my experiences of a first generation college student, raised by a mother who had been a single mother, and the sister of a single mother provided a deeper understanding of how to ask questions and guide the research. In addition, my trained skillset in therapy and motivational interview supported the qualitative approach to learning about the stories and the experiences of the single mothers and the program developers.

The unique perspective and experiences I brought to the research afforded me, as the researcher to build a relationship and trust with the participants, especially the single mothers. I was able to quickly build a trusting relationship that allowed for open sharing of emotions and experiences. From the feministic perspective, I embraced my own experiences and wove them into the interview process and used my skillsets in relationship building as a trained therapist, relied on my own experiences of a first generation college student, and attempted to better understand the role of a single mother as viewed through the lessons learned from my own mother.

As the Director of Recruitment for Aurora Community College, I work closely with both the workforce partners and community organizations involved in the development of the childcare assistance program. I disclosed this information to both the single mothers who participated in the study and the community and workforce partners who were interviewed. Part

of my role in the childcare assistance program was to help monitor the program implementation and the recruitment of students into the program. During the research process, I remained neutral and objective and was purposeful in remaining unbiased in my gathering of data.

In an effort to remain neutral and unbiased in my research gathering, I provided participants with transcripts of their interviews and they were able to provide feedback on the data collection. Participants were given the opportunity provide feedback on their interviews, a process referred to as “member checking” (Yin, 2016). The process of member checking allowed me to have a collaborative approach to data collection and data analysis, while maintaining a high ethical standard throughout the process.

On a personal level, I am the product of a woman who was a single mother for nearly six years. My own mother who has shared personal accounts of her challenges raising a daughter on her own for six years, and the sister of a woman who became a single mother at the age of 17. While I have not been a single mother, I was directly impacted by my mother’s and my sister’s experiences. My mother taught me ways in which to be independent, non-reliant on others, and the values of hard work. Her experience and interpretation of parenting, work, and education were impressed upon me at a young age, including the view that a woman must be a strong, independent person who shows resilience in all situations. This shaped my experiences and motivation to pursue a different path than my single mother, while honoring and respecting her lessons and motivation to strive to reach her goals.

As I took these lessons from my mother, I witnessed first-hand the challenges that a single mother may face while raising a child on her own, through the experiences of my sister. My sister is my closest sibling in birth order. Separated only by 23 months, we experienced the same childhood and were afforded the same opportunities. When my sister became a single

mother at the age of 17, she was unable to provide for her child and continue her education full-time. She chose the path less traveled and persevered through high school and eventually completed post-secondary training in cosmetology. Since her teen years, she has struggled to find an economic pathway that can support her. Despite the setbacks, she has become one of the strongest women I know and has faced barriers alone that I cannot imagine. She cites her son and the desire to do better each day for him as primary motivating factors. Her experiences in single mothering have led me to want to expand opportunities and better understand how post-secondary institutions can support single mothers.

While my experiences cannot be eliminated from my researcher role entirely, I worked to honor the stories that the single mothers shared through their participation in this research and to understand the community partnerships leveraged to help implement a pilot program. Having been raised and surrounded by single mothers my whole life, I have assumptions about hard work, commitment, and independence that formed a strong theme for me growing up. I witnessed self-sacrifice and barriers repeatedly encountered by the single mothers who have been pivotal in driving my interest in creating more supports for single mothers to complete education and improve the quality of their life for not only themselves but also their children.

Context of Study

Aurora Community College (ACC) is a pseudonym for the name of the community college that is housed in a corner of Iowa, serving eight counties in the identified region. All names of actual campus locations have been replaced with pseudonyms to protect the identity of those participating in the study. The main campus is located in Austin, Iowa with a secondary campus in Atlanta, Iowa. ACC also has six centers that serve surrounding communities. The

focus of this study location is around the Denver Center and the community partnerships developed to help increase workforce participation and drive economic development.

In 2012, the City of Denver, Community Resource Partners, Aurora Community College, and local business partners formed the Opportunity Denver program to help address the middle-skills gap in high-demand advanced manufacturing careers in Denver, Iowa (Denver Development, 2020). The Opportunity Denver program was designed to help increase the workforce pipeline by providing short-term certificate training at little to no cost to the student. At the time of the development, the unemployment rate was high due to the recent recession of 2008-2009 and the intent was to provide training to those impacted by the recession. Over time, the program grew to include a variety of educational pathways with over twenty-six different career pathways for residents of the area.

My hope in conducting this study was to provide community colleges with a better understanding of the barriers to completion encountered by single mothers pursuing post-secondary education and provide hope that thinking outside of the box, increasing partnerships, and leveraging workforce relationships can help to support single mothers to complete a short-term certificate training program.

Ontology

The study of ontology, or the nature of truth, looks at existence and what is real (Guba & Lincoln, 1989). What the things are that construct a person's reality and whether there is a universal truth or individual truth can be debated. I believe, and practice, that there is no universal truth and that individuals experience the world and interact differently, ultimately creating their reality. Each person creates a different meaning from their experiences and no two people have the same experiences. While there may be shared experiences or similar experiences

among members of a group, each individual interprets their reality as it is related directly to them as an individual.

Epistemology

Maxwell (2013) explains epistemological constructivism as viewing our world as our construct, rather than as an objective perception of reality. This theory recognizes that what people perceive and believe is shaped by their assumptions and prior experiences (Maxwell, 2013). Post-modern feminist epistemology identifies that there is no single truth and that the self is socially constructed and changeable (Leavy & Harris, 2019). Each person views their world through their lens and however similar in background, individuals cannot separate themselves from an experience. Qualitative research is the belief that people construct their knowledge through how they engage in and make meaning of their experiences (Merriam & Tisdell, 2016).

Experience and knowledge are universal, and I do not believe you can know without an experience to put into context. Human nature is to draw upon what one has experienced in the past and regardless of a clean slate and "cookie-cutter" approach to applying theory or practice, no one person reacts the same way to any situation. For example, I relied heavily on the narrative approach and cognitive-behavioral approach while practicing therapy. While cognitive and narrative therapy styles develop from different schools of thought, I always believed you could not change behavior (cognitive behavior therapy) without knowing a person's story (narrative therapy). Similar to therapy, the researcher must build a relationship with their subject, while understanding and respecting the space of the individual and their experiences. One of the tenets of post-modern feminist epistemology is the recognition of the power dynamics that take place between a researcher and research subjects (Leavy & Harris, 2019). Recognizing and identifying

this power dynamic in the research helped me be more mindful of the impact the relationship may have on the subjects participating in the study.

Axiology

The Community Capitals Framework will be used for this research on the development and implementation of the childcare assistance program. The Community Capitals Framework encompasses the relationships that were purposefully built to bring access to a community need and a need among single mothers in their pursuit of higher education. The Community Capitals Framework allowed for a systemic examination of the multiple facets of a community-minded program designed to increase equity in childcare resources for single mothers. This systems approach allowed me to better understand how the lives of single mothers intersect with the role they play in their educational challenges, while simultaneously examining the roles of the multiple community organizations involved in the program's development.

From a societal standpoint, as seen in the literature review, systemic social programs such as welfare reform aimed at serving under-represented populations such as single mothers actually excluded single mothers and placed often unattainable expectations on mothers in order to meet the basic needs to provide for their families and work or advance themselves by pursuing higher education. The Community Capitals Framework provides a lens to view the attempt by the community college and local organizations to support single mothers where other state or federally supported programs may have failed.

Aligning with my personal background as a therapist formally trained in a systems perspective, the Community Capitals Framework implies that each component of the framework has value and each part functions together to create a whole. This aligns with my understanding of the importance of providing multiple means of support for students at the community college,

and the Community Capitals Framework allowed me to better examine how the community organizations, the community college, and the single mothers intersected in multiple areas to help increase awareness of the need for reliable child care as a means to enhance both workforce and educational opportunities.

The case study methodology was selected to help gain an in-depth understanding of the childcare assistance program and the intricacies of the partnership relationships required to design and implement the childcare assistance program. Coupled with the experiences of single mothers participating in the program or the workforce upon completion of a short-term certificate training program, a deeper understanding of single mothers' experiences in higher education and a pilot program meant to eliminate a perceived barrier for this population of students will create a starting point to better understand the unique experiences of single mothers in higher education and how community colleges can reduce barriers to completion for this targeted population.

Given the very intentional goals of the child care assistance program to increase the enrollment and completion of single mothers in a short-term certificate training program while simultaneously attempting to inform policy at the state level and elicit policy change, the case study methodology allows for close examination of program development, implementation, and program outcomes. The case study methodology allows for an understanding of the phenomenon experienced by the single mothers in higher education while providing an in-depth study of the implementation of the childcare assistance program aimed at eliminating barriers for single mothers.

Sampling

Purposeful sampling was used to recruit single mother participants and convenience and snowballing sampling methods were used for college administrators and workforce administrators. Merriam and Tisdell (2016) state that purposeful sampling assumes that the researcher knows what they want to discover and understand so they must select a sample from which the most can be learned. Convenience sampling, defined as selecting a sample based on time, money, location, and availability, was used because of work-related interactions with the identified college administrators and work force administrator (Merriam & Tisdell, 2016). Snowball sampling involves starting with key participants who meet criteria to participate and then asking those participants who else to involve in the research (Merriam & Tisdell, 2016). Snowball sampling allowed me to start with two key connections to the development of the childcare assistance program and make use of their connections in the community. By asking the two key participants who else to interview, I was able to access higher-level administrators at community organizations that were involved in the program development but that I did not have a direct connection to. Including these additional participants allowed me to gather a broader understanding of the program development process, as well as gather different viewpoints on the program implementation and development process.

For purposes of this study, a single mother was defined as a self-reported single mother, between the ages of 18 and 35, with children under the age of 18, who was pursuing, had completed, or had stopped out of a non-credit short-term career pathway certificate. The self-reported data collection took place in the form of student intakes for identified short-term certificate training and/or two-year or shorter diploma programs at Aurora Community College (ACC). For this study, I used the Aurora Community College institutional definition of a non-

credit career pathway certificate. An ACC career pathway certificate is defined as a short-term training program that is intended to provide training in a specific skill area, such as advanced manufacturing or healthcare, that supports entry-level employment in industry or a pathway that leads to a matching credit-bearing program at ACC. The selection of the ages of the mothers and the children was purposefully based on current student enrollment in programming at ACC.

Data Collection

Before participating in the research study, all participants signed a consent form and were informed that the interviews were being recorded. Data collection from the two single mothers took place over a one-month time frame. Each single mother was able to select the interview date and time that worked best for her schedule. Each single mother participant participated in two semi-structured interviews that were four to five weeks apart. Each interview lasted approximately 60-90 minutes. The first interview was focused on relationship building and collecting background information on the single mother. This interview provided her history of becoming a single mother and her journey to completing her short-term certificate training program. The second interview consisted of open-ended questions developed from the first-round interviews, building upon the single mothers' experiences in completing a short-term certificate training program and subsequent employment or education.

My interviews with key community and college partners started with two key contacts as they developed and implemented the childcare assistance program and assisted in bringing together other key partners in the community. From those two interviews, I was able to ask for suggestions for others to interview. This led to two more interviews with key community partners. I conducted an interview with the Executive Director of Community Resource Partners and a consultant at Childcare Helpers. The inclusion of these two partners helped increase the

understanding of the expansive community partnerships needed to support the program, while also providing a variety of perspectives from the different organizations. Including the Executive Director of Community Resource Partners provided insight from the agency that funded the original study on the need for childcare in the city. This perspective was different from the workforce perspective provided in the first interviews. Including the consultant from Childcare Helpers provided a lens into the childcare providers and the workforce need to fill the gaps in employment that could lead to increasing the capacity in the childcare centers.

The interviews of the college administrator and community partners were conducted over a similar time frame as the interviews with the single mothers. Two interviews were held with each community organization, four weeks apart, and followed an open interview format. Data collection last a little over one month. Each administrator and community partner participated in a 60-90-minute interview with me. Between the interviews, phone calls and transcript sharing provided me with details that did not come out in the initial interview process. Using an open-ended question interview style, I identified key questions that I wanted to use in order to gain a better understanding of the program development phase, the community-building surrounding the program development, and the identified role of each partner organization.

To maintain the confidentiality of the single mothers, each mother was assigned a pseudonym and the names of their current cities of residence were changed. Similar to the single mother participants, each community partner organization participant was assigned a pseudonym for their name and one for their place of employment. The practice of assigning pseudonyms ensures that all parties involved will be anonymous and lessens the opportunity for the participants, community, and organizations to be identified.

Data Analysis

In a qualitative study, analysis and data collection are simultaneous activities, with analysis beginning at the very first interview and first document read (Merriam, 1998; Merriam and Tisdell, 2016). The process of data analysis allows the researcher to make sense of the data that is provided. Merriam describes data analysis as the process of making meaning of the data by consolidating, reducing, and interpreting (Merriam, 1998; Merriam & Tisdell, 2016).

Data analysis for this study began with transcribing of the audio recordings of the interviews. I used NVivo transcription services to provide transcripts of the interviews. Each interview transcript was coded manually on a password protected device. Data for the study consisted of interview transcripts, documents of program development that included marketing materials, policy and procedure manuals, and press releases related to the program. The sources of data were simultaneously compared and analyzed throughout the data collection period.

Analysis of the participant interviews followed the same coding process for each participant. My first round of data analysis began by using a descriptive coding technique. The codes were pulled from the data. I started by identifying larger themes in the data between the two single mother participants and then during subsequent readings narrowed down smaller themes and combined them into broader themes that were relevant to the scope of the study. Descriptive coding assigns labels to summarize basic topics in short phrases or words (Saldaña, 2016). The use of descriptive coding allowed me to place the qualitative data into categories for each interview. As I read through each interview, I made notes and comments on pieces of data that were potentially relevant. The purpose of this note taking was to isolate the most important aspects of the data (Merriam, 1998). As I progressed through each individual interview transcript, I kept in mind the categories identified in the previously scanned interviews, looking

for new and similar categories. Once all interviews were reviewed and categorized during first round coding, I identified common categories.

I conducted a second round of coding, using pattern coding (Saldaña, 2016). Pattern coding involves creating a category label (“meta code”) that identifies similarly coded data. This coding organizes the corpus into sets, themes, or constructs and attributes meaning to that organization (Saldaña, 2016). I then identified themes and sub themes. The end results of the two rounds of coding led to the development of theories from the collected interview data (Saldaña, 2016). I practiced pattern coding for both the single mother interviews and the community partner interviews. I completed the single mothers' interviews before I completed the community partners interviews, so I was able to use the themes identified in the single mother interviews to provide context for the administrator interviews. There was significant overlap in a few areas. I have illustrated that overlap in the figure below. The figure shows the individual themes for the single mothers and the community partners and the overlap in themes.

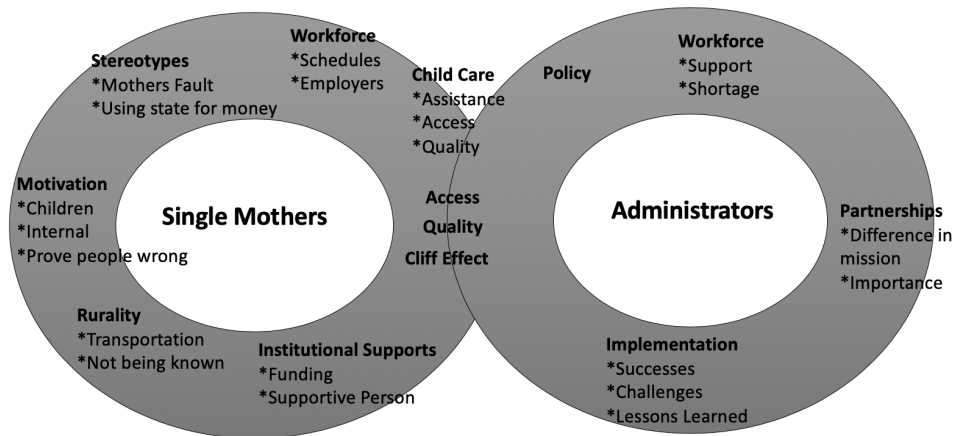


Figure 3. Thematic Codes among Single Mothers and Administrators

The manual coding of the interview transcripts during the first round helped me to see emerging themes. Common themes easily emerged among the two single mothers and the college administrators and community partners. I was able to identify how the themes of each single mother's interview could be easily connected through selecting excerpts from the interviews that intersected with the common themes identified for the college administrators and community partners. While working to consolidate the themes, I strived to maintain the integrity of the meaning for each participant (Saldaña, 2016). In Vivo coding (Saldaña, 2016) was practiced throughout the data analysis of the single mothers' interviews to highlight the mothers' voices in the research, while providing a deeper understanding of the single mothers' perspectives on their experiences.

To help increase the credibility of the study, I used triangulation of the documents analyzed with the interviews conducted. I also used triangulation between the interviews conducted with the community partners. The use of triangulation between the community partner organizations allowed me to see the multiple perspectives that were involved in the program development. There was significant overlap in the goals of the program, but some discrepancies existed regarding the focus of the childcare assistance program and the intent behind its development. Document analysis was conducted as a means to triangulate the information provided by the interviews with both the single mothers and the administrators involved in the study. An initial study of the childcare shortage and barriers provided by Community Resources Partners was used to compare the data collected among the administrators when discussing the relevancy of the childcare assistance program and the need to develop it.

To gain a meta-synthesis of the interview information from all participants, I extracted the common themes from the single mother interviews and common themes from the college and

community administrator interviews. The goal of the meta-synthesis was to enhance the similarities of the single mothers' self-reported barriers and successes while simultaneously analyzing the outcomes of the program development.

Document Analysis

Multiple documents were analyzed for the purpose of the study. According to Merriam (1998), document analysis is a form of content analysis that is used to analyze documents. The analysis of the content in the documents for purposes of this study was used to understand the communication of the multiple organizations involved in the pilot childcare assistance program. I also used the document analysis process to track the progression of the program implementation across the multiple organizations. I analyzed the following documents: childcare provider letter, a study on childcare access, and a policy and procedure manual for the childcare assistance program.

Study on Child Care Access

The first document that I analyzed was a June 2018 report that was provided by the MIT Management Sloan School to the Community Foundation of Greater Denver. This document was the original study that brought attention to the need for increased focus on helping to address the childcare shortage, as well as educate multiple partners, including employers, about the importance of childcare in a community.

Recipients of this report were employers and community organizations. Implemented by the Community Foundation of Greater Denver, this report was meant to educate and persuade employers to increase their interest in the lack of childcare in the community. The overall recommendation of this report was to 1) identify high-impact opportunities to expand childcare

supply and affordability, 2) coordinate advocacy efforts, and) galvanize resources for investment in key interventions.

Child Care Provider Letter

The second document that I analyzed was a typed letter that was written by three of the four community partners who supported the development of the ACC Child Care Assistance program. I am unsure as to why not all of the partners were involved in the writing of this letter. The letter is written on the letterhead of a workforce partner agency and was sent to local childcare providers. It was dated May 21st, 2019. This time frame coincides with the timeframe of the first graduating students who completed a short-term certificate training program and were going to be entering the employment stage of the childcare assistance program. Based on the letterhead, I understand the source of the document to be the Denver Development; however the signatures of some but not all of the community partners does cause some general confusion regarding the intent of the letter.

Child Care Policy and Procedure Manual

This document was developed as an internal process manual for the employees of Aurora Community College to help guide their role in the pilot childcare assistance program. The document provides the staff at ACC with the program goals, tracking procedures, and materials needed to help the students and the partnering childcare providers complete the enrollment in the childcare assistance program.

Data Management

To maintain the highest security and protect the safety of the participants, all participants were given a pseudonym. Each organization that participated in the interview process was also

given a pseudonym. The location of the study was given a pseudonym as well. To protect the data collected during the interviews, all recorded interviews were downloaded to a password-protected computer in my home office. The files were saved on Cybox and saved under the pseudonyms of the participants for anonymity purposes.

In order to practice trustworthiness and validity in the data collection, each participant in the study was provided the written transcript of their recorded interviews. Both the single mothers and the administrators involved in the study had the opportunity to review their transcript and provide feedback. The practice of this validation from the participants ensured that there was no misinterpretation of the data on my part as the researcher. This validity check from the participants allowed each participant to see the interview transcripts and provide feedback and expand on information collected during the interview process.

Due to my position at Aurora Community College, I adhered to strong ethical boundaries and worked closely with the Institutional Review Board at Iowa State University to identify the most ethical means to avoid any confusion between my roles as a researcher and as a college employee. I was very mindful of my role and access to the student population and the connection to the community partners involved in the childcare assistance program development. Prior to each interview, all participants were only communicated with via email from my Iowa State University email address, and I created a Google Voice number to avoid the use of my personal cell phone number that is also used for my role at the college as the Director of Recruitment. I chose not to include any of the success coaches in the study as I serve as a direct supervisor to them and I did not want any students to feel coerced into participating in the study.

CHAPTER 4. CHILD CARE ASSISTANCE PROGRAM

Program Overview

The primary focus of the childcare assistance program at Aurora Community College was to help eliminate a barrier identified in the community and college environment to accessing education and the workforce. The barrier that this program targeted was the lack of quality childcare. The assumption of the partners who created this program was that the lack of access to quality childcare was impacting the ability of single mothers to pursue post-secondary education.

The childcare assistance program had two goals during the pilot program during 2019. The first goal was to develop a childcare assistance program to provide free childcare to participants enrolled in one of four short-term certificate training programs during their program enrollment and for up to one year during their first year of employment upon completion of a short-term certificate training program. The four short-term certificate programs supported by the pilot childcare assistance program were: Child Care, Phlebotomy, Customer Service, and Industrial Sewing. The second goal was to develop a short-term certificate training program in Child Care to help fill the employment skills gap in the childcare sector. This gap was identified based on information provided by a study completed by the Massachusetts Institute of Technology (MIT) and funded by one of the participating partner agencies. This study provided a starting point to examine the needs of the workforce to think more strategically about supporting childcare for their employees and what the lack of reliable and affordable childcare does to workforce participation rates.

The primary focus of this study is the childcare assistance program that provided financial assistance to single mothers during their program and upon entering employment in their area of training. The childcare initiative was a collaborative effort of multiple partners that

included Aurora Community College, Denver Development (DD), Child Care Helpers, and Community Resource partners. The collective efforts of each of the partner organizations created a pilot program that utilized multiple funding sources to provide free childcare to participants in a short-term training program at ACC. To date, this pilot program is the only program to be developed by a community college and community partners that specifically addressed the barrier of childcare for an under-represented student population of single mothers in higher education. Meant to focus on single parents as a whole, the outcomes of the program have led to an overall increase in parent enrollment, increased knowledge of short-term certificate training programs, and support of single mothers to complete short-term certificate training programs and enter the workforce. The initial goal of the partners was to serve 50 parents in the first year of the program. The team did not meet its goal within the first year but by the end of the pilot model, the childcare assistance program had 12 total participants who had completed one of the four short-term certificate training programs. Twenty-one children were provided childcare during the timeframe in which the students were in training. Four single mothers continued the use of the childcare assistance program when they found employment in their area of training and seven children were provided childcare while their mother worked. Despite not meeting the target goal of 50 students, the pilot program was proven successful enough to move ahead, with adaptations to increase the number of eligible participants.

The childcare assistance program was developed to increase the workforce pipeline by eliminating a perceived barrier of a lack of access to childcare that was preventing single mothers from enrolling in higher education. The perceived barrier to accessing childcare was the high cost of quality childcare and the availability of quality childcare during the times needed to obtain training or participate in the workforce. The focus on providing on-site, free of charge

daycare for the single mothers' children while they were enrolled in short-term certificate training programs provided the single mothers with the opportunity to learn an in-demand, high-skill job in less than four months while not having to worry about accessing child care. The concept of providing access to quality childcare at no cost to the mother while she pursued her education was the focus of the pilot program and provided an avenue for single mothers to access the training needed to participate in the workforce in one of the identified pathways.

In addition to receiving childcare during the educational components of the program, participants would receive childcare assistance for up to one year upon completion of their program. The assistance was provided on a step-down level of support. As highlighted in the childcare assistance manual, the participants would receive 100% childcare costs coverage for their first three months of employment. Every three months, the participants' support level would decrease by 25%. The goal was that the participants would be paying 100% of their childcare within one year of completing their program. It was assumed that the majority of the participants would already be eligible to receive childcare assistance through the Department of Human Services, so measures were taken to support those participating in the state program to help mitigate the cliff effect of losing childcare assistance when income increases. The goal of this step-down process was to help support the participants with the cost of childcare during the early months of employment and reduce support as they likely would see a pay increase due to their time on their job. This would likely lead to a decreased impact of the cliff effect for the parents in the hopes they would be earning more at the end of their first year of employment.

A review of the childcare assistance manual, created by ACC, outlined this step by step process but also highlighted an important caveat to this program option. Participants had to receive the assistance of an ACC success coach in order to be eligible for the program, and they

must have applied for Department of Human Services Child Care funding. The assigned success coach was there to help them navigate the educational needs as well as the social service needs that were required for participation. The ACC success coach was a crucial connecting piece for the program participants, and according to the childcare assistance manual, was actively involved from recruitment through placement into employment.

In order for the childcare assistance program to be developed, implemented, and maintained it took a variety of partner organizations in the community. I interviewed four key administrators who each played a critical role in the development of the childcare assistance program. Sue, with Aurora Community College, has been with the college for nearly 20 years. She currently serves as the Vice President of Community Engagement, where she leads the division on creating innovative programming and business connections for the communities served by ACC. Kelly, with Opportunity Denver Corporation, serves as the Vice President of Employment Solutions. Her role in the agency is to work directly with local businesses to help build the workforce pipeline and provide a variety of funding that supports workforce-specific programs in the community. Nita, with Community Resource Partners, serves as the Executive Director and works on targeted grant programs that help increase equity in the Denver region. She works closely with multiple community organizations to help provide grant funding opportunities and supports multiple unique programs in the Denver area. Community Resources Partners is a grant-focused agency that helps identify local needs and provide financial supports through a variety of grant opportunities. Lastly, Sarah, with Child Care Helpers, works primarily with childcare centers and in-home providers. She works directly with the providers to assist in completing the required paperwork and access additional funding supports if needed.

| Participant Name | Agency Name |
|------------------|-----------------------------|
| Kelly | Denver Development |
| Sarah | Child Care Helpers |
| Nita | Community Resource Partners |
| Sue | Aurora Community College |

Figure 4. Partner Organizations

Each interview with the community and college partners helped to form a better understanding of how the childcare assistance program was developed, implemented, and supported as a pilot program. Interesting findings during the interviews lead to varied viewpoints on the value of the program, as well as the intention and purpose of the program. Each interviewee played a different role in the program and the community, which produced different perspectives on the program itself. Despite the varied viewpoints, common themes aligned with the research on the single mother student population and the support systems in place to support them to complete an education and enter the workforce.

Thematic Findings

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- Theme 1: Child Care Barriers
 - Theme 2: Workforce Challenges
 - Theme 3: Institutional Supports
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Figure 5. Themes of Community Partners and College Administrators

Theme 1: Child Care Barriers

The first theme that emerged from the data collected during the interviews with the community and college partners was childcare barriers. The main areas of barriers surrounded equitable access to childcare and the cliff effect that is experienced due to income changes of the single mother. A common understanding and recognition of this barrier was apparent in all of the administrator interviews. The childcare barrier identified not only by the partners participating in the program development, but also the data collected in the Child Care Access study conducted by the Massachusetts Institute of Technology (MIT) in 2018 was the most significant driving force behind starting the pilot program. According to the MIT study, availability issues of childcare in the Denver area included a lack of sites with the ability to set up new centers, a lack of options for parents who work second or weekend shifts, and a shortage of care for infant-aged children (Crowther et al., 2018). With shared direction and a basic understanding of the intention of the childcare assistance program, each organization understood its individual role with regard to childcare access and the cliff effect. Each participating partner discussed the need to eliminate the barrier to accessing childcare to help increase access to higher education and to build the workforce pipeline in the Denver area.

Sarah, from the Child Care Helpers office, talked about the lack of available daycare spots for parents in need of childcare. She talked about the workforce challenges that are presented because of the lack of available daycare spots during second and third shift jobs. Sarah's report of the lack of childcare spots during second and third shift jobs was supported by a study completed by the MIT for the city of Denver in early 2018. This study, funded by another participating partner, Community Resource Partners, was the springboard that led to the childcare assistance program becoming a priority for multiple community partners and the

community college. According to the MIT study, the lack of childcare during second and third shift and weekend shifts created a shortage of daycare options for parents working those shifts. This lack of childcare during off-shift employment opportunities prevented single parents from participating in the workforce.

Sarah shared that many daycare centers want to take on more children but because of the lack of staff, they are not able to take more children due to ratios of workers to children. Sarah's role in the program focused on the development of a childcare certificate program aimed at increasing the number of childcare providers in the Denver area. Efforts were made by all of the partners to educate childcare providers about both the childcare assistance program and the childcare certificate training program that was started. A letter that was drafted and sent to childcare providers provides a brief overview of the childcare assistance pilot program, highlighting the subsidizing of childcare for recent short-term certificate graduates of eligible programs. The letter provides basic information about the childcare assistance program and appears to ask for the involvement of childcare providers: *"We look forward to partnering with you in this initiative to grow the workforce in our community, ensure a high quality early childcare experience for area children, and help to make the Denver Area a community of choice for childcare."* In another statement at the bottom of the letter, the author states, *"If you have specific questions or want to express your interest in partnership or serving Opportunity Denver Pilot graduates, please contact..."*

This letter was written during the completion phase of the first round of short-term certificate training programs that were eligible to receive childcare assistance. During this time, the unemployment rate in the state of Iowa was 2.4 % (Iowa Workforce Development, 2019). Denver County, with an even lower unemployment rate of 1.9%, was faced with a shortage of

people to fill available jobs (Iowa Workforce Development, 2019). This low unemployment rate indicates that there was likely a middle-skills gap in the community, and efforts to provide training and eliminate barriers to access the training were a top priority for the community. In addition, there was a growing awareness of the lack of childcare spaces based on the results of the childcare study.

Sarah was also a key leader in assisting in developing the childcare assistance manual that was used by the ACC success coaches to assist students in completing the necessary steps required to participate in the childcare assistance program. Sarah explains it below:

We know that we need more people in the childcare workforce, they simply just need more staff. If we can have more spots available, then parents have a better access to quality childcare. It was my role to help in developing a curriculum with the ACC team that met the workforce needs for childcare providers. I also worked closely with the ACC coaches to make sure all of the steps required for application [for] Department of Human Services childcare programs were followed. This was a requirement of the program for participants and the coaches need to know the steps even better than the students themselves.

As Sarah explains, the need to train more people in the childcare industry is crucial to increasing the access to quality childcare for working parents, primarily single mothers. Sarah also shared that there are spaces available in the community, but that the schedules of available daycare may not meet the current needs of the workforce, so access continues to be an issue for parents working a second or third shift job. Supporting single parents in accessing employment is a component of the supports provided by the ACC success coaches, but without available options for childcare, parents' options for employment are often limited. This presents a barrier for any

student who may not have support for childcare, and it is likely that the student will likely choose not to seek employment unless daycare is available. The other main issue to access that Sarah sees is the area of town in which the parent is working and where the daycare might be located.

We do have spaces available in the community, but they are not necessarily matching up with the people's schedules or they are not matching up with the days they need care.

They are not matching up with the area of town that they are needing care. If I showed you the openings that we currently have, you would think, wow we do have a lot of openings, but when parents call, they are looking for specific time, specific place, and age appropriateness.

The trends of availability, according to Sarah, tend to vary month by month. Sarah shared that they go through different trends of people calling and that their needs for childcare during their work hours is high; however, while second and third shift work daycare needs present an immediate challenge, often times parents find a solution on their own with family or friends during their second and third shift work. Sarah explains it below:

We go through different kind of trends where we will have people call who need childcare. Second shift or third shift. And it seems like it is a very big deal for a for a little amount of time. And then you try to do a program that helps with second shift, third shift care. And then what we find is these people... their first instinct is I need to find childcare. I have a second shift job. But then as they are looking and they're running into those roadblocks, then like, well, do I really want my child at a stranger's house? And then I have to disrupt their sleep. So, what we find is a lot of parents find a solution with family members or with neighbors, because...they do kind of want that more comforting childcare when it gets into that evening time or that overnight time.

A key component of the childcare assistance program was partnering with a new childcare center that was projected to open about six months into the pilot program, August 2019. While this facility was able to take on new families in August, the gap between the pilot program starting in April 2019 and the center opening in August 2019 needed to be filled. This is where the idea of an ACC pop-up childcare center was formed. In a collective effort to meet the goal of the childcare assistance program in providing access to childcare both during and after training, ACC converted a space at its downtown location to a childcare room.

In order to help alleviate some of the access concerns for the parents, the daycare center agreed to be available for childcare from 6 am- 9:30 pm, Monday through Thursday. The intention of the partnership was to eliminate the challenges about times and provide a reliable location for parents to send their children. Nita, from the community foundation, explained the barrier of childcare from her perspective. The community foundation provided financial support to the childcare certificate students by paying for their tuition for the program. Nita explained why she wanted to support the initiative and how she viewed the barriers to childcare:

The whole business model is broken. The workers providing the childcare do not get paid well enough and they don't have excellent benefits, vacation...and people needing the services can't afford the childcare. So, it's, all right, this is totally broken because both sides have nobody winning. This isn't working for anybody, not the provider or the parents. So, it became very obvious to me that either we needed either business or government to invest in the childcare system or we are just going to be putting on a band-aid to the real problem.

Nita's hope in paying the tuition for the first 20 participants was that more students would become trained in the childcare program and help fill the gaps in the workforce. Aligned

well with Sarah's goal for the program, Nita had the financial means to help support the program and hopefully help to increase the workforce in the childcare industry. Although Nita's role would not likely change the model that they knew was broken, her hope was that those getting the training would be the passionate individuals needed in the childcare system. The workforce partners in the community held similar views about access to childcare. Kelly of Denver

Development shared:

Data from the local childcare resource and referral over a five-year period showed a significant decline in programs available for childcare. While everyone was impacted by this, a low-income population was more impacted because there is also a reduction in homes that accepted children who were state paid. So, once we learned of this data, we inquired with our partners at ACC regarding the Opportunity Denver Program and to see if childcare was a reported common barrier for applicants. The data that we got pointed to yes, it was a frequently reported barrier.

Kelly described the barriers that she could see from her workforce perspective. Supported by the feedback provided by ACC, Kelly knew that an investment to support a training program aimed at eliminating the workforce barrier and developing a childcare assistance program was the right move for the community. The barrier created by limited access to the type of childcare needed by parents was hoped to be solved by training more people in the childcare area. The development of the short-term childcare certificate program was intended to fill the gap in the workforce so that access would be increased. Access to childcare was a crucial barrier to address if workforce barriers for the Greater Denver area were to be addressed.

Not only was access to childcare itself an issue, especially for single mothers who make up a larger proportion of the under-represented population living in Denver, the cliff effect of

losing childcare assistance based on incomes was a real issue that the partners wanted to help address. The goal, from Kelly's perspective, was to help inform state policy so that the income guidelines for childcare assistance could be adjusted. The program providing childcare support for up to one-year post-graduation helped to fill the immediate need parents on assistance may need. Kelly remarked,

So we also had to do some education about [the] cliff effect in the state of Iowa, where we have one of the most difficult cliff effect policies in the country where individuals lose any state benefits at a pretty low wage, which actually reduces their incentives to take higher levels of employment or promotion where they might earn a higher wage.

The cliff effect occurs when a parent loses their childcare assistance from the state because their income has met the assistance threshold (Fisher & French, 2014). The parent loses the childcare assistance but is likely not able to support living expenses and raise a child without assistance. In the 2018 report conducted by MIT for the City of Denver, recommendations to help address the childcare barrier were to increase public awareness of the childcare issues surrounding the cliff effect and to help educate legislators about the childcare cliff effect and lobby for changes (Cowther et. Al., 2018). The collective efforts from each partner organization to implement these recommendations led to a shared mission among the organizations. The impact of the cliff effect often leads to single mothers choosing not to taking a higher paying job or to quit their job, simply so they can maintain their childcare assistance benefits. From the provider's perspective, Sara shared that she often sees the cliff effect since she primarily helps daycare facilities, not the parents using the services. She explains a bit more below:

We know that the cliff effect is a problem for parents, you know. It's like they will be here one day and then gone the next day. So, I think our providers feels that too, because they

have an income coming in from this family and then that family gets kicked off the CCA for one reason or another, then they don't have that and then they have an open spot.

While the different partners had different roles in the pilot program, addressing the cliff effect for both the parents and the providers brought the group together with a common goal. The partners in this pilot program hoped to have an impact on the childcare cliff effect by encouraging providers to take on children who were being funded with state dollars. The additional component of the program provided parents with support on a step-down basis to help eliminate dependency on the state program. The hope was that this would encourage more local providers to accept state-funded children, thus opening up more available spots for low-income children in the Denver area.

Theme 2: Workforce

The second common theme among the partner organizations was the theme of workforce. The common theme of needing to garner support from a childcare assistance program as a workforce issue and educating businesses about the need for childcare to support employees was recognized by all of the partners. Of the partners, DC played a significant political role in harnessing its connections to build support for childcare among local business owners and collectively bring the workforce, community, and higher education partners together. While ACC already held a heavy presence in the workforce realm due to the community college mission focused on workforce needs, Sue with ACC identified the important connection to business that DC brought to the partnership.

Nita, whose organization partnered with the Sloan School of Management of MIT to conduct the childcare access study for the city of Denver, shared that the study identified that the city needed to build relationships with local employers to help them understand how childcare

has a direct impact on their workforce. Nita is the partner most closely connected to the study conducted by MIT and used this research to help gather support from the other partners. She used the childcare access report to open up discussion and opportunities for exploration with multiple organizations and business leaders. Nita's close connection to this report and her passion to see findings put into action the need to increase the human capital of Denver to fill the pipeline of employees in not only the childcare sector but across a variety of sectors. While Nita's role in the childcare assistance program shifted due to changing priorities, her involvement from the very beginning of the study was crucial as it brought more awareness of childcare access as a barrier to employment and education.

The report provided by MIT was inclusive of the multiple facets needed to successfully implement a childcare initiative. At the time of the study, there were many unknowns about the viability of a program to assist in increasing childcare opportunities in the Denver area. During the time of the study, historically low unemployment rates were affecting the workforce pipeline in Denver, and there was a shortage of workers who could fill the gaps in the pipeline. This report helped to provide insight into the unique challenges and strengths for Denver when examining childcare through a community-wide strategy. At the time, this report was used to help educate local organizations about childcare needs. Used later to help leverage funding to support the childcare assistance program, this report was the key to helping to bring awareness of the shortage of quality childcare in the Denver area.

Gathering support from the local workforce presented one of the greatest challenges, more than any of the partners could have imagined, whether it involved convening local daycare providers to help identify the true shortage of workers in their facilities or meeting with local

employers from a wide variety of industries to help educate them about the value of providing childcare for their employees.

According to the MIT study, investment in childcare by employers increases retention rates and decreases turnover rates of employees. The report stated that one Denver-area employer estimates that childcare issues cause 50% of absenteeism. After providing childcare, 85% of employers report improved recruitment and 2/3 report reduced turnover.”

Nita shared that in the Denver area, the need to gain influence with the larger employers in the area to support a childcare program as a workforce issue was needed. She talked candidly about meeting with three larger employers in efforts to garner support for an increased interest in childcare as a workforce barrier.

So, I think a big barrier was that the business model was broken but that the three main players that could have made a difference weren't game. A lot of businesses talked a big game at the front end of our proposal but then when they started digging into it, they didn't want to own it. They didn't want to pay for something. They didn't like the liability. I just kept thinking, if we could get at least one of these employers to have even a cafeteria plan to support childcare for their employees we could have been successful.

Nita was referring to how important it was to get the support of the local businesses to help identify ways in which they could support their current or future employees by providing some form of childcare. The graduates of the Opportunity Denver programs supported by ACC's childcare assistance program would likely be entering employment in the Denver area. The intent was to provide training for the single mothers and connect them to employment. The lack of involvement from the businesses in continuing a supportive childcare environment had the potential to exacerbate the already glaring gap in the workforce pipeline. Nita and her team's

attempt to connect with large employers in the area went mostly unnoticed. Because of the lack of involvement from the businesses, her team could not fund the initiative. She was forced to change priorities and make the hard decision that she and her team could not fund a childcare assistance program through her organization.

As the Executive Director for the organization that funded the MIT childcare study, Nita knew that this was still a need in the community and used her political capital and financial capital to garner interest from another partner organization. Nita described sharing the need with DC, and more specifically Kelly; she knew that since her team could not address the problem, Kelly might have more success. The transfer of the responsibility to DC led Kelly to connect with Sue at ACC and the partnership truly started to take shape. Little did DC know that ACC was dealing with multiple students who struggled to enroll in programming because of the lack of reliable and affordable childcare. The unique partnership that had been created to address previous workforce needs in the Denver area was now moving towards an innovative approach to increase workforce training at the community college and implement an innovative student support program.

The number one recommendation from the MIT study conducted for the city of Denver to help increase the workforce was to engage local workforce partners and educate them about the benefits of supporting childcare for employees. DC and ACC leveraged their already established relationship between the community organization and higher education and their shared vision of increasing workforce training for the city of Denver and began to work collaboratively in designing a childcare assistance program. Nita expressed that she did not necessarily always support turning this into a workforce-only initiative, but she did support the local businesses having a stake in increasing the daycare options for the residents in most need.

Kelly with DC took on the challenge of educating the businesses about the value of supporting childcare, whether directly in their company or by financially supporting their employees to make childcare more affordable. Kelly's connection to the businesses allowed for a platform to be created so that the local business owners on her organization's board could hear about the need for childcare. This audience of potential funders of the childcare assistance program was essential in taking the next steps to secure local dollars that would support a wide initiative across the workforce and community college sector. Her efforts proved to be successful. Not long after presenting the need to support childcare to increase the workforce pipeline, Kelly's board approved the use of dollars to support the innovative childcare assistance program designed by the ACC team. The city and county soon followed and dollars were reallocated to help fund the childcare assistance program for students enrolling in any of the four short-term training opportunities at ACC.

The social capital and political capital that Kelly's role brought to launching the childcare assistance program was crucial to establishing a general understanding of the need for more focused attention on the childcare shortage as a workforce issue.

Offering the perspective presented by Vice President of Aurora Community College, Sue shared that businesses were in a tough spot in providing daycare support directly to their employees, at least in the form of building and maintaining a childcare center. Sue remarked, *"Because of all the costs and the regulations that...are enforced, it is very difficult to have childcare and to be financially sustainable...And if you aren't the experts out there the field, you are deviating from your mission."*

While Sue identified that providing direct childcare assistance in the form of a physical center would be a challenge for many of the smaller businesses in the Denver area, she also

noted that figuring out how to support parents in the work environment was a crucial piece to help increase the single mother workforce pipeline. Like Nita, Sue shared that the important connection of DC to the employers on Kelly's board in the local area was a crucial political tool. She shared that without Kelly at DC, the local businesses would not have had any interest in supporting childcare for their employees simply because it was not their core mission:

So for them to get into their own childcare program, I don't really see that as a real opportunity but to be able to provide some funding and some incentives that would assist the companies getting tax breaks so they would be able to give funding to parents, I think that would great. Having businesses be more lenient and flexible processes to help with the child, with the parents, with sick children, I think that is the responsibility of the business. Those initiatives can make a big difference.

Sue knew that the businesses could not suddenly start to develop innovative and robust childcare supports for their employees. Given the significant financial and time investment this would take, her immediate goal shifted to creating the childcare assistance program to at least help financially support graduates of ACC training programs during their training and once they entered employment. She knew that ACC could partner with DC to make this program a reality now that funding had been secured. She described it as positive step towards enhancing student supports outside of education and supporting the workforce mission of the community college.

Kelly, with DC, also knew the value that was placed on the partnership with ACC and the connection between higher education and workforce. Kelly talked about garnering support from her board, which approved funding to support the childcare assistance program. Kelly had to build trust among the business community and show the outcomes of the MIT study through the workforce lens to get their support. She discussed how she used the MIT study to help educate

her board of directors about the benefits of funding portions of the childcare assistance program. Kelly shared that she had to educate her board about the impact childcare has on the local workforce and how providing financial support for the new initiative might have long-term rather than short-term outcomes. Kelly remarked,

I would say the employer community was the most reluctant because childcare is not a traditional economic development tool and it's a bit of a long game. So, we really had to make it about the workforce for the employer community, first and foremost.

As Kelly talked about gaining the support of her board of directors, she talked about how funding the child care assistance program to help fill the current workforce pipeline by reducing the actual cost of childcare for program graduates would likely lead to higher retention rates for employers because their employees would have reliable childcare funding while they were employed, allowing them to take less time off to attend to their children's needs. From this lens, Kelly moved on to educating her board about the immediate impact for the students, who would be supported beyond education. Kelly talked to the businesses about the educational value of a short-term training certificate and combatting the generational poverty cycle that many of their employees were likely trapped in due to barriers impacting their workforce participation, such as lack of access to quality childcare.

Once Kelly was able to educate her board about the need for more attention to the childcare shortage, the next step was to examine the multiple funding sources that would be able to help support this initiative in the business, non-profit, and higher education realms.

Leveraging the financial capital of various funding streams that support the DC and working in partnership with Community Resource Partners and ACC required trust between the three organizations. The financial capital and the braiding of the various funding streams allowed the

childcare assistance program to have the funding support it needed to start to address the problem. With the braiding of funding sources, students would not only have tuition provided for a short-term certificate program in a high-demand area, they would also have the costs of their childcare covered.

Theme 3: Partnership

The collective ownership of the childcare assistance program was evident in the interviews amongst the partners. Each individual organization played a different role in the program, and while working collectively on the program development and implementation, each organization still remained focused on its individual mission. The partnerships that it took to develop the childcare assistance program represent multiple capitals from the Community Capitals Framework. Human capital, social capital, political capital, built capital, and financial capital were all required for a successful implementation of the childcare assistance program. From the variety of partners interviewed, it became clear that although all partners shared many common goals, each partner had their own vision and understanding of how they were a part of the childcare assistance program. This unique relationship among the various partners led to a different understanding of the roles and some of the goals of the program.

Each individual organization involved in the child are assistance program has its own mission and vision. While all of the partners found value in the development of the multiple facets of the program, it was clear throughout the interviews that each organization brought a unique perspective to the model's development and implementation. Both ACC and DC functioned from the perspective of increasing the workforce pipeline by providing high-quality, short-term certificate training with financial support for tuition and childcare assistance, while the Community Resources Partners and Child Care Helpers functioned in the childcare provider

area, with less emphasis on the workforce initiative. Across sectors, these partnerships leveraged both the political and financial capital of each organization to remain focused on program development and support of the participants in the childcare assistance program. While all understood the value this program brings to the workforce, there were enough differences in opinion that perhaps some challenges were present due to differences in missions.

Most vocal about the differences in mission and participation was Nita from Community Resource Partners. As the organization that started the conversation based on the MIT study, Nita talked proudly about Community Resource Partners being the original organization to have identified a childcare shortage and need in the Denver area:

About five years ago, the community foundation went out to all non-profits and asked what the top three issues that are preventing you from keeping your clients. What are the barriers that are preventing our residents from having a happy, healthy, happy, successful life? The top two identified were mental health, now more commonly known as brain health, and childcare. So, we hired a consultant and we did a needs assessment on these two issues. From that assessment, we went out for funding. We very easily found funding to tackle the brain health but had less luck finding a funder for the childcare initiative. My board and I decided not to take on the childcare initiative but at the same time we had the opportunity to work with Aspen Institute and we were part of six community organizations, and we joined with the Southwest Initiative Foundation in Minnesota. Aspen helped us set up game plan on how and [see] where to bring about change that would have the most impact. So that was where a two-pronged approach came from. We then did a needs assessment, created a small cohort, and then created an implementation plan. After that we held a community meeting where stakeholders came

together, and we asked them what do we need to do next? That is when DC came and said that they would like to work on this, and we handed it off to them.

Nita's perspective on the role of Community Resource Partners and the goal of their participation in the childcare assistance program is that without the original assessment having been conducted, the need would not have been recognized, and the pilot program never would have been developed. The need for childcare was apparent from the study, but Nita felt that throughout the process, her organization was left out of the process of shaping the program that would actually help eliminate the gap in childcare at the level needed to make an impact.

Kelly with DC shared a different perspective on the role that they played during the childcare assistance program's development. Kelly acknowledges that Community Resource Partners was the first organization to start having a conversation about the need for not only a skilled workforce in childcare but the ability to provide assistance to anyone accessing childcare. Kelly's workforce perspective aligned with the mission of ACC. Sue, with ACC, talked about the importance of the childcare assistance program being about the workforce for the Denver area. As a community college, ACC's primary mission is to help fill the workforce pipeline with skilled workers in high-demand areas. This program helped to meet that need in the Denver area. When talking about the goals of the program, Sue shared,

The number one goal was helping the individuals get into employment, helping them be able to be self-sufficient. That has always been the goal of our Opportunity Denver Programs and our partnership with DC. We knew we needed to develop career pathways so that they could have a higher level of sustainability and self-sufficiency and also to get more people in the employment market.

Sue and Kelly's shared vision of the program implementation was a strong driver of the program implementation. Nita shared that she knew her organization could not fund the program and she gave it to DC because it needed funding. Despite her expressed concern that the intent shifted towards driving the workforce, and left the providers out, Nita supported the program and agreed to fund the students' tuition for the childcare certificate training program. Her support of this component of the childcare assistance program, while not the focus of this study, helped to support her mission of increasing the workforce pipeline as it specifically related to childcare workers and the shortage to fill that need.

Similar to Nita, Sarah, with her role at Child Care Helpers, truly felt that her role was to help establish a strong curriculum and process to make sure that the students in the childcare certificate program were getting the best training possible leading to basic certification in childcare. While Sarah worked most closely with the curriculum development for the childcare certificate, she also worked closely with the ACC success coaches to educate them about the childcare process at the state level. Sarah helped the success coaches develop the policies and procedures manual to follow when working with the participants in the childcare assistance program. Her role was to help educate the success coaches about the Department of Human Services childcare assistance program and how best to serve students in the program by eliminating conflicting information and providing support for completing multiple applications. While Sarah seemed to decrease her involvement in the development of the program, her involvement in the development and partnership with the ACC team would ultimately guide how the program was delivered to the students. The manual created in partnership with Sarah and the ACC coaches provided the model and step by step process for the students and success coaches to follow. This manual provided guidance to the team that would be most closely connected to

the students enrolling in a short-term training program and hopefully completing the program. Less driven by the workforce, Sarah's role in the program appeared to align more with Nita's rather than with DC and ACC. Sarah shared,

My goal was to help with part of the curriculum development, reviewing the curriculum, getting providers at the table to learn more. I believe that was my role in doing this and making sure, you know, that this program was doable. That students would actually be able to complete. I also had a significant role in making sure the coaches understood the DHS process since that was a component that each participant had to complete as well.

Despite the stark differences between the four organizations, the commonalities they shared made the program a success. All partners concluded by stating that they felt the program made an impact for the community, whether it was an awareness of a need or an awareness of educational opportunities with increased supports. The organizations shared a common mission of helping to increase access to education and the workforce for an under-represented population of Denver residents.

Without the variety of partnerships involved in its development and implementation, the program would not have been possible. Each partner brought a unique perspective and value to the program. Connecting the workforce, education, and funding partners was crucial to pulling together a program meant to impact an under-represented group of community members.

Sue, with ACC, described the relationship with DC as crucial to making the program a success. She emphasized that without the access to the workforce and business owners serving on the DC board, the initiative never would have been funded and it would not have happened. Sue shared,

The number one key in place that we used was our political partnership with DC. They have the political clout in the business arena and the businesses made the decision that they wanted Greater Denver Development to invest in the childcare arena. They have also had that political power because of the businesses saying that they did recognize childcare as a barrier for their workforce. They helped us leverage funding from the city, from the county, funding from the community foundation.

The statement above indicates that the community college could not have created this program alone. The funding was simply not there to implement a program of this size and scope. Not only did Sue highlight the overall need for the partnership with DC, but she highlighted the leveraging of Kelly in particular. Without the direct connection with Kelly and her thorough understanding of the Opportunity Denver program and its unique initiatives to serve the under-represented populations of Denver, the workforce partners would not have understood the unique challenges that come with an initiative meant to serve those historically living in generational poverty. The goal was to lift those living in poverty out of poverty by providing access to education, otherwise not available to them because of the childcare barrier. Sue spoke openly about that connection between Kelly and the businesses:

Quite frankly, Kelly was the educator of the businesses. She was the political capital that we had to have to be able to keep all of our funders happy because she was able to explain that, show our outcomes, and the diversity of the student population we were serving. She needed to be there to help educate her board and the business community.

Kelly talked about the vastness of the partnerships that were needed to make something of this magnitude truly be seen as successful. She shared that the key partners in the development may not have been directly involved with the implementation, but without their implied support

or their financial support, the program would not have happened. She talked about how she started to see a shift in the interest in childcare after Community Resource Partners shared its study on the lack of quality childcare and the role of workforce. She highlighted the work of Nita and her organization in bringing this issue to the attention of the political powers in the community. Kelly explains it well in the statement below:

I would say this has been a kind of perfect storm. Three years ago, no one said the words childcare in an economic development arena. Then I would start hearing conversations first at the community foundation. They are who really started to give this the attention that it needed. Then we stepped in to help look at the workforce training side and said that we needed to look at this opportunity through that lens. We started to bring in the city and the county, and they were at the table. Then we brought in childcare resource and referral.

Kelly's depiction of how the model grew aligns with Nita's previous sharing of how her team identified the need, but simply could not find the funding. Kelly explains that once the interest starting to spread, the city and county had to be involved because they did not know where the money would come from to support the childcare assistance program. The multiple funding streams that needed be braided to fund this program were significant. It would take money from the city, the county, and three out of the four partner organizations. Kelly shared,

The county is the single largest funder of childcare in the community. All of the state funds flow through Denver Early Childhood to be used in the community. The county attention to this program really helped to bring attention to the childcare community. I think the childcare community was excited to have other people shine a light on this and say that how the current system was functioning was not sustainable.

The partnerships described in each interview would not have been able to happen without the trust between the multiple organizations. Specifically identified by both Kelly and Sue, trust between the organizations was a key piece to make this multi-faceted program work. The trust had to be built. As Kelly described the interactions between the Child Care Helpers and the other partners, she talked about how a sense of fear was likely present because of the large amounts of money that flow through the Denver Early Child Care program. She shared that she wondered if there was a fear that a partner was trying to use its money differently.

Sarah, with Child Care Helpers, never mentioned a fear or concern about money being reallocated but did speak to the new attention and partnership in her arena of work

We never really had any connection to DC, we never were connected to small businesses or employers in any way. I think we really got a great opportunity to help educate people on all of the things that we do and all the things that our childcare providers do and what is really required of them. So, when I look at it, I feel like those connections are there now. Even though we had worked with the community foundation in the past, our relationship is stronger now.

The growth in the partnerships was helpful to make this large program work for the students and the community, but the challenges that can come from such enhanced partnerships can sometimes cause issues between multiple organizations. The partnerships seemingly appeared to work closely together, but Nita, from the community foundation, highlighted that she felt the partners still functioned independently of each other and did not take a systems approach to developing the model. Nita explains below:

We at the foundation really try to tackle tough social issues through a system change strategy using a collaborative process. I feel like this is stronger strategy than traditional

grant making programs I have seen. I think when we handed this project over, DC took it, and their mission is business. I think we missed the systemic approach and the most important people in this program should have been the children, then the families.

Business would have been my third. I feel like the people who are really in the system of childcare or providing the childcare were not driving the conversation or involved and to me that goes against my systems approach.

The partnerships established or expanded on in this model all inherently grew because of the common goal of providing quality training and additional supports to the most under-represented populations in the Denver area. The core partners who worked on this project each had their own piece to include in a large puzzle. Because of the work involved across the sectors, the partners were able to find funding, create a curriculum, and use the political and social capital of each organization, all with the shared goal of creating an opportunity for historically under-represented populations in the Denver area.

Theme 4: Policy

It was clear that all parties involved had the same focus of shifting the childcare policies to help both the parents and the childcare providers. They collectively, although through different lenses, wanted more attention to be placed on childcare and the need to eliminate this barrier for parents. The interviews showed that each partner understood the large task at hand to implement the childcare assistance program in a higher education institution. The potential this program had to impact policy, for students, workforce partners, childcare providers, and the greater good of the community was an identified by all of the partners as a goal. All partners understood that childcare in the State of Iowa needed more attention. A common thread that held together the multiple partners throughout the program, and still does this day, is the hope

that this program helped to bring attention to a need in our rural communities: the need to increase access to childcare for those trying to pursue education, provide incentives for employers to support childcare for their employees, and decrease the cliff effect for those receiving childcare assistance from the Department of Human Services.

Kelly and Sue both shared that they feel strongly that the childcare assistance program brought attention to a statewide need. During the legislative session for 2020, there were five bills related to childcare. Both Kelly and Sue felt that because of the work done by this group of community organizations and the community college, the state of Iowa began to look more closely at childcare access, funding, and programs to support self-sufficiency. During the Fall 2019 term, Kelly and Sue were invited to present on the childcare assistance program to legislators in Des Moines. Kelly and Sue shared that the opportunity to get in front of the legislators was beneficial so that they could see both the challenges and the successes of the pilot program at the community college and broaden the understanding of the importance of community partners to supporting community college initiatives. Both felt that this opportunity highlighted that the program helped to bring attention to the need for accessible daycare across the state of Iowa and showed a community working with higher education to do something about the need. The political capital that was leveraged by Kelly and Sue brought attention to the childcare needs in the state, in higher education, and in the business sector.

Sue shared that she felt the program helped to bring attention to the childcare barriers that community college students, workforce partners, and communities face. She spoke about the legislative priorities of this year's session and the role she felt this program provided. Sue and her small team were invited to share information about the childcare assistance program at the

Iowa State Capital in February 2020. The presentation exposed multiple legislators to the innovative program created by ACC and the many partners. Sue shared,

It's so important for us to continue to be heard at the state level. The whole legislative issue of childcare and looking at support for childcare and looking at policies and procedures for not only our students but for our workforce. This is an in-demand occupation but because the wage is below \$14 per hour, the state won't fund [it]. This program is a workforce strategy and we need to make sure our childcare centers are growing. We have had the benefit to be legislative advocates and the governor made childcare a priority because of what we were able to showcase.

Kelly talked about her hopes for this model becoming one that other communities and colleges would look at and try to replicate. She shared that seeing so many bills in legislation this year regarding child care helped her think that the attention was moving towards the need for quality childcare, incentive programs for businesses, and expansion of the incomes for childcare workers, which are crucial to help the State of Iowa make a shift towards increasing access to quality childcare. Kelly talked openly about the importance of higher education and the need to reduce barriers for students. Highlighting the partnership with ACC, Kelly expressed her feelings about how the strength of the partnership between her organization and the college was what works best for the greater good of the community and the college:

I think we are going to see more community colleges and economic development groups engaging in childcare through training programs. Childcare has always been a challenge for parents. There is a reason why different social organizations offer childcare, why gyms offer childcare. It's a fact that if you want people to participate in what you have to

offer, you have to have a solution for where they can take their children. I don't see that going away.

Kelly also talked candidly about what she thinks the state of Iowa could do to help support community colleges to take on a similar project. Kelly shared that she hopes this brought attention to the needs of students and the lack of resources that community colleges have to implement a support program like this. Kelly hopes that in the future, the state will look at how community colleges can use some of their existing funds to support childcare for their students or if additional funds could be appropriated to use for similar initiatives. She ended by saying, *“At the very least, I imagine this program and some of the bills in the legislation right now, is going to create more flexibility for them (community colleges) to utilize funds for childcare.”*

The impact that the childcare assistance program had at the state level was looking promising at the time of the majority of these interviews. Since then, the implications of COVID-19 and the legislative process have stalled progress on this initiative at the state level. Sue expressed that she is hopeful the bills will be picked back up and made a priority like they were during the start of the legislative season.

Theme 5: Program Implementation

The implementation of the Child Care Assistance program was a true effort of multiple organizations working together to help meet a community need. Challenges and successes were seen in the pilot program, from each organization. The impact that this program had on higher education in the local area was evident, but the impact that program also had on the various participating partners showcases the strengths, weaknesses, and challenges of implementing such an innovative program.

Every partner in the childcare initiative understood the tremendous value that the childcare assistance program brought to the Denver area. Each partner expressed that they felt the pilot program brought attention to the childcare shortage, helped increase the skilled workforce, and provided a solution to help increase both education and workforce participation through the funding of childcare.

The partners interviewed for the study indicated one common challenge that came after the completion of the program. Each partner identified that the graduates of the short-term certificate training program did not present the ambition, confidence, and quality of hard work that they all desired in a childcare worker. Sarah, with childcare resource and referral, always had concerns about the quality of childcare providers and making sure that the right people were getting trained. The pilot program that supported childcare assistance programs in four different certificate areas, while successful during the program, did not result in continued employment upon graduation. As Sue stated in her interview,

Our ACC success coaches did their best to make sure the students fit their program of choice. Whether it was the newly developed childcare certificate or one of the three other programs, the students were connected to their coach. We unfortunately can't control the human aspect of our students. We did our best to reduce the barrier of childcare...a barrier that we thought was significant, but what we failed to account for was the other multiple barriers a student may have in accessing education.

While all of the partners saw the program as a success, the childcare assistance program did not come without challenges, whether internal to each organization or between organizations. Nita talked about the challenge of no longer knowing where the community foundation's role was in the childcare assistance program:

We did have the conversation about what our role is now that we handed it over and I don't think we ever really answered it. And I do think as a community we could have done a better job if we had paid more attention to that question. I think one thing that our organization does well is be the convener and the catalyst, we can be the facilitator to bring the main stakeholders to the table and then others really address the systems issue.

From the college perspective, nearly all of the barriers identified in the program were internal. Sue shared very few external barriers but talked candidly about the internal barriers encountered in the program development:

One major barrier we had, internally, was simply working with the deans from the credit program. They felt that developing a career pathway certificate was a threat to the credit program. This was an expected barrier because this has been an internal issue since we started our non-credit certificates in 2011 but they were originally not supportive of the program.

The challenge of working with the deans and faculty at ACC was highlighted throughout Sue's interview. Due to the accreditation standards for the ACC Child Care Diploma program and the ladder into a four-year regent's university program in early childhood development, additional coursework had to be included in the childcare certificate program. The intention of adding the additional coursework was to help create a true "ladder" into the ACC diploma programming, according to Sue, but it presented curriculum challenges for both the students and the instructor of the short-term certificate training program:

Childcare is a very rigorous, very book heavy program, project heavy program compared to our other career pathway certificate programs. It's a little more rigorous because it does ladder into a four-year program. It also happened that in the middle of developing

our certificate the four-year changed their requirements, so we had to add some last-minute change to our program. Typically, we know the curriculum of the credit program when we started, but this change caused additional stressors for the students because they weren't aware of this when they started the program and also the instructor. And in reality, to our business partners as well, they didn't need all of that extra curriculum. They just wanted them to have the essentials skills to start working as soon as possible.

While the childcare certificate program development presented challenges for ACC, another challenge was creating a pop-up child-care program that allowed the childcare assistance program to start. Despite efforts of all of the partners to help educate local daycare centers and providers about the benefits of supporting the program by choosing to provide childcare for students pursuing the certificate, there was only one center that agreed to assist. The challenge was that the center was new and was not slated to open until August 2019, a full four months after the pilot childcare certificate program was set to launch. ACC stepped up and developed a “pop up childcare” center. This model allowed parents to take their children to a space at the ACC downtown center while the parents were on the same property taking their class. While ACC provided the space, they partnered with the local YMCA to provide the childcare so as to make sure the children were well taken care of. According to Sue, the pop-up child-care program presented opportunities and challenges and was a learning experience for the college. Despite the challenges, without the pop-up opportunity, the childcare assistance program would not have been possible. It was critical piece that needed to be implemented in order to allow the parents to learn while their children received safe and reliable childcare.

While ACC experienced challenges regarding the curriculum implementation and the pop-up childcare, Kelly with DC, sympathized with the challenges presented to ACC to help

make this program a success. Kelly talked openly about the pop-up childcare, and she knew of the challenges that came with that from ACC and their impact.

It was not something that had ever been done before. It required use of their space. It meant there were kids running around all evening. It required retrofitting a classroom space. But from the pilot's perspective, I think it was a really good solution.

Despite the best efforts to provide quality training to the students in the program and recruit students who were passionate about childcare, the partners identified that the participants in the first childcare certificate were not committed to the final goal of finding employment in the childcare arena. The partners all expressed that they did not feel the students were fully vested in the end goal of getting employed in their area of study, for a variety of reasons. The reasons shared by the partners ranged from motivation, income concerns, fear of making a change, and an overarching generational poverty mindset. Sarah shared,

I think ACC did a wonderful job with the curriculum and the implementation of the program. I think where we struggled was getting the right people coming in or out of the program. I had heard from a provider who hired a graduate of the pilot program that they really didn't want a full-time job, they just weren't motivated to work in childcare.

Sarah's comments were not unique among the partners. Other partners highlighted the challenge of finding students who understood the commitment to not only complete a short-term training program but also find employment after the program. Kelly, from DC, identified that although they knew childcare was a barrier for these students, she thinks they misunderstood the co-barriers that the students had when they were recruited for the program.

Kelly shared that the struggle to recruit for the program was harder than anticipated, and she explained that she thinks that trust needed to be developed between the students and the

program. Despite the shared efforts of DC and ACC to market the childcare assistance program and the free childcare that came with the training, numbers fell short of the projected goal to serve 50 parents. The marketing pieces created by the teams were clear, transparent, and enticing. Each was shared widely, in various formats, including electronic and print. Efforts to recruit students for the four short-term programs were supported by multiple non-profits that worked with ACC to fill the training programs. Despite the best efforts, the marketing of the program simply did not result in students enrolling in the pilot program.

I think we had a harder time recruiting than we anticipated. We didn't have the individuals that bought into this program. It looks really good on paper. We had to build the trust of the parents to send their children to us, to go through this program, and find employment when they complete. So, although it looks good on paper, humans are human. And in actual practice people don't always act in their best interest. So, there are other factors that are there. We just weren't as aware of the co-barriers that were there at the time.

Sue, with ACC, talked specifically about the challenges of working with students who come from generational poverty and how despite the best efforts to provide supports needed to be successful there is a human factor that plays into the decisions of the students. The students' commitment level was hard for the business partner and the funding partners to understand. Sue had shared that one of the main reasons they took this project on was so that they could help address the barrier of childcare that so many students had expressed. She shared that for years, the college had been hearing that childcare was a barrier preventing students from enrolling in short-term trainings. She felt that they were addressing a need but perhaps lost site of the magnitude of the other barriers the students had and the unique challenge this presented when

blending funding typically reserved for businesses with community college programs. Sue shared her feelings about the stress and frustration that were caused because she had to report minimal outcomes to business leaders who were used to big gains with big funding supports. She highlighted that this was stressful to her and that trying to explain the community college population to seasoned business leaders presented a challenge in and of itself:

I don't know that people truly understand that it takes time to change, time for humans to grow, time for human capital to grow. They have to gain the social capital and we have worked with folks that have been in generational poverty, who don't have role models. These students are truly just trying to maintain the essentials in life like food, shelter, and clothing. They are just trying to take care of their own children and survive. They don't understand things as the same as everyone else who hasn't experienced generational poverty.

There was a multitude of challenges within the program. Each partner interviewed talked about the innovation behind the model to help provide a multi-faceted approach to meeting a need of a population of residents who were faced with the barrier of lack of quality childcare. Since the start of the program in Spring 2019, 35 parents have been served by the childcare assistance program. The original goal to serve 50 has not yet been met. Despite not hitting the goal, the organizations in the partnership model all agree that the program had its successes.

Sarah, from Child Care Helpers (CCH), loved the program. She expressed that the region she serves is now leading the charge at the state level to implement a similar childcare training program within her broader organization. She shared,

I have to tell you that, other regions are looking at this program and they are calling it a new provider orientation. The new curriculum they are proposing includes all the

necessary things that someone has to do in order to get hired. It's very similar to the Opportunity Denver Program.

Sue from ACC shared this same success during her interview. She highlighted that because of the curriculum model developed, the state childcare programs are looking at how they are offering training to their new childcare providers. She highlighted that this is a huge success for the childcare sector and for increasing the skilled workforce across the state.

Despite challenges, there were successes across all of the sectors involved in the program. Nimbleness and open communication about the challenges allowed successes to be had and opportunities for growth to occur. The collaboration across multiple partners with multiple missions and goals speaks to the strengths of the local community to understand human capital and value the access to higher education collaborators can provide for the community. The financial capital, the built capital, and the political capital of the childcare assistance program helped create a strong pilot program that supported access to education for the under-represented population of single mothers. The collective efforts of each partner and the trust between organizations helped leverage multiple resources in support of providing access to higher education, with the goal of improving the workforce pipeline in Denver. All of the partners understood the reason behind the program and focused on the strengths of their own organizations to enhance the program as challenges arose.

The challenges and successes led each organization to examine the childcare assistance program. The decision of how to adapt the program, how to expand it to include more short-term training opportunities, how to better recruit students, and how to increase the connection to businesses were all considered after the pilot program ended. Once the pilot program ended in

the Fall of 2020, ACC had to look at the program from a holistic perspective and determine the college's next steps. Sue, with ACC, talked candidly about the biggest lessons she learned:

I would have started the childcare certificate program as a stand-alone. I would not have tried to mirror it 100% to the credit program because I think that getting the essential skills done and having on the job training would have moved people more quickly into employment. A second thing that I would have done was to be more proactive in getting in front of our partners. I really think that I should have been there explaining it to our partners and making sure they understood our student population and really explaining our successes and our stop out rate.

Sue noted that the rigor of the program, being aligned with a credit program, created a challenge for the students. She shared that she valued rigor but that at times the content needs to meet the needs of workforce demand, not a matching credit program. Sue shared that a major barrier to completion in the childcare certificate program was the rigor of the program and the students simply not being ready for that type of program. The other three programs—phlebotomy, industrial sewing, and customer service—were designed for students to complete and enter the workforce. Sue identified the discrepancy in the success rates between program completers across the programs. She expressed that she also felt that having business sponsors at the beginning of the program, who would hire the students while they were still enrolled, would lead to stronger retention rates and an opportunity for students to earn money while learning the skills. She noted that they made this change in the second round of the program and had more success with students completing the program.

Another major change after the pilot program was the change in location for the pop-up childcare. The community organization that had originally agreed to support childcare during

ACC training programs is now open and works closely with ACC to support students who need childcare during their training programs, and if needed, once they enter employment. This new partnership highlights continued support of the program despite it not meeting its goals. Success comes in many forms, and single mothers are being provided with a wider variety of training across multiple sectors because of the off-site daycare facility. This will have an even greater impact as more skilled workers will be able to put their skillsets to use once they complete their short-term training program at ACC.

In summary, the breadth and depth of this program presented unique challenges to implementation. Bringing in multiple organizations with different missions and goals inherently will lead to challenges in the development and implementation process. However, with that being said, each partner found value in the program and plans to continue working towards a stronger model. In the upcoming months, business involvement and increasing the support of the childcare providers will be intentional. Working to change the curriculum to align more with the workforce, not the credit program, will be examined so that students can complete the program in a timely manner while also working in the field. The efforts put forth by all of the partners created an innovative program that attempted to meet a need for one local community.

CHAPTER 5. SINGLE MOTHERS AND COMMUNITY COLLEGE AND WORKFORCE

To gather a better understanding of the experiences of single mothers who have completed a short-term certificate training program with ACC, I interviewed two single mothers who had successfully completed a short-term certificate training program at ACC. Their experiences help to provide insight into barriers encountered in both the community college and the workforce setting. The single mothers who participated openly shared their experiences, highlighting the successes and the failures they have faced in pursuing their education.

Melissa is a 33-year-old self-identified single mother currently living and raising her two children in a large metro area in Iowa. Melissa's son, 10 years old, and her daughter, two years old, are her reason for working hard and trying to reach her educational and personal goals each day. Melissa is not originally from Iowa and talks openly about the challenges that she has faced since moving to Iowa. She tells her story through a lens of a strong woman, not to be deterred by failure, setbacks, or personal struggles. Melissa has completed a bachelor's degree and is now working towards completing a master's degree. Her journey to where she is at today is one of persistence, strength, and intrinsic motivation, described by her as, "each day having the opportunity to go a little farther than the day before." Melissa was a participant in the childcare assistance program and is currently using her phlebotomy certificate while working for an insurance company completing blood testing for insurance candidates.

Melissa was open in sharing throughout her interviews the myriad challenges she has experienced as a single mother. A long history of not feeling as though she was welcomed in rural Iowa after moving here from Nevada and the stereotypes she felt others held against her raising two children without a father were continuous themes for Melissa. Melissa struggled to find employment with a schedule that worked for her and her two children.

Jessica is a 27-year-old single mother of a three-year-old son, Ely. Jessica is also expecting a second child in July. Jessica is originally from Iowa and is currently enrolled in a one-year Licensed Practical Nursing program. Prior to her current enrollment, she had completed a nurse aide certificate at Aurora Community College. Jessica shared her story of how she got to her current educational placement and her hopes regarding where she will be in a few short years. During the interview process, Jessica identified her family, her son, and her strong support system as reasons why she has been able to overcome her past history of extensive drug use and what she described as “poor choices.”

| Participant Name | # of Children | Certificate Program |
|------------------|-----------------------------|----------------------|
| Jessica | One son; Expecting daughter | Certified Nurse Aide |
| Melissa | One son and one daughter | Phlebotomy |

Figure 6. Single Mother Participants

Each of the single mothers highlighted in this study has completed a Certified Nurse Aide (CNA) short-term training program at ACC. In addition to completing the CNA program, Melissa also completed her Phlebotomy Certificate as part of the childcare assistance program. Melissa offered the perspective of a student who had been through the childcare assistance program designed to increase access to higher education and build a workforce pipeline. Jessica had also successfully completed her CNA. Both have continued on with their post-secondary education while simultaneously working in their area of study and raising their children.

Both single mothers shared similar struggles to completing their education and identified barriers in the workforce, education, and the state-supported programs meant to increase their social, educational, and economic mobility. Melissa’s story provides insight into her experiences

with the ACC childcare assistance program while also providing an overall exploration of the life of a single mother pursuing post-secondary education and working. While Jessica did not participate in the childcare assistance program, her insight into attending post-secondary education as a single mother and working provides context for the myriad of challenges faced by single mothers, both in and out of the higher education arena.

Thematic Findings

The following section will discuss the themes identified through the single mother interviews. The data collected through two rounds of interviews with each single mother produced three common themes and seventeen subthemes (Figure 2). Each theme identified is relevant to single mothers and their access to a community college education and workforce participation. The themes identified through the interviews with the single mothers were Child Care Barriers, Workforce Challenges, and Institutional supports.

| | |
|----------|------------------------|
| Theme 1: | Child Care Barriers |
| Theme 2: | Workforce Challenges |
| Theme 3: | Institutional Supports |

Figure 7. Themes of Single Mothers Pursuing Short Term Certificate Program

Theme 1: Child Care Barriers

The single mothers experienced similar childcare barriers. Both single mothers identified that childcare access was a barrier while they were enrolled in a short-term certificate training program and while they were working or attempting to join the workforce. Each mother had

unique challenges in finding, accessing, and funding quality daycare for their children. Barriers came in two primary forms. The barriers they identified were the Department of Human Services (DHS) Child Care assistance program guidelines and the shortage of quality childcare providers. Both of these barriers overlapped with the goals of the ACC childcare assistance program. This indicates that the childcare assistance program should benefit the single mothers who participate in the program.

Melissa talked about her history of struggles to receive DHS childcare assistance for her two children because of her varied work schedules. Guidelines for the DHS childcare assistance program require that participants work 30 hours per week. Due to the nature of Melissa' current job, she is not guaranteed a consistent 30 hour per week schedule. This prevents her from being eligible to receive the funding from DHS. Luckily for Melissa, she is receiving six months of support from the childcare assistance program. This support is helping her to financially afford the sporadic daycare she needs for her young daughter. Melissa's story is a perfect example of the primary challenges the ACC childcare assistance program was intended to address.

Melissa was emotional throughout both of her interviews when she explained her frustration and sadness related to the State of Iowa Department of Human Services childcare assistance programs. Melissa does not have a consistent schedule each week. In fact, her hours vary dramatically. Because of this lack of a consistent 30-hour schedule, Melissa is not eligible to receive Department of Human Services childcare assistance. Melissa would have been forced to pay out of pocket for her daughter's daycare expenses on a weekly basis if it were not for participating in the ACC Child Care Assistance Program. Melissa remarked,

I would have to pay out of pocket. I don't qualify for state assistance to pay it because I don't have a certain number of hours every week that I'm guaranteed work. I go to work

when my company has work for me to do. They tell me you go. So, since I can't say "yes I have 30 hours of work a week" they're not going to pay it. So, everything that I make would go to daycare.

The lack of childcare assistance, according to Melissa, seems to be something unique to the state of Iowa. According to the Iowa Policy Project, only seven states in the United States have wage ceilings that are lower than Iowa's. Currently, the state of Iowa's lowest threshold for State of Iowa Child Care Assistance is 145% of the federal poverty level (Fisher & French, 2014). Melissa, having lived in states such as Nevada, shared that Iowa seems to have tougher guidelines around childcare assistance and that this, compounded by challenging work schedules in her field and finding employment in a job that does not require evenings and weekends, causes a lot of stress for Melissa. Melissa shared that she wants to work, but the majority of jobs that are available to her do not allow her to work due to the lack of reliable childcare for her youngest child. Melissa talked about turning down good jobs in the past because when she was eligible to receive DHS Child Care Assistance the childcare assistance, she could not find a provider that would accept her pay source. The Department of Human Services Child Care Assistance program provides a lower pay rate to the provider. Because of this pay differential in childcare rates, some childcare centers move Department of Human Services-eligible children down to the bottom of the wait list. Melissa shared,

I would have been able to take the job, I told them I would take the job because when I called the daycare, they said they had an opening. It was a safe daycare and a good daycare too. I told the job that I would accept the job and then the daycare turned around and said that some people showed up who could pay full price, out of pocket, and they gave my spot away.

Melissa's expression of her challenges in finding a provider that would accept her funding source highlights yet another goal of the childcare assistance program. The program, while benefitting the participant by paying for daycare, also made sure that the provider was being paid the same amount for DHS assistance students as full paying students. Sue, with ACC, shared that they knew that providers might not accept DHS recipients because of the lower rate. Filling that gap for providers was intended to make it easier for participants like Melissa to obtain childcare.

The Department of Human Services childcare assistance program, meant to help single mothers afford childcare, left Melissa without assistance. At the time this study was conducted, she was not able to find a job that would support an adequate schedule for her and her children; thus, she was somewhat stuck in a job that did not provide enough support for her and her children. Melissa was currently able to work because she was still receiving the ACC childcare assistance and needed the income from her job. Melissa knew that this child care assistance from ACC would not last forever but for the time being, it allowed her to not have to worry about covering her full cost of childcare and she was no longer facing the problem of being denied childcare due to her funding source. Melissa continually worked with her ACC success coach to find employment that was more consistent but struggled with jobs that did not offer a work schedule that was conducive to raising her two children alone:

I can't imagine what I would do if I had to try and pay for this on my own. The childcare assistance program with ACC has helped me get the access to childcare that I need for my daughter. She is able to be in a place that is safe, and I don't have to worry about being turned down because of my funding source.

Similar to Melissa, Jessica shared struggles with using State of Iowa childcare assistance currently and in the past while attending her short-term training at ACC. Jessica, whose short-term CNA training program was not eligible for childcare assistance during the pilot program, did not have the benefit of receiving the ACC childcare assistance. Currently working towards her Licensed Practical Nurse diploma, Jessica had a different view of the challenges she would face once she completed her diploma program. The difference expressed by Jessica was the income cap to receive assistance: *“When I am done with school, I will only be making \$16.30 per hour, if I am lucky. And, you know, I don’t know how that will affect my ability to get childcare assistance.”*

According to information provided by Child Care Helpers, the average income in the state of Iowa at which a single parent with one child will lose DHS assistance is \$10.82 per hour. The loss of childcare assistance at this low level presents a gap in the ability of Jessica and other single parents to provide for their children’s basic needs. According to the Iowa Policy Project, a single income earner would need to make roughly \$18 per hour in order to meet the basic needs for a household with one child. This discrepancy in earnings is exactly what the ACC childcare assistance program was designed to alleviate for program participants. Jessica referred to having to choose between working in a hospital setting, where she likely could make more than \$20.00 and a clinic job that would likely pay less. While \$16.30 per hour is a good wage, but the cost of daycare for two children was a concern for Jessica. She knows that even though the \$16.30 per hour is more than what she makes now, she would lose her childcare assistance. Jessica worried that without that childcare assistance, she would not be able to afford the childcare that she needs in order to work.

Both Melissa and Jessica have used the Department of Human Services (DHS) childcare assistance program in the state of Iowa. Melissa has been able to benefit from the ACC Child Care assistance program, while Jessica has not. They have had different experiences in accessing quality childcare for their children. While not able to participate in the ACC childcare assistance program, Jessica was aware of the program. She remembered seeing various marketing pieces in the community and originally inquired about how to become eligible. When she connected with her ACC success coach, she shared that she was “let down” when she found out the pilot program was only for certain programs. While she understood at the time why only a few programs were available, she also felt that it might have helped her while she completed her training program.

Melissa’s participation in the ACC childcare assistance program helped to fill the gap that she was experiencing due to her inconsistent schedule that made her ineligible for DHS childcare assistance. Because of her enrollment in the program at ACC, Melissa was able to find quality daycare for her daughter and had less stress related to the challenges of finding quality daycare. Jessica, unlike Melissa, was eligible for DHS childcare assistance; however, still struggled with accessing the quality of childcare she felt her son deserved. Jessica was okay while finishing her nursing program, but as she expressed, she worried about the long-term decisions she would need to make in order to maintain her DHS assistance.

Melissa spoke openly about the lack of access to childcare in the state of Iowa. Melissa expressed her frustration with the ability to access childcare for her two children and the long waiting lists, particularly for the facilities that accept DHS assistance. DHS recipients are often put at the bottom of a waiting list and full-pay children are moved to the top, which leads to challenges in accepting employment if a single mother does not have access to childcare during

the workday. Melissa and Jessica both identified that wait lists have prevented them from accepting a job or even being able to consider a job. Both shared the challenges of experiencing waitlists sometimes for longer than eight months. Melissa commented,

A huge problem in this state is daycare. I have waited on lists and lists and lists and they might take a look at the bottom of the list. OK at the very bottom of the list there might be like two or three daycares...so realistically no there is not enough daycare in this state. All the nice daycares are full, and they all have waiting lists that are two or three years out.

Melissa, as mentioned above, has been unable to accept employment because of the lack of access to quality daycare for her daughter. Because of her daughter's age, Melissa has experienced inconsistency in the days and hours that her daughter could attend daycare. The daycares must follow children to provider ratio for compliance purposes and in turn this impacts the number of days per week that Melissa's daughter could attend. One daycare in particular would only allow for a Tuesday and Thursday schedule. At the time, this was the only daycare center with any openings where Melissa was living. These challenges experienced by both Jessica and Melissa speak to the important work that was attempted by the partners who developed the ACC childcare assistance program and the tremendous amount of work that was done to help educate employers about the value of providing childcare support for their employees. The inconsistent schedules or inability to find childcare outside of the typical workday for the single mothers highlights the need for employers to have a vested interest in childcare if they want high-skilled workers to fill their vacancies.

Currently, Melissa felt her daughter was at a safe, reliable daycare because of the funding assistance provided by the ACC program, but the lack of access to quality daycare she received

in the past still rested heavy on her heart and was a constant reminder of the challenges that not only she had experienced, but also what other single mothers might be experiencing. Melissa was emotionally upset and cried during her explanation of her past experiences. Melissa continued to work and continued to trust a few people who could assist in taking care of her child, but she shared that it was not without worry each day about what her daughter would be exposed to in childcare centers once she was no longer using the ACC child care assistance program.

Melissa shared her experiences with daycare and the quality of daycare throughout her two interviews. While Melissa was able to access quality childcare because of her enrollment in the ACC child care assistance program, she talked about past challenges regarding the quality of the workers employed at childcare facilities that would accept her DHS assistance. Melissa remarked,

There was a daycare he (my son) had been at that was one of their little social service daycares and one of the men who worked there decided to tell my child, my male child, that private parts had different flavors. And when I reported him they wanted to tuck that away and cover it up and keep him there and I had to pull my child again and find different daycare so my child got to bounce into all kinds of nasty daycares you can't even imagine because everything else is full.

Jessica shared similar concerns with the quality of staffing at daycare facilities and the safety of her son when attending them. Jessica self-disclosed during her interview that she had an extensive history of drug and alcohol dependency and her choice to become sober when she found out she was pregnant with her son. Having been a drug user herself, Jessica identified that she had a strong sense of being able to identify when people may be using. Concerned with the quality of childcare for her son and her soon to be born daughter, Jessica talked about the

challenges she experienced in finding quality daycare for her son. Jessica stated, *“You know, I used to be an addict...I have seen them, I know they have been in trouble. They are just flying under the radar and I have to trust them to take care of my child.”*

The quality of staffing at the daycare centers worried Jessica and she thought that something must have happened to her son at one of the centers. Jessica began to cry as she explained her son’s reaction each time, they drove past his old daycare center:

If we drive by, he says he hates that place, he starts to cry. He screams that he never wants to go back there again. It’s stuff like that that is concerning to me... that makes me question why my kid hates a daycare center so much?

Jessica talked about trying to find quality daycare for her son and her soon to be born daughter. She wanted them to be at the same daycare center or in-home provider but worried that she would not find a place that had room for a toddler and an infant, and if she did, it might not be a provider that was good so that she did not have to worry about her children’s safety. Jessica also identified the need for the childcare to fit her class schedule as she continued to pursue her goal of getting her degree in nursing. The quality of an in-home provider versus a center is one that she had to consider. She had to balance the challenging schedules of work and school, while also making sure the schedules of the provider align. This put an additional strain on Jessica as she worked on her final year of education.

Access to quality daycare was a top priority for both Melissa and Jessica. Both single mothers wanted what was best for their children, they wanted to work, and they wanted to be self-sufficient, but often the barriers they encountered did not allow them to be “on their own.” Jessica and Melissa were like many single mothers, who often feel like they are trapped in a cycle of poverty and dependence on a system designed to help them yet that also prevented them

from gaining financial independence and the quality of life they wanted. Melissa was appreciative of the supports she was receiving from ACC to access childcare for her daughter and felt that this was the type of support that more colleges should be providing to their students.

Theme 2: Workforce Challenges

Both Jessica and Melissa spoke openly about the workforce challenges that they faced because of the lack of childcare. Whether related to the scheduled hours, the amount of travel between work and daycare, or the lack of understanding from employers of being a single mother, both single mothers identified that the workforce does not understand the unique challenges they may face when balancing work and home obligations. Jessica and Melissa shared their experiences, frustrations, and limitations that they faced in the workforce arena because of the challenges of balancing work, school, and raising children as a single mother.

Jessica and Melissa both worked in the healthcare field and identified that the schedules in the healthcare field are not conducive to the reality of raising children as a single mother. The next section focuses on their work schedule challenges due to the varying scheduling demands placed on them by their employers. This helps clarify the need for a childcare assistance program from the workforce perspective. The challenges encountered by single mothers expand beyond their education and into their work environment. As described in the interviews, both of the single mothers faced challenging work schedules that impacted their ability to accept higher paying jobs, thus impacting their ability to decrease their reliance on public assistance programs. Their workforce challenges support the need for the ACC goal of helping businesses to understand the challenges of single mothers and their need for daycare assistance or supports in the work environment.

The challenges of working 10-12-hour days during the week and weekend rotations were common issues among the single mothers. The long hours on the weekend were challenging for Jessica. She shared that she needed the job to help make ends meet financially while she simultaneously completes her nursing program. The weekend shifts at the nursing home where she worked were mandatory for all employees. She was currently employed as a Certified Nurse Aide, and despite her requests to only work during the week, she had to work at least one weekend a month. Jessica shared that her parents provided her daycare on the weekends when she must work. Without their assistance, she would not have anyone to watch her son.

Although not currently working as a CNA, Melissa, who had previously completed her training as a CNA and worked for a short time as a CNA, also expressed challenges with weekend requirements. During her interviews she expressed her frustration at the lack of understanding of the impact of a weekend schedule on a single mother from the employer side. She and Jessica shared similar experiences in the workforce and the unique scheduling conflicts that arise when raising children alone.

Melissa and Jessica talked about their experiences in the healthcare field and shared that they wanted to be able to work and use their training but because of the demands of scheduling, particularly in the healthcare field, they struggled to meet the demands placed on them by their employers. Both Jessica and Melissa have been forced to choose jobs that support their single mother status but do not meet the financial needs of their families. Jessica explained, *“I’m pretty much going to be forced to work a clinic job, it’s not my first pick but I have to because of the hours that the daycares are open.”*

Jessica mentioned the financial implications that she knew she would be forced to face once she completed her nursing program because she would have to take a clinic job over a

hospital job. She knew she would make less money at the clinic, thus not be able to provide the quality of life that she wished for her children. In her current work situation, Jessica was a certified nurse aide while she completing her nursing diploma. Balancing her full-time school schedule that included clinicals during the week, Jessica relied heavily on her parents during both her work schedule, which was primarily weekend shifts, and her clinical hours during the week for her nursing diploma. Jessica explained her scheduling situation:

Wednesday night to Friday my parents usually keep him because the daycare doesn't open early enough for me to get to my clinical sites by 6:00 a.m. If I have to work at the care facility on the weekends, I either have them come to my house for the weekend or we stay with my parents on the weekends when I have to work.

While Jessica was able to rely on her parents and shared that she had a strong personal support system, she considered herself lucky that she had the supports that she did. Melissa was not so lucky because she did not have the family or friend support that would allow her to work a weekend or other schedule where she might earn more money. While Melissa was enrolled in her phlebotomy program at ACC, the on-site childcare was crucial to her being able to complete the training program. Hopeful that she would be able to find a job upon completion, she felt confident in her support system. However, Melissa talked about the challenges she faced in finding a job that was available during the typical daytime hours when she had access to daycare. The current job that Melissa had supported a daytime schedule, but she was still bound by time constraints because of her lack of support in her current living situation. Her schedule varied weekly, and she shared that she sometimes struggled to get to her children in time, before her daycare or schools closed. Melissa remarked,

I wonder sometimes, am I going to get stuck, way out here in rural Iowa and I can't get back in time to get to my kids. My son would be freaking out. My daughter's daycare would be freaking out. I would have no one to pick them up and if I don't get back to them in time, there is nobody else who is going to step up and get them. So, I have to get back, I have to get home in time. And it's a huge concern to me. It's a whole different ballgame for me living here in Iowa, because I don't have any family or friends that I can rely on.

Jessica also expressed not only the challenges of finding daycare during second and third shift schedules, but also the time strain that comes when the daycare closed by 5:30 p.m. and her shift did not end until 5:00 pm. Similar to Melissa, Jessica talked almost fearfully about what would happen to her children if she did not get there in time:

They have policies...say I don't get off work until like 5:00 p.m., my daycare closes at 5:30 p.m. I have to park almost a mile away and walk to my car. If I am not there at 5:30 p.m. they will call DHS on me. I am sure they have been burned before, so they have policies, but this is hard on single mothers.

Jessica and Melissa were both faced with challenges in their work schedules and the daily impact on the choices they must make for their employment demands, employment options, and their children. The schedules of the work force are a major barrier that was identified by the single mothers, but even more so is the lack of understanding by employers and the multiple challenges that single mothers face in balancing their work and children. Jessica and Melissa are like many other single mothers who struggle to meet the needs of both being a mother and an employee, wanting to do more in both roles but bound by limitations in understanding of the unique role of single parenting.

Both single mothers talked about the multiple experiences, both past and present, of their employers understanding what it is like to raise children, balance work, and being able to maintain consistency when you do not have anyone else to depend on. Jessica and Melissa both experienced employers who did fully understand the unique challenges they faced as single mothers, and they both spoke freely about how they had to adapt their employment goals in order to make everything work. Jessica shared,

I've heard of people getting fired because their kids were sick, and even though they had a doctor's note, their kids were sick too many times. I don't see why larger employers couldn't help their employees and build a daycare for their employees.

Jessica talked particularly about the challenges encountered when unexpected changes took place in her children's lives and the lack of understanding by employers that being a single mother puts all of the demands on one person. Jessica shared that she was nervous about her daughter being born and the number of doctor's appointments that she would have in the first year of her daughter's life. She shared that she knew her daughter's father would likely stay in her life but that still most of the childcare needs would fall on her. She shared that she would have to take time off from her job but did not anticipate having enough time off in the clinical setting.

Melissa also shared her experiences working as a CNA in the past and trying to work as a single mother and balance the challenges of a work schedule, more specifically the mandatory weekend schedule that was required of her CNA job. While Melissa now had a daytime schedule because of her phlebotomy certificate earned at ACC and reliable daycare that was supported because of her enrollment in the ACC childcare assistance program, Melissa recounted past experiences with challenging work schedules: *"Unless you can commit to nights and weekends,*

they are not going to take you on. The problem is that the company's policies are unrealistic. You can't be a single mother and work as a CNA without any support."

Melissa focused more on the challenging schedules of the health care sector when she was employed as a CNA. She shared that she wished more facilities would see the amount of workforce they were missing because of their demanding evening and weekend schedules. She talked openly about creating a rotation schedule and putting in a longer rotation or even asking facilities to poll their employees about who would be able to work on the weekends. She shared bit of her plan:

I think what really needs to happen is that we need to have companies look at their policies, and what really needs to happen is that companies need to ask who really is able to work evenings and weekends and pay them more for those hours. But I don't think they should require everyone to work evenings and weekends because single mothers just can't do that.

Both Jessica and Melissa were faced with challenging schedules and demands of raising children as a single mother. The challenges they encountered in the workforce highlight the importance of employers understanding the unique demands placed on single mothers as they attempt to work. As workforce policies evolve, employers must begin to understand that they too can have an impact on the ability of single mothers to participate in the workforce if only they are willing to look at their specific policies and make adjustments. ACC's attempts at educating employers and showing the value of supporting students while they complete a training program meant to fill skills gaps in multiple areas showcases the close connection needed between higher education and the workforce. You cannot have one without the other; they are intertwined because of the mission of the Aurora Community College system. Jessica and Melissa have both

the skillset and the motivations needed to be strong contributors to the workforce, but barriers they cannot seem to overcome on their own prevent them from participating fully.

Theme 3: Institutional Supports

Both single mothers shared that without the specific supports at the community college, they would not have been able to complete their education at ACC. Although ACC was not the only community college that both single mothers have attended, they both highlighted their experiences at ACC as exceptional. Jessica and Melissa talked about the intentional supports they received from ACC through being connected with a success coach. Melissa and Jessica were also willing to share their overall thoughts on how all higher education institutions could do better in supporting their students, specifically single mothers. Both single mothers had previously or were currently attending college in the state of Iowa, and Melissa has completed her education outside of the state.

The supports provided to Jessica and Melissa were specifically related to their enrollment in a short-term certificate training program. Melissa's involvement in the childcare assistance program connected her with a success coach who helped her access both her training and the requirements to enroll in the childcare assistance program. Jessica's enrollment in her CNA course, although not eligible for the childcare assistance program, afforded her the opportunity to access an ACC success coach.

The financial supports that were provided to Jessica and Melissa were identified as crucial to their successful completion of their short-term certificate training program. Jessica and Melissa both received State of Iowa GAP dollars that allowed them to complete their short-term certificate program at no cost. Melissa was able to receive assistance in completing her phlebotomy certificate at ACC college. Melissa, the sole participant in the childcare assistance

program in this study, shared the financial impact that the childcare assistance program had on her while she was enrolled in her phlebotomy program. She received the benefit of free childcare while she was enrolled in her training program. This support was provided by the City of Denver and the county as their contribution to the childcare assistance program. Melissa highlighted this benefit as a primary driver to enroll in the phlebotomy program. She shared,

The childcare assistance allowed me to have my daughter on-site while I took the class. I didn't have to worry about who was watching her and I knew I could go check on her when and if I needed to. This was both financially and emotionally good for me at the time.

As Melissa shared her challenges in finding quality daycare for her son when he was younger and at times her daughter while she was working as a CNA, it was easy to understand why this program and the funding assistance she received meant so much to her. Melissa shared the many challenges she had in accessing quality childcare prior to her enrollment in the ACC phlebotomy short-term certificate and the ACC childcare assistance program. She talked about the financial and emotional relief it provided to her. Having her daughter on site, at no-cost, was what was most encouraging to her when making the decision about what pathway to pursue. The additional support of the tuition assistance because of the GAP dollars used by the college to provide tuition assistance helped her as well. The strategic use of the state dollars towards tuition and the funds provided through the partnerships in the childcare assistance program highlight the financial capital and the leverage of funds to increase Melissa's skillset. The human capital that she gained through successful completion of the phlebotomy program was evident as she was able to secure employment.

The time needed to travel for both work and school impacts the time that single mothers are able to spend with their children. Living in a rural area, both Jessica and Melissa identified that because of their travel time, lack of reliable transportation, and the rurality of where they lived, both their work and home life was disrupted on a daily basis. Jessica shared her challenges of living in a small town and needing to travel for work in larger city nearby in order to find employment that supported her son and her soon to be born daughter.

Melissa talked about the challenges of living in a rural area currently but specifically about the challenges during her enrollment in the phlebotomy program at ACC. Melissa shared that during her enrollment in the phlebotomy program at ACC, she didn't live close to the ACC downtown campus and gas money was a challenge for her. She struggled to afford the drive to campus for class and also make it financially possible to drive to her job that was farther from her home. Melissa was able to receive financial assistance in the form of gas cards from her ACC success coach. This, coupled with the use of the childcare assistance program that provided free childcare during her training program, helped to alleviate the financial burdens of having to travel long distances between her home and the college.

Although Jessica did not participate in the childcare assistance program due to her program not being eligible, she still talked about the benefits of the tuition assistance that she received for her CNA program. Like Melissa, Jessica's cost of tuition was provided by the State of Iowa GAP funds. Jessica shared that the tuition support helped her access her training at no cost. This reduced her financial burden and allowed her to not have to worry about how she would be able to afford her education.

Jessica talked specifically about the role of a success coach and a learning center staff member who worked with her during her CNA program, as well as her first semester of nursing.

Jessica shared that both of the women at the college were crucial to her completion of both her CNA and the pre-nursing requirements. Both of the women helped her despite knowing some of her past. The help came in forms of educational support, but also emotional and financial supports as needed. Without these two women “in her corner,” Jessica did not think that she would have been able to continue her education. Jessica shared,

She was able to help me get my course funded, otherwise I never would have been able to complete it. She followed up with everything, like if I needed anything, she would have ideas of how I could get it, where to find it, and would help me get it. She would help me make important phone calls and would really advocate for me. She made sure that if something didn't work, that she was going to help me find something else that might work...she was really just a bulldog. I also had a retired nursing instructor who worked in the learning center. If someone needed help on a certain subject, she would sit with them for hours and tutor them. I thought Human A and P I and Human A and P II were going to break me, but she sat with me for hours studying. She knew about my past and was proud of me. I would say she definitely impacted me the most.

The support that is provided by an institution for its students cannot not be overlooked when colleges are examining best practices. Aside from the personal and educational supports that Jessica received, her personal connection to the two staff members at the college clearly shows the impact that was made on Jessica. The social capital that was created between Jessica and her success coach supported Jessica's confidence in her abilities and created a trusting relationship for her to turn to in times of need during her program. Jessica was able to connect with her success coach as needed and felt supported when she felt like giving up.

Similar to Jessica, Melissa talked openly about what institutions could do to support students. Melissa's explanation of what colleges can do is broader, less personal than Jessica's, but still a valuable insight to consider. Melissa stated,

I think teachers have to have a motive to want to get to know their students. I think some don't try to get involved in the personal lives, but maybe if they did, they would get to know their students on a personal level, get a sense of who they are as a person and who that student really is. I think teachers need to be more open minded, towards individuals. They have to show compassion, have curiosity, you know, have a curiosity for who these students might be. I think everyone has something to learn and I think they have to be genuinely interested in their students. In who they are and their well-being. They can't be afraid to ask somebody if they are okay or if they need something. I think that shows that they care about the person, that they are open to helping this student and meet their needs.

Melissa was open about the support she received from her success coach while she was enrolled in her phlebotomy program and all the assistance she needed leading up to the program. Melissa shared that the paperwork for funding assistance was easy to complete but working to get all the needed documents for income verification was somewhat time consuming. In addition to the funding assistance materials, she also talked about the importance of the success coach in helping her to complete the childcare assistance documents that were required for her daughter to participate in the on-site childcare program and in the program after she had completed her phlebotomy certificate:

I had to get a lot of paperwork and health records for my daughter so that she could use the pop-up childcare at the campus when I was there. I also had to make sure that I was

applied for DHS childcare assistance and then provide the appropriate documents verify I understood all the expectations of me to participate in the program. My success coach helped me complete all of the requirements and without her, I don't know that I would have been able to do it all on my own.

The process that Melissa followed, led by her coach, is documented in the working manual for the childcare assistance program. This manual was an internal use only document that was written by a lead success coach with input from the Denver Development. The manual is broken up into different program components. It helps to walk the success coach through recruitment, enrollment, retention, completion, and placement into the employment phase of the childcare assistance program. The manual provides what is needed at each phase of the program for the staff, the student, and partnering childcare providers who are participating in the reimbursement for childcare program.

When this document was being created, the childcare assistance program was still being developed. It has seen many different versions and is still being updated as the program changes. The fluidity of the document mirrors the fluidity of the childcare assistance program. The living document provides an ongoing assessment of both policies and procedures for staff to successfully implement the program. I was able to see multiple versions in electronic format due to it being a Google Document. The multiple versions that were provided to me helped me to better understand how the program itself evolved and how the coaching supports evolved, and I gained a better understanding of the multiple changes the program experienced throughout the first few months. As it adapted, the comments made in the document also provided me with an understanding of how the team of coaches approached it and what types of questions they had from the coaching perspective. This provided insight into some of the internal organizational

challenges that ACC had alluded to during the interview with the Vice President who helped to develop the program.

Melissa talked about how instructors might have a fear of connecting with their students but that they need to get over that fear. She talked about how it might have helped her in the past if she knew she could have told her instructor all that she was dealing with while attending her college classes. She shared that just asking how someone is doing outside of the classroom might be helpful to start that connection. She shared that she thinks there are more students that just need someone to ask if they are okay and how that might have a positive impact on their education. Jessica and Melissa talked about the importance of a connection between the college and the student. Nothing monetary was as valuable as the ongoing support, the understanding that the single mother has a life outside of the classroom, and simply being there to provide the support when and if needed.

Both Jessica and Melissa had a strong opinion about what colleges could do to support more single mothers in accessing higher education. Whether their recommendations came from their lived personal experiences or ideas that they felt would have helped them while they were enrolled, both single mothers provided insight into what they experienced that was helpful and what they thought could improve a single mother's experience at a community college.

CHAPTER 6. CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to examine the development and implementation of a childcare assistance program that required a partnership among the community college and multiple community organizations. The program's implementation was examined to identify strengths and weaknesses of the model to help identify ways to replicate the program to help increase the enrollment of single mothers in short-term certificate programs. While the childcare assistance program was successful, the small scale of implementation of the pilot program was just a starting point to advance the understanding of barriers for single mothers and expand the partnership across a community to support this historically under-represented population in higher education.

Research Questions and Findings

This section will provide a detailed review of the data collection and the connection back to the research questions. A discussion of the results related to current literature and the theoretical framework is also included. The study was guided by the following research questions:

1. What is the role of the community college in providing supports outside of education to help increase access, completion, and placement into employment of the single mother student population?
2. What is the role of workforce partners in helping support initiatives to increase the enrollment of single mothers in community college short-term certificate training programs?

3. What was the impact of the childcare assistance program that was designed to help support single mothers in accessing education at the community college?
4. How was the childcare program developed, adapted, and modified to meet the needs of the single mother student population?
5. What workforce and educational barriers are faced by single mothers who have completed a short-term certificate program at a rural community college?

Aurora Community College, in partnership with Denver Development, the City of Denver, and Community Resource Partners, worked to develop a childcare assistance program. The pilot program started in Spring 2019, with the intention of supporting single parents who had the perceived barrier of childcare preventing them from enrolling in a short-term certificate training program. There were three components of the childcare assistance program: 1) development of a child care certificate that would lead to employment or continued education, 2) providing free child care to participants enrolled in a short-term certificate training program, and 3) funding child care for short-term certificate graduates for up to one after program completion if they enter employment.

The role of the community college in providing supports outside of education to help increase access, completion, and placement into employment is supported by the findings of the single mothers' experiences as they accessed their education at ACC. Both of the single mothers identified that institutional support from a key individual helped them to complete their education by informing their pathway and helping to eliminate barriers to their education. Melissa specifically talked about the childcare assistance program and the impact that this opportunity had on her ability to complete a training program that would allow her to advance her earning potential and that provided much needed childcare while she completed it. The

support she received from her success coach, coupled with the monetary relief of free childcare, showcased the role that the community college can play in supporting students outside of traditional educational costs and programs designed to aid in their access and completion.

Jessica also expressed the role of a key institutional support system at ACC that was pivotal to her completion of her training program. Although Jessica did not participate in the childcare program, she identified that her ACC success coach helped her collect the information needed for her program, was an advocate for her during her program at ACC and provided her with financial supports to cover the cost of her program tuition. The institutional support that was provided to both single mothers during their time at the institution was crucial to their completion. The support provided was related to the training program, but also provided support related to needs outside of the classroom. The support provided by the ACC success coach helped the single mothers navigate both the higher education realm and the connection to resources outside of education, thus eliminating barriers both at the institution and outside the institution. While both single mothers received the support of the institution, both identified challenges upon entering the workforce once they completed their training program.

The role of the workforce partners in initiatives to increase enrollment of single mothers in a community college short-term certificate training program was a not easily connected to the outcomes of this study. With no direct participation of the workforce partners who supported the program during the pilot program, as ACC Vice President Sue shared during her interviews, the workforce role was lacking. The intent of the program was to help educate the workforce partners about the needs of single mothers and the barrier that is put in place by lack of access to quality, affordable childcare. The single mothers' accounts identified challenges they face with work schedules, the needs of their children, and access to on-site daycare at their places of

employment. The perception that employers have of single mothers and their needs indicates that the employers should be more aware of the challenges faced by the single mother population; however, this study identifies that workforce partners have yet to understand the value they can bring to the single mother by being more mindful of her challenges.

The impact of the childcare assistance program was measurable when viewed through the lens of the one single mother in this study who participated the childcare assistance program. Melissa's account of the program and the emotional relief it provided to her after numerous bad experiences with childcare signifies that the childcare assistance program provided a service to her that was not provided elsewhere. Outside of Melissa's experience, the childcare assistance program also brought attention to the lack of childcare access, funding of childcare, and the need for the workforce to be involved. As shared by Kelly, with DC, multiple legislative bills were proposed at the state level because of the ACC childcare assistance program. The focus of the bills was broad but covered the workforce connection for employers to support a more robust childcare system for their employees, the lack of quality childcare providers, and the cliff effect of the State of Iowa Department of Human Services childcare assistance program. The childcare assistance program at ACC should be viewed as a model state program that helped bring multiple organizations together towards a common cause to help influence higher education support of students in programs outside the traditional costs of education, such as books and tuition. Programs such as the childcare assistance program at ACC indicate an understanding of the barriers encountered by students, primarily single mothers, and highlight the importance of meeting students where they are in their educational journey.

In Sue's interview on the childcare assistance program from the community college perspective, she identified what she felt worked well during the pilot program and what did not.

She highlighted that access to childcare was a barrier ACC recognized in the student population, but ACC was not able to account for the multiple barriers encountered by single mothers. Sue admitted that the childcare assistance program did not sufficiently reduce the barrier to employment for its participants. Though the pilot program did not meet the initial goals to serve 50 single parents, the pilot program and its awareness of the multiple barriers provided an area for growth in the next iteration.

Because the outcomes were less significant than expected, ACC and the community partners were able to shift their focus to how to better incorporate the workforce needs of the single mothers while they attend a short-term certificate training program. Sue shared that because of the lack of scheduling that was conducive to single mothers and their parenting roles, ACC will move towards a program style that allows single mothers to not only attend class but also start working in their area of training, all at the same time. Sue described this program as an “Earn and Learn” model. She shared that ACC would soon be partnering with multiple businesses in a variety of career areas to increase partnerships that will hire the participants while they are co-enrolled in the short-term certificate training program. This change will allow single mothers to worry less about how they can earn money while taking time off to gain skills.

Jessica and Melissa both spoke openly about the workforce and educational barriers they encountered over many years. Jessica and Melissa both experienced challenges in accessing education and completing their education. The barriers encountered during their educational journey surrounded the challenging schedules of classes and the lack of understanding of the unique roles of single mothers. The childcare assistance program attempted to eliminate a barrier to accessing quality daycare to help in upskilling the single mother population, but the personal accounts of Jessica and Melissa indicate that the challenges in the workforce far exceed the

challenges in accessing education. Specific to the workforce, the main barrier to work is the challenging schedules that are often associated with the training or employment areas of single mothers. For both Melissa and Jessica, the health care sector was the focus of their challenges. The requirements of weekend and evening shifts as mandatory for employment presented a barrier due to lack of a reliable support system that can assist with childcare.

Discussion of Theoretical Framework

The Community Capitals Framework consists of seven types of capital. They are: Natural Capital, Cultural Capital, Human Capital, Social Capital, Political Capital, Built Capital, and Financial Capital. The various types of capital are used identify the interactions between the various parts of the community (Jacobs, 2011). This study focused primarily on the human, social, political, built, and financial capital. For context, human capital is the various knowledge skillsets of each organization that participated in the program development. The single mothers represent the human capital that was developed by completing the short-term certificate training program which allowed them to increase their earning potential and provide what they hoped would be a better life for their children.

Figure 8 below showcases the themes that were discovered through interviews with the community and college administrators and the two single mothers who participated in the study. The themes identified were placed within the Community Capitals Framework in order to analyze the themes through the Community Capitals Framework. The five primary capitals identified as common areas among the single mothers and the community partners were Social Capital, Human Capital, Political Capital, Built Capital, and Financial Capital. As you can see in the figure, the larger circles of Built Capital and Financial Capital contain more overlapping

themes among the participants. The larger circle indicates the stronger emphasis of these themes when examined through the Community Capitals Framework.

The center of the figure highlights the primary outcomes through the development and implementation of the ACC Child Care Assistance program. Due to the program's development, access to childcare was created for single mothers, changes to policies at the State of Iowa level were started, social equity of single mothers and their increased access to education was created, and overall an awareness of the need for child care as a workforce initiative was started.

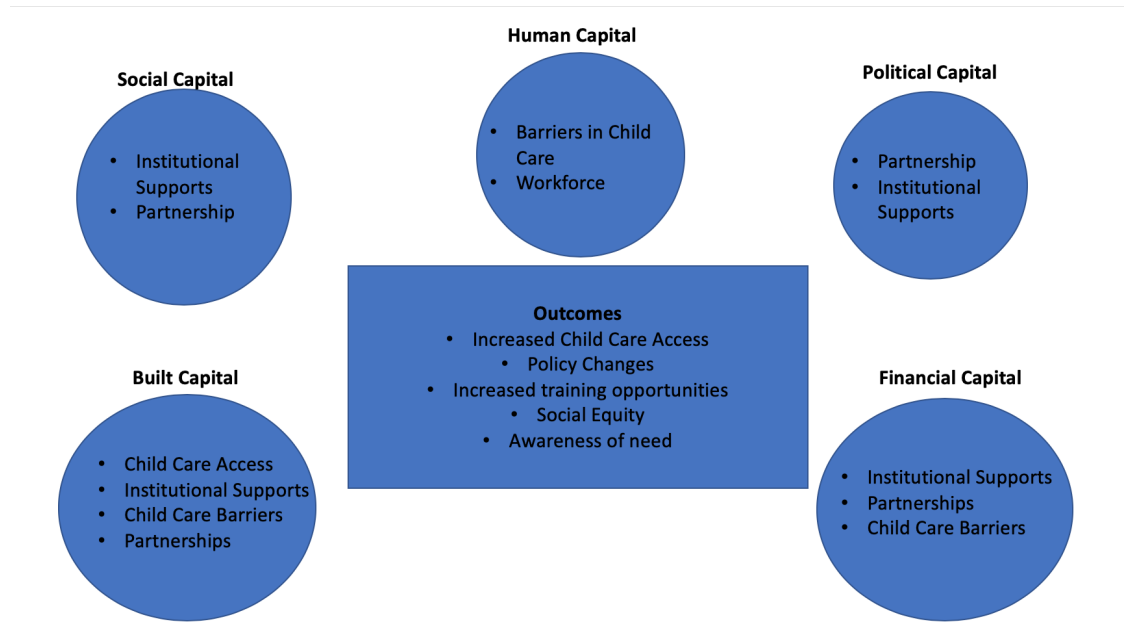


Figure 8. Overlap of Themes and Community Capitals Framework

Social Capital is represented by the multiple organizations that worked together to develop the childcare assistance program and the trust that it took between the multiple organizations to implement a project of this magnitude. These partnerships across the variety of non-profit sectors, each with their own unique missions, were crucial to the full implementation of the program. Leveraging the social connections of each organization allowed a broader audience of investors and interested partners to become involved in the childcare assistance

program. The direct benefactors of this social capital leverage were the single mothers who were able to utilize the program and receive the supports provided through their connection with ACC. As identified by both single mothers, the institutional supports, in the form of an ACC success coach and funding assistance, created a space for them to access their education with less financial burden and emotional stress over quality training and childcare, and overall provided a stepping stone to increase the quality of not only their life but that of their children.

Access to quality childcare was a motivating theme for the partners in the creation of this program. The lack of access to quality childcare was a barrier for single mothers wanting to advance their skillset and enhance their employable skills. The childcare assistance program attempted to address the deficit of human capital that the lack of childcare created for the single mothers and the lack of human capital that was present in the workforce sector due to a smaller workforce pipeline. These two deficits created an opportunity for the development of the Child Care Assistance program that would support both the employers and the single mothers. Through the Community Capitals Framework, it is apparent that while the program sought to eliminate this barrier, it was successful only during the training period for the single mother. Once the single mother completed the training program, lack of access to childcare created a barrier to employment that would provide a sustainable living wage for the single mother and her children.

The challenges in the workforce lie with the schedules and the childcare shortage for an employer's employees. The deficit that is created by this misalignment of need and interests from the single mother's perspective and the employer's perspective highlights the need to continue to educate employers about the value of childcare to increase the workforce pipeline. The ACC Child Care Assistance program helped to bring awareness to the business sector regarding daycare issues; however, not enough businesses were willing to take on the unique challenges of

supporting employees with daycare assistance as a hiring or retention strategy. Because of this disconnect between workforce and childcare, although the community college can provide the training needed to fill the skills gap, graduates of the short-term training program are not always able to use their training.

Political Capital was recognized by ACC as their partnership with DC related to the use of their connections to the local workforce partners and the various funding sources that allowed the program to become a reality. While each partnership was important, the strength of the political connections that Kelly, of DC, provided to the initiative for breaking into the workforce sector created a new space for the discussion to happen. The bridge between the community college and workforce partners, already strong because of the training provided, was made stronger because of this partnership. Each partner was able to play on the others' connections and strengths in key areas that would lead to policy changes in childcare and a better understanding of the need to enhance multiple supports for students in short-term training programs.

Partnering with ACC and political access through lobbying in the community college realm created a space where the state legislators and the governor took notice of the childcare assistance program and the need to fix a system that is seemingly broken for many Iowans. The two single mothers who participated in the study were provided supports by the ACC success coach. The success coach helped the single mothers complete the necessary paperwork, educated them about program opportunities, and helped support each single mother by eliminating barriers to education and employment. The single mothers benefited from the leveraging of connections by the success coach, enhancing the likelihood of their success in completing the short-term training program and in finding employment or continuing education beyond completion.

While political, social, and human capital were all necessary for the success of the childcare assistance program, without a physical space to open the pop-up childcare, there would not have been on-site childcare for the four identified short-term training programs. The physical space of the pop-up childcare and its location at ACC is an example of Built Capital. The space provided by ACC allowed the pilot program to start with four training programs hosted on-site. Because the parents of the children were on-site, this eliminated the need for the daycare to follow the typical Department of Human Services requirements of a licensed daycare. The built capital provided by ACC, and the offering of the space to house the program was the most important aspect of making sure the pilot program was implemented in a timely and efficient manner, for both the partners and the students. The ACC pop-up childcare was needed due to the lack of childcare centers and the desire to provide childcare slots to participants in the identified short-term certificate training programs. Without this space, the childcare assistance program would not have been able to start as there was no other space for the children of the participants to stay while their mothers attended class.

Lastly, each organization provided a monetary or time donation to the program implementation. The various streams of funding that were used to implement the childcare assistance program represents the Financial Capital component of the framework. The braiding of the various funding sources helped to reduce the cost of education, childcare, and additional supports needed for the successful implementation of the childcare assistance program. The City of Denver and the county provided over \$100,000 to help fund the childcare for the participants both during the short-term training program and for up to one year during the employment phase of the program. This investment by the city and county highlights the importance of the program and buy-in regarding the value of the program. Because the cost of the childcare itself was paid

for, additional funding was provided to help supplement or cover the full cost of tuition for each of the four programs. ACC was able to fund the customer service, phlebotomy, and industrial sewing tuition through their use of State of Iowa Gap funds and private local grants. Nita, with Community Resource Partners, wrote a grant and provided full tuition assistance for up to twenty participants who enrolled in the short-term certificate childcare program. The provision of tuition for all participants eliminated a financial barrier for each student who participated. In addition to providing tuition support, ACC also provided additional supports to help fund transportation to and from training, supplies needed for the program, and small living expenses to participants who needed additional assistance in reducing barriers to completion.

Each organization involved in the development and implementation of the childcare assistance program provided a different type or various types of community capital. From the student's perspective, the capital that was gained through the support of the community college and short-term training received, expanded their human capital and social capital, and likely enhanced the quality of life for themselves and their children. The goal is that the community will see an impact on for years to come. The long-term impact that this single program had for a handful of students will likely impact multiple children's lives, thus contributing to a decrease in the reliance on social service programs and programs that are designed to help but that often limit single mothers and their pathway out of poverty.

Limitations

A primary limitation in this study is the small sample size of participants in the childcare assistance program. Only one of the two single mothers in the study was a participant in the childcare assistance program while she completed her training in phlebotomy. This limitation is significant as it does not give the single mother perspective based on their experience in the

childcare assistance program. The experience of the lone single mother in the childcare assistance program does not provide a wide understanding of the experiences of the multiple single mothers who participated. Further research should include more participants from the program; however, due to the low numbers of participants in the pilot program and lack of successful outcomes upon completion, the sample of students was small. This was out my control as the researcher; a similar study could be more intentional in following participants throughout their program.

Another limitation of this study is the pre-established community partnerships that were already formed prior to the implementation of the childcare assistance program. The partnerships that were utilized in the development of the childcare assistance program at ACC were pre-established before the research. This limitation does not allow for the study to fully understand the relationship building that must take place in order for the variety of community organizations to come together and identify a need that must be met to help enhance the opportunities for the community. This relationship building is a significant undertaking for any community college and should be considered when developing a similar program to support students in eliminating barriers and accessing education.

The homogenous sample of participants is a limitation of this study as well. Both single mothers identified as white females. This inherently impacts the understanding of a broader, more diverse population of single mothers in the Denver area. In order to gather a better understanding of the program and impacts across all races, a larger sample with more diverse backgrounds may have shown different results and a different impact or understanding of the program. It should also be noted that all of the participants in the study from the partner organizations identify as white females. This must also be noted as a limitation as the lens in

which the program was developed and implemented is narrow and represented only the white female perspective.

The community partnerships that it took to form the ACC Child Care Assistance program were necessary for such a large undertaking of a community college to support their students outside of the typical educational supports. These partnerships were formed at higher level of administration across all partners and this likely caused a disconnection between the developers and the implementers of the program. While all administrators remained heavily involved in the program, the lack of knowledge of the day to day functioning of the program from implementation to present day limits the perspective being represented in the findings. Combined with the lack of childcare assistance program participants involved in the study, a true understanding of the program may not be available. This limitation could be eliminated by a more in-depth look into the roles of the ACC success coaches and the relationships established between program participants. This more in-depth approach may reduce the disconnect that may have occurred between the administrator understanding of the program and the value, or lack of value provided to the participants.

Implications for Practice

While the childcare assistance program was successful at increasing access to education for single mothers while they were enrolled in a short-term certificate training program, the program had little success at impacting the employment outcomes of the single mothers upon their completion of the program. The access to childcare during the program helped alleviate a barrier to education at the college; however, once the single mothers completed the program, workforce schedules, specifically second and third shift employment, often did not align with the daycare needs and challenges often faced by single mothers.

The childcare assistance program was meant to support single mothers' access to education and increase their participation in the local workforce. The outcomes of this pilot program did not necessarily meet the goal of meeting both the workforce demand and the greater educational access. Further research should focus on the inclusion of broader training programs across multiple career pathways. The pilot program's focus on childcare, customer service, phlebotomy, and industrial sewing was limited in scope and selected based on location of training and the ability to provide on-site childcare during the training period. Replication of a program like this should look to enhance the training programs included and work strategically with daycare centers or providers to increase the available options of childcare for the program participants.

The childcare assistance program did successfully bring attention to the need to look at the support of single mothers and the lack of childcare funding and facilities that meet their needs, as well as advancing the policy to help employers take a more active role in meeting the childcare needs of their employees. The program and the work of the community partners brought attention at the state level to help support childcare access through increased funding and policy changes. Currently, in the 2020 legislative session, bills were adopted to adjust the income levels for those who qualify for childcare assistance under the DHS childcare assistance program. According to information provided on the Iowa Department of Human Services website, effective July 1, 2020, income levels for the childcare assistance program have changed. According to the sliding fee scale, single parents with two children can now earn up to \$48,870 before losing benefits and the limit on enrollment length was removed. This is a significant change that highlights the impact that the ACC Child Care Assistance program had on changing policy at the state level.

The development of the childcare assistance program was a springboard in the City of Denver for larger and more robust conversations and focus on childcare to become a priority. Since the implementation of the program in Spring 2019, the City of Denver has formed a more robust childcare coalition. Originally, the childcare coalition consisted of only the partners who helped to create the ACC Child Care Assistance program. Now comprised of multiple community organizations and childcare providers and led by the Early Childhood Center of Denver, its focus on the importance of childcare and the workforce connection has strengthened. Both ACC and DC have remained involved in the program, which is in its third round of funding. Now, inclusive of nearly all available short-term training programs, the childcare assistance program is able to provide childcare to more students in a wider array of sectors. This support is expanding the number of students who are eligible to participate and supporting an increase in enrollment for programs by eliminating the barrier of childcare. This in turn, has a direct impact on the number of skilled workers that will be entering the workforce within a few months after they start their training program.

The overall intent of the ACC Child Care Assistance program was to eliminate a barrier of access to childcare that was creating both educational and workforce challenges for a small community. The ACC Child Care Assistance pilot program was a narrowly focused attempt to help alleviate both the physical barriers to childcare and the financial barrier to funding childcare while students completed a short-term training program and once they entered employment. While successful, the program in and of itself was not enough to reduce the myriad of barriers experienced by single mothers in accessing higher education. Childcare is a significant issue for single mothers attempting to access higher education, but as shown by this study, it is not the primary barrier that prevents completion of a training program. It was easily recognizable that

the barrier of childcare impacts the decision of a single mother to pursue education, but the workforce provides a greater challenge.

Policy makers should examine the work of the community college, the community partners and the various funding streams that were braided to support the program. From a policy perspective, policy makers need to have a better understanding of the challenges faced by single mothers pursuing a short-term training program and the multitude of barriers faced in their pursuit of their certificate. Policies at the state level that allocate funds towards barriers such as childcare for the single mothers in higher education would help decrease the dependence on social service programs designed to help the single mother, but because of program regulations, often hinder the mothers ability to provide for her family. In addition to examining funding supports, policies that were created to support single mothers, and low-income citizens should be more closely examined and adjusted based on current economic needs and demands. Social service programs have long been outdated in practice and often lead participants to be placed in a perpetual cycle of services that do not adequately provide supports for their families if they experience a small increase in wages. While the policy is designed to support those most in need, in the instance of single mothers, policy makers need to be more aware and examine the program requirements that often place single mothers in the challenging position of choosing to support her family by working or pursuing education. Programs that are redesigned with the single mother in mind would provide supports that would allow the mother to pursue her education, while advancing her skillset to a higher wage and not lose the benefits that help maintain the basic needs of the family.

While policy changes at the state level that support the single mother to pursue higher education and not feel forced to choose between education and workforce will advance the

greater good for the mother and her children, employers also need to consider the types of support and programs they are offering their employees. Retention of employees is a common issue that is shared by employees and absenteeism of working parents can be traced back to the role of balancing parenting with working. In order to support a stronger retention in the workforce, employers should examine the benefits of on-site childcare, both healthy and sick children. Support the childcare of employee's children, whether sick or healthy will lead to decrease absenteeism, an overall increase in staff morale, and provides a much-needed benefit and enticement for the employee to choose that business for employment. In addition to examining on-site childcare, as it may not be possible for employers, employers should examine how to supplement wages of employers and utilize flex spending accounts that can be used to help reduce the cost of childcare for their employees. Taking on the childcare issue as an employer can be an overwhelming task to consider but when examined through the workforce retention lens, efforts towards creating a more supportive environment for employees with children could lead to longer term employees, decreased attrition and turnover rates.

Lastly, community colleges will continue to serve an important role in serving single mothers and helping the single mothers to complete their programs. Being creative with the use of various funding streams that are used to support students outside of traditional tuition costs should be closely examined. Strategic partnerships with local organizations or businesses who are willing to work with the community college and provide direct funding to initiatives designed to support single mothers will benefit the student, the employer, and the community college. In addition to strategic partnerships with local organizations and employers, the community college needs to showcase the student needs, the student experiences, and the possibilities of innovative programs. Community colleges need to keep the student stories at the forefront when speaking

with policy makers, community partners, and institutional agents of change. The student stories help to humanize the experiences, captivate the audiences, and provides a real-life experience for those that may not inherently understand the unique experiences of community college students.

From a higher education standpoint as a whole community college are only just a small piece of a larger puzzle and the students are an even smaller slice of those in need. Higher education has the opportunity to provide additional supports for all students, staff, and faculty when it comes to barriers to access, retention, completion, and placement, for all.

From an employer perspective higher education needs to examine the dual roles that their own staff and faculty have as a parent and adapt policy and institution benefits that better support focused efforts on supporting the single parent population. At the time of the completion of this study, a historic pandemic swept across the world, highlighting the importance of quality childcare, breaking down barriers between work and home as institutes of higher education shut down, as well as businesses. Parents, single or partnered, were forced to balance work and home, which placed a spotlight on the importance of quality childcare. Pivoting services for employees in higher education is crucial as the traditional model of education was broken during the COVID-19 pandemic. Higher education needs to follow the shift and pivot how they are supporting their employees and provide innovative solutions that will support the historic shift in how higher education has been adapted and will continue to adapt to the changing needs of the students, but also the overall shift in the working world as a whole.

The program provided a short-term solution to a long-term problem that cannot be addressed in isolation. This study highlighted the opportunity for community colleges to build or enhance partnerships across multiple sectors to address not only issues related to higher education access for single mothers, but also to use their workforce connections to support

increased efforts to support employees. This study examined a community college program, which at the time had not been attempted. The impact that the program had, and the attention gained at the state level, will likely impact how legislators look at funding allocations for community colleges. The study has the potential to help educate legislators and key political players to better understand the student population likely to enroll at a community college and better understand the unique challenges both in and outside of the educational setting that students may face.

Implication of Theory

The Community Capitals Framework (Emery and Flora, 2006) aligned well with the scope of the childcare assistance program and the involvement of multiple community partners coming together to develop a program aimed at meeting the needs of single mothers in both education and the workforce. While the framework helped to provide a systematic approach to examining the multiple types of capital needed and the capitals gained from implementation of the program, the theory did not account for the personal components that each participant may have experienced in the process. The framework lacked the structure to examine the personal impact of the program, not only on the single mothers but also on the organizations involved.

At an individual level, one framework that should be considered for future research is the Double ABCX framework created by McCubbin and Patterson (1983). The Double ABCX Model was adapted from Hill's (1958) ABCX family stress model and the Double ABCX model formula examines stressors (a), existing resources (b), and perception of a stressor (c) pre-crisis for a family. The model examines the same factors, stressors, existing resources, and perception of stressor from the post-crisis perspective of the family, which the two single mothers in this study both identified as significant impacts to their education and workforce participation.

(McCubbin & Patterson, 1982; 1983). The closer examination of the stressors for the single mother will lead to a better understanding of the personal impact of the program for the single mothers at a deeper human level.

While the Child Care Assistance program successfully met the need of the single mothers and helped enhance already established community relationships, what should be considered by further research is the impact of such a program at the basic human level for the program participants. Expanding the research to gather a better understanding of the human aspects that the single mothers reported in their interviews, such as poverty, drug use, coping skills to deal with the stressors of single mothering, and attending school would help community colleges and community partners to better understand the multiple levels of personal challenges faced by single mothers. The impact on the mental health of both mothers and children may lead to long-term effects that continue to feed the cycle of generational poverty and unstable living conditions for mothers and children.

Implications for Research

This study provided a deeper look into the development of a unique program that was intended to support students pursuing a short-term certificate training program at a community college. The childcare assistance program met the intended goals of helping to reduce a barrier for single mothers, in particular, to advance their educational and workforce opportunities. The study was narrowly focus on a much broader challenge in supporting single mothers to complete a short-term training certificate. This study reviewed only one barrier to completing education, and while the outcomes were promising, further research is needed to understand the true needs and impact of innovative programs designed to support single mothers in post-secondary

education, particularly short-term certificate programs geared towards increasing workforce participation.

To gain a better understanding of the long-term effects and impact of a program, a longitudinal study over a three-year timeframe that would begin at point of enrollment and follow single mothers through employment or continued education would provide a deeper understanding of the multiple barriers encountered by single mothers on the path to higher education. Examining the mothers' experiences while enrolled, through the employment or continued educational search, and following their employment would allow further research to identify barriers that persist throughout the three-year timeframe, but may also allow the researcher to better understand the workforce connection and unique challenges associated with participation in the workforce upon completion.

The short-term training programs offered at ACC are meant to provide the entry level training needed to get into the workforce in a particular sector. A student completing the training program receives the assistance of a success coach for a minimum of one-year post completion, regardless of program length. The intention of the short-term certificate programs is to help give students the skills needed to enter the workforce, and many times with the continued support of success, they return for another certificate to build upon the first, make decisions to enter into a one- or two-year credit program, or work with their employer to advance in the company. The entry level skills learned by the student are intended to help catapult the student to a higher level and encourage them to learn more; however, the human factor of the student and the uncontrollable outcomes of working with people does not always advance this mission. Often times, students discontinue connecting with their success coach or choose to quit their job because of factors not always known to the college. Future programming and future studies

could examine the entry level wages of the programs and work towards creating programs with more than entry level positions. While it may lengthen the duration of the program for the student, the income earned may help maintain the student's motivation to continue working in their area of study.

From a community perspective, further research should explore the dynamics of building engagement among sectors to advance a common cause. A more in-depth look at the experiences of each community organization may provide a framework to examine similar community-focused solutions to higher education and workforce challenges that so many rural areas face. A study focused on the dynamics of the partnership, outcomes, expectations, and roles played in a community would lead to a better understanding of how to leverage the political and human capital in smaller communities and provide a starting point to examine a tool that could be replicated and shared with other community colleges in the state.

Conclusion

To summarize the outcomes of the study, both the community college and the community partners identified a need in the local community and the community college arena. While the pilot program did not meet the goals of the group to help provide childcare assistance to 50 parents in the Denver area, the program itself created an awareness across multiple levels in the community and across the state. The awareness that the Child Care Assistance program brought to childcare as whole for not only the education sector but more broadly the workforce and community sectors was the starting point for broader community conversations about the lack of childcare and the impact it has on the community.

Most recently, a childcare coalition, which originally started with the four founding organizations of the childcare assistance program, has been led by the Denver Early Childhood

organizations. This childcare coalition is now led by the teams that can most greatly make a change in the childcare arena. Each founding organization still participates in the childcare coalition and the work they started is now being put to scale and bringing awareness to the childcare barriers in the Denver area. A current initiative led by this childcare coalition is a family survey that is being used to collect data on family needs across the city. Multiple organizations are now more invested in the need for childcare and see the value in supporting programs to enhance opportunities for access to quality childcare.

While outside the scope of this study, it is important to note that at the time of this study, the COVID-19 pandemic was just beginning to impact the United States. As the pandemic moved across our nation, historical losses in employment and multiple impacts to multiple sectors affected not only the nation but also local communities, including Denver. The impact that this pandemic has had locally will greatly impact even a greater understanding of the importance of childcare, the need to provide access to all regardless of income level, and the role childcare plays in relation to the workforce. The pandemic impacted employees' abilities to work on-site; educational institutions were shut down; and parents were left to not only provide full-time childcare but also balance both work and home responsibilities. This global shift in the understanding of childcare as resource and a necessity for workforce participation may likely create a paradigm shift in how we as a society view the role of childcare programs and the direct connection to education and workforce participation by all socio-economic status populations, married and single mothers, parents, and others.

The childcare assistance program was ahead of its time in developing support outside of education for single mothers and enhancing the support for an often-underrepresented student population to complete certificates. The program in and of itself was successful, continues to

build its capacity, and has maintained the funding support not only locally, but also through the State of Iowa Future Ready Iowa Innovation grant. The sustainability of the program will be examined on a yearly basis, but outcomes are indicating that this program is worth investing in and provide a non-traditional solution to a long-term problem of helping single mothers to complete their education at a post-secondary education institution and change the trajectory of their lives, and the lives of their children, for years to come.

The value of the childcare assistance program, for both the single mothers and the multiple partners that came together to create the program, cannot easily be measured by program outcomes and hitting the goal set by the group. The true value of the program and the results lie in the outcomes that have brought attention to a barrier that single mothers and parents in higher education face while advancing their education. The study highlights the important role that community colleges play in providing innovative solutions to the challenges faced by their students. The collective impact that programs such as the childcare assistance program can have on the student and the community showcases the need for the state of Iowa to continue to fund community colleges and support the workforce programming that is offered at the local level. Addressing the limitations of students and access to education should become a community effort in each community college district. The creativity and partnerships that were displayed in the childcare assistance program highlight the ability of community colleges to address student needs outside of education, utilize local partnerships, and further advance the workforce goals that were established when Aurora Community Colleges determined their mission statement.

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APPENDIX A. RECRUITMENT SCRIPT ADMINISTRATORS

Hello

I am currently a Ph.D. student at Iowa State University, and I am hoping to recruit participants for my dissertation. I am hoping that you will participate in the study as you were a partner who started the childcare assistance program at Aurora Community College.

You are receiving this email because you were identified as a key partner to the development of the childcare assistance program at Aurora Community College. This program was aimed at improving access to short-term training by decreasing the barrier of childcare that may impact enrollment in the short-term training programs.

Involvement in the data collection for this study will take minimal time. You will be asked to participate in an interview for 60-90 minutes. This may be held face to face if possible or via phone.

The goal of the study is to impact the service that community colleges can provide to support single mothers in their pursuit of education, and hopefully impact state policies that help support single mothers to pursue a college education program. Your participation is completely voluntary and all identifiable information will be kept confidential between the researcher(me) and the participant. Data collected will

If you are interested in participating, please feel free to reply to this email OR text me at 563-277-7281. I hope you will choose to participate in the study and help increase the educational opportunities for single mothers in the state of Iowa.

Thank you.

Erin Daley
Iowa State University

APPENDIX B. RECRUITMENT SCRIPT SINGLE MOTHERS

Hello

I am currently a Ph.D. student at Iowa State University, and I am hoping to recruit participants for my dissertation. I am currently looking for 10 **single mothers** who would like to participate in a study that will focus on the role of short-term certificate training and the impact on the workforce participation of single mothers. If you do not identify as a **single mother**, you may discontinue reading this email.

You are receiving this email because you have completed, have stopped out, or are currently enrolled in a short-term non-credit certificate training program at a community college in Iowa and are between the ages of 18-35.

Involvement in the data collection for this study will take minimal time. You will be asked to participate in an interview for 1 hour in January or February, followed by a second interview in March. This may be held face to face if possible or via phone.

The goal of the study is to impact the service that community colleges can provide to support single mothers in their pursuit of education, and hopefully impact state policies that help support single mothers to pursue a college education program. Your participation is completely voluntary and all identifiable information will be kept confidential between the researcher(me) and the participant. Data collected will

If you choose to participate in this study, you will receive a \$25gift card to Wal- Mart. If you are interested in participating, please feel free to reply to this email OR text me at 563-277-7281. I hope you will choose to participate in the study and help increase the educational opportunities for single mothers in the state of Iowa.

Thank you.

Erin Daley
Iowa State University

APPENDIX C. INFORMED CONSENT ADMINISTRATORS

INFORMED CONSENT FORM

Title of Study: Single Mothers and the Pursuit of Short-Term Certificate Training at a Rural Community College_ Barriers to Completion and the Impact on Workforce Participation

Investigator: Erin Powers Daley

Invitation to be Part of a Research Study

You are invited to participate in a research study. This form has information to help you decide whether or not you wish to participate—please review it carefully. Research studies include only people who choose to take part—your participation is voluntary, and you can stop at any time.

Please ask the project staff any questions you have about the study or about this form before deciding to participate.

Introduction and Purpose of the Study

The purpose of this study is to understand the barriers encountered by single mothers while they complete a short-term certificate training program and community and community college roles in supporting single mothers in completion in a workforce training program.

Eligibility to Participate

You are eligible to participate in this study if you are a college administrator and/or a workforce partner who is working closely with the Aurora Community College.

You should not participate if you are not able to commit to the interview.

Description of Study Procedures

If you agree to participate, you will be asked to:

- Participate in a 60-90-minute interview
 - The interview will be 60-90 minutes in length and recorded for transcription, with an open interview dialogue between researcher and the participants.
- Interviews will be conducted in an open-ended question format but the guiding questions for the researcher will be:
 - What is your role at the college and/or in the community?
 - What are some of the barriers you see single mothers encountering in workforce and education?

- What role do you see your organization playing in increasing access to education for single mothers?
 - What role do you see your organization playing in increasing the participation of single mothers in the workforce?
 - What prompted you to look at serving single mothers through a targeted program?
 - What were your main goals when starting the childcare assistance program?
 - What were the challenges in implementing the childcare assistance program?
 - Can you describe for me a typical day for you and your children?
 - Outside of childcare assistance, what additional supports should or have been provided to single mothers?
 - Did the program go as you had planned?
 - If not, what did you do to change?
 - If yes, what went well?
 - What advice would you give other administrators who are determining how to support single mothers?
- Allow the interviews to be voice recorded by the researcher.
 - All interviews will be deleted from recording device once research collection is complete
 - Participants for the study will be assessed and determined based on a demographic pull of eligible participants.

Expected Time or Duration of Participation:

Your participation will last for about one month. The interview will be between 60-90 minutes in length. Subsequent interviews may be scheduled if participant is willing to participate based on researcher needs.

- Each interview will be in person if possible, however if travel is not possible a zoom or phone meeting can be arranged.

Risks or Discomforts

While participating in this study you may experience the following risks or discomforts:

- Embarrassment or emotional discomfort from answering sensitive questions during a survey or interview, from being audio recorded during the interview process.

There may be risks or discomforts that are currently unforeseeable at this time. We will tell you about any significant new information we learn that may relate to your willingness to continue participating in this study.

Benefits to You and to Others

It is hoped that the information gained in this study will benefit society by increasing the awareness of the barriers that single mothers encounter while completing a short-term certificate program. The hope is that educational institutions, employers, and social service agencies will learn how to better meet the needs of single mothers who are pursuing a short-term certificate training program.

You are not expected to directly benefit from participation in the study

Costs and Compensation

You will not have any costs and/or compensation from participating in this study

Your Rights as a Research Participant

Participating in this study is completely voluntary. You may choose not to take part in the study or to stop participating at any time, for any reason, without penalty or negative consequences. During the interview process you can skip any questions that you do not wish to answer.

- If you withdraw from the study early let the researcher know as soon as possible.
- Data that is collected prior to a withdrawal will be used for purposes of the study.

If you have any questions *about the rights of research subjects or research-related injury*, please contact the IRB Administrator, (515) 294-4566, IRB@iastate.edu, or Director, (515) 294-3115, Office for Responsible Research, Iowa State University, Ames, Iowa 50011.

Research Injury

There is no risk of injury to participants in this study.

Confidentiality

Research records identifying participants will be kept confidential to the extent permitted by applicable laws and regulations and will not be made publicly available without your permission. However, it is possible that other people and offices responsible for making sure research is done safely and responsibly will see your information. This includes federal government regulatory agencies, auditing departments of Iowa State University, and the Institutional Review Board (a committee that reviews and approves human subject research studies) may inspect and/or copy study records for quality assurance and data analysis. These records may contain private information.

To protect confidentiality of the study records and data, the following measures will be taken:

- Pseudo(fake) names will be re-assigned to each participant in the study.

- All voice recorded interviews will be uploaded on a secure ISU Cloud drive that is password protected.
- All signed consent forms will be uploaded to a password protected computer and backed up and stored on the ISU Cloud Drive.

To protect your confidentiality when results of the study are reported, the following measures will be taken:

- All participants in the study will be identified by a pseudo (fake) name during the results reporting.
- Confidentiality will be maintained throughout the study.

In cases where you report either abuse/neglect of a minor or dependent adult, or the imminent threat of harm to yourself or others, we may have to break confidentiality by notifying the appropriate authorities to assure the safety of you and others.

Future Use of Your Information

Information about you will *only* be used by the research team for the project described in this document.

Questions

You are encouraged to ask questions at any time during this study. For further information ***about the study***, contact Erin Daley via phone at 563-277-7281 or via email at daleye@iastat.edu

Your Consent

By signing this document, you are agreeing to participate in this study. Make sure you understand what the study involves before you sign. If you have any questions about the study after you agree to participate, you can contact the research team using the information provided above.

I am 18 years of age or over and agree to take part in this study.

Participant's Name (printed)

Participant's Signature

Date

By clicking below, you are agreeing to participate in this study. Make sure you understand what the study involves before you agree. If you have questions about the study after you agree to participate, you can contact the research team using the information provided above.

You may print a copy of this form for your files.

I certify that I am 18 years of age or over and agree to participate in this research study.

APPENDIX D. INFORMED CONSENT SINGLE MOTHERS

INFORMED CONSENT FORM

Title of Study: Single Mothers and the Pursuit of Short-Term Certificate Training at a Rural Community College_ Barriers to Completion and the Impact on Workforce Participation]

Investigators: Erin Powers Daley

Invitation to be Part of a Research Study

You are invited to participate in a research study. This form has information to help you decide whether or not you wish to participate—please review it carefully. Research studies include only people who choose to take part—your participation is voluntary, and you can stop at any time. Please ask the project staff any questions you have about the study or about this form before deciding to participate.

Introduction and Purpose of the Study

The purpose of this study is to understand the barriers encountered by single mothers while they complete a short-term certificate training program.

Eligibility to Participate

You are eligible to participate in this study if you are between the ages of 18- 35, who self-identify as a single mother, with children under the age of 13. You must be enrolled, stop out of, or completed a short-term certificate program.

You should not participate if you are not able to commit to the interview.

Description of Study Procedures

If you agree to participate, you will be asked to:

- Participate in 2, 60-90-minute interviews over a time span of 8 weeks.
 - The two semi-structured interviews will take place during the study for over two months. These interviews will be 60-90 minutes in length and recorded for transcription, with an open interview dialogue between researcher and the participants.
 - The first interview will be relationship building and collecting background information on the single mother and the move into understanding her history of becoming a single mother.
 - The second interview will consist of open-ended questions, with interview questions being formed from the first interview responses, building upon experiences in accessing, completing, and/or stopping out of a short-term certificate program.
- Interviews will be conducted in an open-ended question format but the guiding questions for the researcher will be:
-

- How many kids do you have?
- How old are you?
- What made you decide on the educational pathway?
- How did you learn about short term certificate training at the college?
- What has motivated you to pursue an education beyond high school?
- What types of supports do you have?
- What is/was your motivation to pursue a short-term certificate program,
- What barriers have you encountered while in or during your pursuit of a short-term certificate training program?
- Can you describe for me a typical day for you and your children?
- What additional supports from the post-secondary institution would have/would help you to complete your program?
- What are some of the stereotype that you have felt from being a single mother?
- What is your best advice that you would give to single mothers who are thinking about pursuing a short-term certificate training program?
- Allow the interviews to be voice recorded by the researcher.
 - All interviews will be deleted from recording device once research collection is complete
- Participants for the study will be assessed and determined based on a demographic pull of eligible participants.

Expected Time or Duration of Participation:

Your participation will last for about three months. Each of the two interviews will be between 60-90 minutes in length.

- Each interview will be in person or via phone if living more than 30 minutes away from the data collection site.

Risks or Discomforts

While participating in this study you may experience the following risks or discomforts:

- Embarrassment or emotional discomfort from answering sensitive questions during a survey or interview, from being audio recorded during the interview process.

There may be risks or discomforts that are currently unforeseeable at this time. We will tell you about any significant new information we learn that may relate to your willingness to continue participating in this study.

Benefits to You and to Others

It is hoped that the information gained in this study will benefit society by increasing the awareness of the barriers that single mothers encounter while complete a short-term certificate program. The hope is that educational institutions, employers, and social service agency will learn how to better meet the needs of single mothers who are pursuing a short-term certificate training program.

You are not expected to directly benefit from participation in the study

Costs and Compensation

You will not have any costs from participating in this study.

You will be compensated with a gift card in the amount of \$10 to a local business. You will also receive a resource packet for your community, including but not limited to education and community supports.

Your Rights as a Research Participant

Participating in this study is completely voluntary. You may choose not to take part in the study or to stop participating at any time, for any reason, without penalty or negative consequences. During the interview process and journal writing You can skip any questions that you do not wish to answer.

Your choices of whether or not to participate will have no effect on you as a student in any way.

- If you withdraw from the study early let the researcher know as soon as possible.
- Data that is collected prior to a withdrawal will be used for purposes of the study.

If you have any questions *about the rights of research subjects or research-related injury*, please contact the IRB Administrator, (515) 294-4566, IRB@iastate.edu, or Director, (515) 294-3115, Office for Responsible Research, Iowa State University, Ames, Iowa 50011.

Research Injury

There is no risk of injury to participants in this study.

Confidentiality

Research records identifying participants will be kept confidential to the extent permitted by applicable laws and regulations and will not be made publicly available without your permission. However, it is possible that other people and offices responsible for making sure research is done safely and responsibly will see your information. This includes federal government regulatory agencies, auditing departments of Iowa State University, and the Institutional Review Board (a committee that reviews and approves human subject research studies) may inspect and/or copy study records for quality assurance and data analysis. These records may contain private information.

To protect confidentiality of the study records and data, the following measures will be taken: Pseudo(fake) names will be re-assigned to each participant in the study.

All voice recorded interviews will be uploaded on a secure ISU Cloud drive that is password protected.

All signed consent forms will be uploaded to a password protected computer and backed up and stored on the ISU Cloud Drive.

Journals that participants will complete will be kept in a locked file cabinet in the home office of the researcher. The researcher will be the only person to have a key to this locked file cabinet.

To protect your confidentiality when results of the study are reported, the following measures will be taken:

- All participants in the study will be identified by a pseudo (fake) name during the results reporting.
- Confidentiality will be maintained throughout the study.

In cases where you report either abuse/neglect of a minor or dependent adult, or the imminent threat of harm to yourself or others, we may have to break confidentiality by notifying the appropriate authorities to assure the safety of you and others.

Future Use of Your Information

Information about you will *only* be used by the research team for the project described in this document.

Questions

You are encouraged to ask questions at any time during this study. For further information **about the study**, contact Erin Daley via phone at 563-277-7281 or via email at daley@iastat.edu

Your Consent

By signing this document, you are agreeing to participate in this study. Make sure you understand what the study involves before you sign. If you have any questions about the study after you agree to participate, you can contact the research team using the information provided above.

I am 18 years of age or over and agree to take part in this study.

If the study involves obtaining identifiable data about participants from private student records (e.g., grades, coursework, data from the Registrar or other offices, etc.), add:

I also agree that the research team may obtain information from my educational records, as described in this document, for the research.

Participant's Name (printed)

Participant's Signature Date

By clicking below, you are agreeing to participate in this study. Make sure you understand what the study involves before you agree. If you have questions about the study after you agree to participate, you can contact the research team using the information provided above.

You may print a copy of this form for your files.

I certify that I am 18 years of age or over and agree to participate in this research study.

If the study involves obtaining identifiable data about participants from private student records (e.g., grades, coursework, data from the Registrar or other offices, etc.), add:

I also agree that the research team may obtain information from my educational records, as described in this document, for the research.

APPENDIX E. INTERVIEW PROTOCOL ADMINISTRATORS

First Interview Protocol

Institution Name: Aurora Community College

Interviewer: Erin Powers Daley

Prior to the interview process:

Participants will be asked to refrain from using identifying details during the interviews such as names. If the participant does state names or other identifying information during the interview process this will be removed when the research is disseminated.

Introduction Protocol

To help in note taking, I will be recording our interview today. For your information, I will be the only ACC staff that will be hearing your story. I will only use your first name in my notes and for purposes of this research. Upon transcription of the interview, your name will be changed so that no identifying information will be available in the final research.

The first interview will be relationship building and collecting background information on the single mother and the move into understanding her history of becoming a single mother.

The interviews will last no more than 90 minutes each and we will have a very open conversation regarding your experiences with ACC and focus on your journey through education, primarily focusing on how you have used supports to achieve your goals. The types of questions in each interview will intentionally draw on emotions of the experiences for the student as well as utilize behavior-based questions.

Guiding Questions:

1. Demographics questions
 - a. How many kids?

- b. How old are you?
 - c. What is your gender identity?
2. What is your educational background?
 3. What made you decide on the educational pathway?
 4. How did you learn about short term certificate training at the college?
 5. What has motivated you to pursue an education beyond high school?

2nd Interview Protocol

To help in note taking, I will be recording our interview today. For your information, I will be the only ACC staff that will be hearing your story. I will only use your first name in my notes and for purposes of this research. Upon transcription of the interview, your name will be changed so that no identifying information will be available in the final research.

The second interview will consist of open-ended questions, with interview questions being formed from the first interview responses, building upon experiences in accessing, completing, and/or stopping out of a short-term certificate program.

Guiding Questions:

1. What is your role at the college and/or in the community?
2. What are some of the barriers you see single mothers encountering in workforce and education?
3. What role do you see your organization playing in increasing access to education for single mothers?
4. What role do you see your organization playing in increasing the participation of single mothers in the workforce?
5. What prompted you to look at serving single mothers through a targeted program?

6. What were your main goals when starting the childcare assistance program?
7. What were the challenges in implementing the childcare assistance program?
8. Outside of childcare assistance, what additional supports should or have been provided to single mothers?
9. Did the program go as you had planned?
 - i. If not, what did you do to change?
 - ii. If yes, what went well?
10. What advice would you give other administrators who are determining how to support single mothers?

Other Topics Discussed during the interviews:

Other topics that may come up based on responses to above question might be related to employment status, public assistance programs, program barriers to, and information related to relationships between partner organizations during implementation of program.

APPENDIX F. INTERVIEW PROTOCOL SINGLE MOTHERS

First Interview Protocol

Institution Name: Aurora Community College

Interviewer: Erin Powers Daley

Prior to the interview process:

Participants will be asked to refrain from using identifying details during the interviews such as names. If the participant does state names or other identifying information during the interview process this will be removed when the research is disseminated.

Introduction Protocol

To help in note taking, I will be recording our interview today. For your information, I will be the only ACC staff that will be hearing your story. I will only use your first name in my notes and for purposes of this research. Upon transcription of the interview, your name will be changed so that no identifying information will be available in the final research.

The first interview will be relationship building and collecting background information on the single mother and the move into understanding her history of becoming a single mother.

The interviews will last no more than 90 minutes each and we will have a very open conversation regarding your experiences with ACC and focus on your journey through education, primarily focusing on how you have used supports to achieve your goals. The types of questions in each interview will intentionally draw on emotions of the experiences for the student as well as utilize behavior-based questions.

Guiding Questions:

6. Demographics questions
 - a. How many kids?

- b. How old are you?
 - c. What is your gender identity?
7. What is your educational background?
 8. What made you decide on the educational pathway?
 9. How did you learn about short term certificate training at the college?
 10. What has motivated you to pursue an education beyond high school?

2nd Interview Protocol

To help in note taking, I will be recording our interview today. For your information, I will be the only ACC staff that will be hearing your story. I will only use your first name in my notes and for purposes of this research. Upon transcription of the interview, your name will be changed so that no identifying information will be available in the final research.

The second interview will consist of open-ended questions, with interview questions being formed from the first interview responses, building upon experiences in accessing, completing, and/or stopping out of a short-term certificate program.

Guiding Questions:

1. What types of supports do you have?
 - a. Financial supports
 - b. Education Supports
 - c. Personal Supports
2. Do you plan to work or continue your education after you complete your certificate training program?

Other Topics Discussed during the interviews:

Other topics that may come up based on responses to above question might be related to employment status, use of public assistance programs, classroom or program barriers to completion, personal relationship information related to significant other, family members, or children.

APPENDIX G. IRB APPROVAL MEMO

IOWA STATE UNIVERSITY

OF SCIENCE AND TECHNOLOGY

Date:

To: From:

12/03/2019

Erin Powers Daley Erin Doran ^{FAX 515-294-4267} Office for Responsible Research

Single Mothers and the Pursuit of Short Term Certificate Training at a Community College: IRB ID: 19-554

Submission Type: Initial Submission **Exemption Date:** 12/03/2019

The project referenced above has been declared exempt from most requirements of the human subject protections regulations as described in 45 CFR 46.104 or 21 CFR 56.104 because it meets the following federal requirements for exemption:

2018 - 2 (iii): Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) when the information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a LIMITED IRB REVIEW to [determine there are adequate provisions to protect the privacy of subjects and to maintain confidentiality of the data].

The determination of exemption means that:

- **You do not need to submit an application for continuing review. Instead, you will receive a request for a brief status update every three years. The status update is intended to verify that the study is still ongoing.**
- **You must carry out the research as described in the IRB application.** Review by IRB staff is required prior to implementing modifications that may change the exempt status of the research. In general, review is required for any *modifications to the research procedures* (e.g., method of data collection, nature or scope of information to be collected, nature or duration of behavioral interventions, use of deception, etc.), any change in *privacy or confidentiality protections*, modifications that result in the *inclusion of participants from vulnerable populations*, removing plans for informing participants about the study, any *change that may*

increase the risk or discomfort to participants, and/or any change such that the revised procedures do not fall into one or more of the [regulatory exemption categories](#). The purpose of review is to determine if the project still meets the federal criteria for exemption.

- All **changes to key personnel** must receive prior approval. IRB 10/2019

Title:

Barriers to Completion and the Impact on Workforce Participation

Institutional Review Board

Office for Responsible Research Vice President for Research 2420 Lincoln Way, Suite 202 Ames, Iowa 50014

515 294-4566

- **Promptly inform the IRB of any addition of or change in federal funding for this study.** Approval of the protocol referenced above applies only to funding sources that are specifically identified in the corresponding IRB application.

Detailed information about requirements for submitting modifications for exempt research can be found on our [website](#). For modifications that require prior approval, an amendment to the most recent IRB application must be submitted in IRBManager. A determination of exemption or approval from the IRB must be granted before implementing the proposed changes.

Non-exempt research is subject to many regulatory requirements that must be addressed prior to implementation of the study. Conducting non-exempt research without IRB review and approval may constitute non-compliance with federal regulations and/or academic misconduct according to ISU policy.

Additionally:

- All research involving human participants must be submitted for IRB review. **Only the IRB or its designees may make the determination of exemption**, even if you conduct a study in the future that is exactly like this study.
- **Please inform the IRB if the Principal Investigator and/or Supervising Investigator end their role or involvement with the project** with sufficient time to allow an alternate PI/Supervising Investigator to assume oversight responsibility. Projects must have an [eligible PI](#) to remain open.
- **Immediately inform the IRB of (1) all serious and/or unexpected adverse experiences** involving risks to subjects or others; and (2) **any other unanticipated problems involving risks to subjects or others.**
- **Approval from other entities may also be needed.** For example, access to data from private records (e.g., student, medical, or employment records, etc.) that are protected by FERPA, HIPAA or other confidentiality policies requires permission from the holders of those records. Similarly, for research conducted in institutions other than ISU (e.g., schools, other colleges or universities, medical facilities, companies, etc.), investigators must obtain permission from the

institution(s) as required by their policies. **An IRB determination of exemption in no way implies or guarantees that permission from these other entities will be granted.**

- Your research study may be subject to **post-approval monitoring** by Iowa State University's **Office for Responsible Research**. In some cases, it may also be subject to formal audit or inspection by federal agencies and study sponsors.
- Upon completion of the project, transfer of IRB oversight to another IRB, or departure of the PI and/or Supervising Investigator, please initiate a Project Closure in IRBManager to officially close the project. For information on instances when a study may be closed, please refer to the [IRB Study Closure Policy](#).

Please don't hesitate to contact us if you have questions or concerns at 515-294-4566 or

IRB@iastate.edu.