A Quantitative Analysis of Factors Contributing to Adult Education Students’ Transition to Credit Courses

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ABSTRACT

A QUANTITATIVE ANALYSIS OF FACTORS CONTRIBUTING TO ADULT EDUCATION STUDENTS’ TRANSITION TO CREDIT COURSES

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Northern Illinois University, 2022
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Adult education programs serve students with low literacy and numeracy skills. They provide instructional services below the postsecondary level for students who have limited English proficiency and students who are working towards obtaining their high school equivalency. Once adult education students complete their programs, they may choose to transition to college credit courses or enroll in a job training program. This study examined student factors that impact the likelihood of adult education students transitioning to college credit courses. Stepwise regression was used to analyze five years of adult education data from over 3,000 students in an adult education program in Illinois. A model consisting of seven variables was identified.
A QUANTITATIVE ANALYSIS OF FACTORS CONTRIBUTING TO ADULT EDUCATION
STUDENTS' TRANSITION TO CREDIT COURSES

BY

HEATHER MARTIN
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A DISSERTATION SUBMITTED TO THE GRADUATE SCHOOL
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FOR THE DEGREE
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Doctoral Director:
Xiaodan Hu
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PREFACE

The aim of this dissertation project was to understand which student-level factors, if any, increase the likelihood of non-credit adult education students transitioning to credit courses. The quantitative study explored the adult education program at a community college in the Illinois. The resulting chapters describe this research project from the proposal stage to a report on the study findings, as well as a scholarly reflection on my process and learning at the conclusion of the study.

Chapter One is an artifact from the dissertation proposal defense. The proposal was defended in November of 2020, and this chapter outlines the initial plans to carry out the research. The original proposal included three different data sources and corresponding independent variables. As the study progressed, it became apparent that getting data from all three sources was not going to be possible. Therefore, only institutional data was used. Chapters Two and Three reflect the sole data source.

Chapter Two is a report of findings using a paper model. This chapter details the research conducted throughout 2021 and early 2022. The findings reflected a predictive model comprised of seven independent variables: average credits taken per semester, total learning community courses taken, average attempts per class, average withdrawals per semester, total ICAPS courses taken, and total computer courses taken.

Chapter Three is a scholarly reflection of my dissertation and the process of writing it. This chapter discusses the practical implications and recommendations I have based on the findings of the study. The chapter also examines what I learned by conducting this research that can be
applied to future research, and applications to professional practice. Key take-aways include the
importance of data accuracy, the need for more professional development opportunities related to
data and data practices for adult education professionals, and the importance of supporting adult
education students with academic goals by establishing academic pathways.
CHAPTER I
INTRODUCTION TO THE STUDY

Introduction

People who do not complete high school are more likely to be unemployed, poverty-stricken, using public assistance, in prison on death row, unhealthy, divorced, and single parents of children who drop out of high school than their peers who complete high school (Bridgeland et al., 2006). In addition to the societal implications that comes with not completing high school, there are also economic implications. According to data from the Bureau of Labor Statistics (Torpey, 2018), the median weekly income for adults (defined as twenty-five and over) working full-time with no high school equivalency is $520 with an unemployment rate of 6.5%. Those adults with a high school equivalency make an average of $712 per week with an unemployment rate of 4.6%. Adults with an associate degree have a median weekly income of $836 with an unemployment rate of 3.4%. This earning potential financially impacts the students and their families as well as their communities.

To help mitigate the potentially devastating effects of this education gap, the federal government has provided funds with which states can establish and expand basic education programs who have not completed high school. These funds are governed by the Adult Education and Family Literacy Act (AEFLA) and each year, states get a minimum grant of $250,000 to help promote these programs. In order to receive the funds, states must submit a plan in which they address how they assess the need for adult education services and how they
will serve special populations including low-income students, individuals with disabilities, single parents, “displaced homemakers,” and individuals with other barriers to educational enhancement or employment (Lasater & Elliott, 2004). According to the U.S. Department of Education (2004), part of the purpose of AEFLA is to “assist adults to become literate and obtain the knowledge and skills necessary for employment and self-sufficiency” (Lasater & Elliott, 2004, p. 1-2).

While this purpose dates back over 40 years, the context of it has evolved. According to Georgetown University Center on Education and the Workforce by 2027, 70% of all jobs will require some postsecondary education (Carnevale et al., forthcoming). This puts adult educators in a precarious situation. Adult education students are already low-wage workers and are ill-prepared for the workforce or postsecondary education. However, the rapid evolution of the job market, especially as it relates to technology, gives adult education programs and their institutions an even bigger task. Rather than solely preparing students for their high school equivalency exams, programs must establish a clear pathway by which the students can obtain the skills and knowledge necessary for employment.

With 81 providers, Illinois has one of the five largest adult education programs in the United States (Illinois Community College Board [ICCB], 2018a). While the majority of these programs are based in community colleges, they can also be provided by regional offices of education and community-based organizations. The grant-funded status of adult education programs and the fact that the programs are required to work within the parameters set forth by the grants often lead to adult education programs operating as a separate entity under the same
institution. These independent departmental practices, along with many of the characteristics associated with non-traditional students lead to several obstacles that the students face when integrating into their institutions (Jacobs & Tolbert-Bynum, 2008).

There is limited extant literature about adult education students transitioning to credit courses. Tyler (2003) found that only roughly 30% of students who obtain their high school equivalency go on to obtain any postsecondary education. While 5%-10% obtain at least one year of postsecondary education, only .5%-3% obtain an associate’s degree (Zafft et al., 2006). Similarly, Patterson et al. (2010) found that among the high school equivalency holders who attended college, 82.9% of them attend a two-year institution and a fraction of them would earn a college credential. To better understand and support adult students’ transition rate, the current study aims to explore what factors contribute to adult education students’ successful transition to college credit courses.

**Purpose Statement**

The purpose of this study is to understand which student-level factors, if any, increase the likelihood of non-credit adult education students transitioning to credit courses. Prior research has indicated that certain factors of an adult education program contribute adult education student persistence. Among these are contextualized instruction, academic support, prior education, specific discussions surrounding motivation, intake and registration procedures, and orientations (Beder, 1991; Comings, 2007; Cuban, 2003; Meder, 2000; Quigley, 1997; Quigley, 2000; Reynolds & Johnson, 2014). However, no known literature has focused on adult students’ transition to credit courses.
While the existing literature on adult education programmatic components contributing to students transitioning to credit courses is important, it is important to note that the different settings in which adult education programs exist provide the programs with different constraints. The existing literature stated that institutional supports, financial assistance, childcare assistance, and orientation into the college environment all contribute to a higher transition rate for adult education students (Zafft et al., 2006). This program level guidance is useful, but it is not necessarily able to be utilized by individual programs. For example, programs that are based in community-based organizations likely do not have the resources to incentivize transition financially or offer transition support in the same way that community college programs do. Similarly, budget constraints in community college-based programs could make offering assistance with childcare more difficult than it might be at a community-based organization. The inconsistencies in the structure of adult education programs highlight a need for understanding student-level trends and data. This study contributes to the literature on student-level characteristics that contribute to transition to credit courses, thus providing programs with practical recommendations that can be contextualized and utilized within their unique constraints.

To examine if any factors specifically impact adult students’ likelihood of transitioning to credit courses, this study used a quantitative design to explore the relationships among variables (Creswell & Creswell, 2018). This study seeks to explore and analyze observational data from a midsize community college in Illinois to determine which factors, if any, contribute to the
likelihood of adult education students transitioning to credit courses. The following questions guided the research:

1. What factors contribute to the likelihood of adult education students transitioning to credit courses?
2. To what extent does the likelihood of transitioning to credit courses vary across student groups defined by demographic information and enrollment history?

**Review of the Literature**

Adult education consists entirely of non-traditional students. According to the Council of Adult and Experiential Learning (2000), non-traditional students meet one or more of the following characteristics: delaying enrollment into postsecondary education, attending part-time, being financially independent from their parents, working full-time while enrolled in college, having dependents other than a spouse, being a single parent, or lacking a standard high school diploma. The literature review focused on the field and structure of adult education, barriers to academic success for adult education students, the role of motivation and goals in adult education, and the importance of adult education students transitioning to credit courses.

**The Structure of Adult Education**

Adult education programs in Illinois serve approximately 81,000 learners each year (ICCB, 2018a). Adult education students enroll in programs for a specific reason; they want to obtain a high school equivalency, improve their English fluency, or prepare to obtain their United States citizenship. Illinois offers several different types of courses to meet the needs of their adult learners. Adult basic education (ABE) classes offer instruction for students who have
below a ninth grade reading level. These students can come from a variety of language backgrounds and are working towards obtaining their high school equivalency. Also for students pursuing a high school equivalency, Illinois offers adult secondary and high school equivalency classes for students from a variety of language backgrounds who have at least a ninth grade reading level. For students who have completed a significant amount of high school coursework, there are high school credit recovery programs so that they can complete their high school education (ICCB, 2018a).

There are over 40,000 English language learners enrolled in adult education programs in Illinois that want to improve their reading, writing, listening, and speaking skills. These students come from a variety of backgrounds and have a variety of levels of educational attainment in their home countries. There are also civics classes that integrate literacy skills with civics education to help these students acclimate to American culture and gain the skills and knowledge necessary for citizenship.

In addition to classes for language acquisition and high school equivalency preparation, there are also classes with an emphasis on transition to career and/or credit courses. Bridge programs provide adult education students with instruction, contextualized to their specific occupations, thus preparing them for successful transitions to job training programs. Transition courses emphasize the academic and college readiness skills needed for adult education students to successfully transition to postsecondary educational settings. Integrated Education and Training (IET) and Integrated Career and Academic Preparation System (ICAPS) programs, modeled after Washington’s I-BEST program, use a team-teaching approach. Students are co-
enrolled in their adult education and workforce and career and technical training so that they improve their English fluency and/or earn their high school equivalency and a postsecondary credential, often industry-specific (ICCB, 2018a).

**Barriers to Academic Success for Adult Learners**

Because adult education students are non-traditional, they have responsibilities outside of their education that are not reflected as strongly in their traditional counterparts. These roles can include employment, family responsibilities, and community activities (Kilgore & Rice, 2003; Ross-Gordon, 2011). At two-year institutions, college persistence for students with high school diplomas is approximately double that of students with a GED (Reder, 1999). The National Center for the Student of Adult Learning and Literacy (NCSALL) states that there are several reasons for this. Among these reasons are limited exposure to college-level reading and algebra, use of computers, and writing research papers, limited knowledge of and/or access to financial aid, lost wages, and unanticipated costs of college such as transportation and childcare, lack of strategies to simultaneously manage work, family/relationships, childcare needs, and school, difficulty navigating a new academic environment, and lack of confidence in one’s ability to succeed and a need for counseling (Zafft et al., 2006).

Adult learners’ barriers can be organized into situational barriers, dispositional barriers, and institutional barriers (Comings, 2007; Mercer, 1993). Situational barriers are life circumstances that are often specific to non-traditional students. These include job responsibilities, financial strain, and family obligations. Family obligations can include childcare, eldercare, time constraints due to family members’ schedules, and disruption of
education due to family changes such as having a baby. Dispositional barriers are an individual’s attitude and beliefs. As previously mentioned, many adult education students, particularly those in Adult Basic or Secondary Education programs, have negative associations with school due to their previous experiences. Though they dropped out of high school for a number of different reasons, the fact that it was a negative experience is shared by all of the students. Adult learners lack motivation and confidence due to the fact that they have been out of an academic setting for a significant amount of time (Osam et al., 2017). Institutional barriers are policies and procedures that can hinder adult learners’ ability to participate in educational opportunities. Institutional barriers include a lack of accessible childcare, registration procedures that are not accessible for the students, and inconvenient scheduling.

The Role of Motivation and Goals in Adult Education

Due to developmental stages, life circumstances, and the nature of the education, adult students have different motivational factors than their traditional counterparts. One of the first studies of the motivation in adult students found that adult learners could be separated in three types of learners: goal-oriented, activity-oriented, and learning-oriented (Houle, 1961). Goal-oriented learners use education as a means of accomplishing a direct and well-defined goal, such as obtaining a job or promotion. Activity-oriented learners take part in the educational process because they see the course or activity as meaningful. Learning-oriented learners seek education for the sake of education and knowledge.

Boshier (1991) expanded on Houle’s work by further differentiating the reasons adult learners pursue education. Within Houle’s goal-oriented learners, Boshier found students
motivated to improve their communication, those motivated by their desire to get more education and training (for a specific purpose), those wanting to advance or maintain their careers, and those who wanted to enhance the quality of their lives and the lives of their family members. Houle’s activity-oriented group was broken into students that are motivated by a need for social contact and those seeking social stimulation. Houle’s learning-oriented group was again defined by their desire to learn for the sake of learning (Boshier, 1991).

While the work of Houle (1961) and Boshier (1991) thoroughly defined adult learners’ motivation and their findings have been validated by several other studies (Burgess, 1971; Cross, 1981; Morstain & Smart, 1974; 1977), the specific focus of the studies was adult learners in non-credit, continuing education courses. While, demographically, this population may share some characteristics with some of the adult basic and secondary education population, there is one important difference: the students in the continuing education program do not have the same negative association with school that the dropout population has.

As previously stated, adult education students are enrolled for a specific purpose. Therefore, they are largely goal-oriented learners. Their goals do not typically extend past the completion of their non-credit studies. This is a potential reason that they often do not transition to credit courses when they complete their adult education programs (Houle, 1961). When learners register for their adult education program, they are required to set a measurable goal that is chosen from a list provided by the ICCB. The program also tracks the completion of all of these goals, regardless of which goals were chosen by the student. The goals are separated into educational, societal/economic, and parenting goals. Educational goals include enrollment in
another academic or vocational program, completion of a vocational program, and attainment of high school equivalency or diploma. Societal/economic goals include receiving U.S. Citizenship, registering to vote or voting for the first time, gaining employment, securing employment retention or job advancement, and removal from public assistance (Data and Information System Illinois, n.d.). Parenting goals include reading to children and increasing involvement in children’s schooling. In addition to setting goals, students must also choose a career cluster when they enroll. They must choose between sixteen career clusters provided by ICCB. The clusters represent a large range of careers that involve various different levels of training and educational attainment.

The goals and career clusters are a result of the Workforce Innovation and Opportunity Act of 2014 (WIOA) and its predecessor, the Workforce Investment Act of 1998 (WIA). Both iterations of the federal legislation were implemented to provide the education, training, and support needed to succeed in the labor market (dol.gov). Though several students enroll in adult education classes to learn English or obtain their high school equivalency, the presentation of career clusters and goals outside of the immediate objectives of the program could give students the information they need to connect their immediate goals with their next goal of obtaining a specific vocational or employment goal or societal goal. This study determined whether the desire to attain or the attainment of indirect goals lead to a likelihood of transfer to credit courses.
The Importance of Transitioning

From the student perspective, transitioning to credit courses can enhance several aspects of their lives and their children’s lives. The benefits of transitioning are multigenerational. It improves the quality of life for the next generation. According to a 2010 study by the National Institutes of Health, a mother’s reading skill is the greatest determinant of her children’s future academic success (Sastry & Pebley, 2010). Moreover, a more educated population improves many aspects of society. Better educated parents raise better educated, more successful children, who are less likely to end up in poverty or prison (Flores et al., 1999). A more educated citizenry is also more likely to vote, make charitable contributions, and contribute to economic growth as their level of education rises. In addition to increasing the potential for the district’s youth, adult education programs also increase economic status. On average, 43% of adults at the lowest levels of literacy live in poverty compared to only 4% of those at the highest (Bowen, 1998). According to the Bureau of Labor Statistics, unemployment rates of 8.4% for individuals with less than a high school education compared to 4% for those with an associate degree and 3.3% for those with a bachelor’s degree (Zafft et al., 2006). Other societal benefits of education include lower rates of smoking and less money spent on social programs for individuals with higher educational attainment (Beder, 1999; De Walque, 2007). Furthermore, as previously stated, high school dropouts are more likely to be unemployed, poverty-stricken, using public assistance, in prison on death row, unhealthy, divorced, and single parents of children who drop out of high school. It is estimated that just a year of college credit can result in a 4%-7% increase in earnings (Kane & Rouse, 1995).
From the program perspective, transitioning to credit courses is important for the adult education programs. The Adult Education and Family Literacy Act (AEFLA) is the primary source of federal funding for state adult education programs. The Office of Career, Technical, and Adult Education (OCTAE) administers AEFLA. According to OCTAE, one of the purposes of AEFLA is to assist adults in transitioning to postsecondary education and training (AEFLA Resource Guide). Regardless of the settings in which adult education programs are held, the programs are funded by grants. During continuation years, funding is partly contingent on the programs’ performance in the preceding year. In competitive years, one of the evaluation criteria for funding is level of performance. Because transition to credit is a measure of success, programs benefit from students transitioning (ICCB, 2018b).

Despite the importance of students transitioning to credit courses, there are not a lot of procedures or structures in place to facilitate these transitions. Some programs have scholarships available for students who complete the adult education program. For example, some community colleges offers one free credit course to any adult learner who completes the adult education program. Some programs have transition advisors to help the students plan and register for credit courses once they have completed their adult education program. These transition advisors might be full-time or part-time and could be funded by grants or by the institution. At some institutions, these advisors help the students throughout the first semester of their credit coursework. The transition advisors at other institutions might serve as the students’ academic advisor through the duration of their credit program. There is no literature pertaining to the effectiveness of these transition advisors.
Adult learners have several characteristics that set them apart from their traditional counterparts. Furthermore, the structure of adult education programs can impact the ease with which a student can transition by providing or lacking certain supports for the students. The unique barriers to academic success, the distinctive motivational factors of adult students, and the supports offered within the adult education program informed this study. They, along with the conceptual framework, provided the factors that were explored as potential indicators of a student’s likelihood of transitioning to credit-bearing courses.

**Conceptual Framework**

The conceptual framework for this study was Bergman’s (2012) theory of adult learner persistence in degree completion programs. This theory draws on Braxton et al.’s (2004) theory of student departure in commuter college and universities and Bean and Metzner’s conceptual model of undergraduate nontraditional student attrition (Bergman, 2012) to isolate specific factors and understanding their individual influences on adult student persistence. For example, Braxton et al. (2004) proposed that most adult and nontraditional students have more commitments outside of school than their traditional counterparts, such as employment and family obligations. These commitments put a larger emphasis on the effects that external environmental conditions have on these students than on students at residential institutions. Students in residential institutions are not as heavily impacted by these commitments. This model emphasizes the students’ external environments more than previous attrition models. Bean and Metzner also mitigated the impact of socialization on nontraditional and adult students, drawing attention to characteristics of nontraditional students, such as age, enrollment status,
employment, family obligations, residence, previous academic performance, and financial factors (Bean & Metzner, 1985).

Centering around adult student characteristics and learning experience, Bergman’s (2012) theory, as indicated in Figure 1, explores student entry characteristics and both internal (campus/academic) and external environmental factors. Student entry characteristics include gender, age, ethnicity, parental education, previous college credit, educational goals, children, marital status, socioeconomic status, and motivation. Internal environmental factors are enrollment status, cumulative GPA, institutional support, academic advising, faculty support, financial aid, cost, flexibility of course options, active learning, and prior learning assessment. External environmental factors include finances, family influences, work influences, significant life events, community influences, and hours of employment.

Because of existing literature on adult education students, the characteristics that were considered in this study are gender, age, previous educational attainment, goal, marital status, socioeconomic status, single parent status, ex-offender status, number of courses taken concurrently in the year leading up to transition, academic advising, participation in contextualized courses, hours of employment, and homelessness. Though gender has not been found to directly contribute to adult student success, it has been tied to utilization of study strategies, rate of progress, persistence, and attrition risk in adult learners (Bean & Metzner, 1985; Grimes, 1997; Markle, 2015; Robertson, 1991; Tinto, 1993; Watkins & Hattie, 1981). Age has been found to be an indicator of completion of adult basic education programs (Dirkx & Jha, 1994) and growth in basic reading skills in adult ESL students (Condelli, 2006).
Prior educational attainment was found to have a positive correlation to literacy growth in adult ESL students (Condelli, 2006) and Spurling, et al. (2008) posited that adult students with higher prior educational attainment possessed foundational skills that would allow them to progress quickly. Students who have goals pertaining to transitioning to credit-bearing courses are potentially more likely to transition (Comings, 2007; Markle, 2015; Spurling, et al., 2008).
Marital status, socioeconomic status, single parent status, hours of employment, ex-offender status, and homelessness are all factors that contribute to adult students’ commitments outside of class. Nontraditional students often face obstacles attaining academics success due to the increased number of external commitments they have (Yorke, 1999). Furthermore, socioeconomic status has been shown to directly impact adult student persistence (Ashar & Skenes, 1993). In sum, while Bergman’s (2012) theory focuses on adult students’ persistence in particular, this theory guided the current study in selecting possible predictors of adult students’ transition to credit-bearing courses, which carries important implications for student success. It was hypothesized that these factors would impact students’ likelihood of transitioning to credit courses.

**Method**

To examine if any of these factors specifically impact adult students’ likelihood of transitioning to credit courses, this study adopted a quantitative design to explore the relationships among variables (Creswell & Creswell, 2018). This study sought to determine what factors contributed to the likelihood of adult education students transitioning to credit courses and to what extent it varied across student groups.

**Research Site**

This study used student-level data of adult students at Midwestern Community College (a pseudonym) in Illinois. Midwestern Community College sits on a 217-acre campus located northwest of Chicago. The main campus contains thirteen buildings. In addition to the main
campus, Midwestern Community College holds classes in various other locations, including a
town hall and a community center.

The college’s enrollment was 9,917 students in fall of 2019, which is consistent with the
fall enrollment for the previous five years. The student composition was 67.6% part-time
students. Enrollment by gender was 54.7% women and 45.3% men. The racial/ethnic breakdown
of the student population was 4.6% African American, 7.4% Asian, 45.4% LatinX, 0.6% Native
American/Alaska Native, 0.5% nonresident, 0.2% Pacific Islander, 3.1% unknown, and 38.2%
White. The largest age group represented for Fall 2019 was the 18-22 year old demographic,
making up 55% of the student body. 23-29 year olds represented 19% of the population, 30-39
year olds represented 10% of the population, 40-49 year olds represented 6% of the population,
students 17 years and under represented 5% of the population, 50-59 year olds represented 3% of
the population, and 60+ comprised 2% of the population. The student breakdown by enrollment
status, gender, and race/ethnicity are all consistent with the population for the previous five
years. The distribution of the age group demographics remained consistent from 2015 to 2017. In
Fall 2018, the 17 and under demographic outnumbered the 50-59 age group for the first time.

In Fall 2019, the adult education program’s enrollment was 1209 students, making it
12.2% of the institution’s total enrollment. All of the 1209 students were enrolled part-time.
Program enrollment by gender was 63% women and 37% men. Racial/ethnic breakdown of the
program’s student population was 1.8% African-American, 6.3% Asian, 83.1% LatinX, 0.8%
Native American/Alaska Native, and 8.7% White. The smallest age group represented was 16-18
year olds, making up 2.2% of the program’s population. 19-24 year olds represented 19.5% of
the population, 25-44 year olds represented 50.6% of the population, 45-59 year olds represented 23.3% of the population, and students 60 years and older made up 4.4% of the program’s population.

The adult education program at Midwestern Community College consists of two primary groups of students: the English as Second Language (ESL) students and students that are working towards their high school equivalency. As per the grant, the students are required to take a standardized test to show level gains. In particular, the ESL program consists of ten levels of classes. The students are placed into these levels by the ESL staff and faculty who use writing samples and individualized, informal verbal interactions to gauge the students’ levels of both written and oral English fluency. The program for students pursuing their high school equivalency consists of math and language arts classes. The students are placed into these classes based on standardized test scores.

The program also offers classes that provide contextualized and integrated instruction in the form of bridge courses, learning communities and Integrated Career and Academic Preparation System (ICAPS) courses. Bridge courses offer contextualized instruction in three different career clusters. ICAPS classes consist of students taking two corequisite classes: one is a career certificate-based course and the other is an adult education support class. Like ICAPS classes, learning communities consist of corequisite classes. However, rather than career-based classes, these are academically based. The students in learning communities take one introductory academic credit course and one adult education support class.
Data Source

The study used secondary data from multiple sources. Student’s enrollment data will be taken from Datatel, which is used by the institution to track students’ enrollment and participation in credit courses. Demographic information and enrollment and participation in adult education courses will be taken from the Data and Information System-Illinois (DAISI). All publicly funded adult education programs in the state of Illinois are required to use DAISI to track their student data. This is because the grants that fund the programs stipulate that data is tracked using DAISI. DAISI will be used to collect data on the students’ enrollment and participation in adult education classes. It will also be used to collect student demographic information. The rationale for using DAISI for demographic information rather than Datatel is that the student intake process for adult education students is more extensive than that of the credit students. Adult education programs have more robust demographic data on their students than credit programs do. Transition advisor records will be used to ascertain whether or not the students consulted with the transition advisor and, if so, to what extent.

Sample

The data sample consisted of adult students enrolled in the Adult Education Program at Midwestern Community College between 2010 and 2019. The sample was restricted to students who had met a certain academic milestone. For students in the Basic and Secondary Education Program, the sample only included students who had completed the two highest levels of math and language arts. Students in these levels were considered to be academically ready to take their high school equivalency tests. The high school equivalency tests were independent from the
program. Therefore, data was taken from the top two levels to accommodate any students that chose to take their high school equivalency tests prior to the completion of the entire adult education program. Appendix C provides detailed educational functioning descriptors for the students in each level of the program.

For students in the ESL program, the sample consisted of students in levels six through ten. The rationale for choosing these ESL courses was due to the students’ academic and linguistic demands of the specific courses. The students in these levels possessed a level of fluency that enabled them to navigate work and school settings without barriers due to language. Due to this level of fluency reached in level six, levels seven through ten were established to provide students with academic content so that they were prepared to transition to credit courses. As a result, the curricula for these courses consisted largely of research, presentations, and academic papers. It was not unusual for students in any of the levels six through ten to exit the ESL program and move on to other career or academic pursuits. Appendix D provides detailed educational functioning descriptors for the students in each level of the program.

The rationale for choosing the bridge, ICAPS, and learning community courses was that the students participating in those courses were at the same academic level or level of fluency as the students in the ESL, and math and language arts courses from which the data was taken. For the purposes of this study, the students who were enrolled in ICAPS and learning communities were considered adult education students and not credit students. To be considered transitioned to credit courses, the students had to enroll in credit courses after completing their ICAPS or learning communities, taking credit courses independently.
The transition advisor records will be used to establish whether or not the students met with the transition advisor prior to enrolling in credit courses. The program has one transition advisor. All of the students are aware that they have access to the advisor as a resource because they have been told by program supervisors, instructors, and in many cases, the transition advisor. The transition advisor often goes to the advanced level classes to speak to the students and give them her contact information so that they can set up an appointment. The students are not required to utilize the transition advisor as a resource in order to register for credit courses.

**Variables**

As indicated in Table 1, the dependent variable was a binary variable indicating if a student transitioned to for-credit courses within six years of adult education completion. If a student transitioned to credit bearing courses, it was coded as 1, and 0 otherwise.

Guided by the conceptual framework and previous literature, the independent variables were separated into demographic information and academic support. The binary demographic variables are gender, single parent status, marital status, ELL status, ex-offender status, migrant worker status, homelessness, long-term unemployment, and whether or not the student receives public assistance. ELL status as utilized in the demographics differs from the classification of the students as ESL students. ESL refers to the courses in which the students are enrolled. ELL refers to the students having a first language other than English and is independent from their enrollment. Therefore, students in the ABE/ASE program can be classified as ELL students because they have a first language other than English. However, they are fluent English speakers and therefore not enrolled in the ESL program. The nominal demographic variables are the
student’s country of origin, the student’s chosen career cluster, and the student’s disability status. The student’s career cluster is nominal because the students choose from a list of sixteen possible career clusters. The student’s disability status is nominal because the students choose whether they have a disability, do not have a disability, or would rather not disclose. The ordinal demographic variables are the student’s employment status and their previous level of education. The student’s age is the only continuous demographic variable.

There were five independent variables representing students’ academic support. Four of them were binary and one is continuous. The binary variables were completion of a bridge course, participation in an ICAPS course, participation in a learning community, and communication with the transition advisor. The continuous academic support variable is the amount of time spent in the adult education program.

Analytic Strategy

All data was be entered into SPSS so that they could be analyzed for statistically significant relationships. Because this study explored secondary data and the researcher did not alter any variables, this was a nonexperimental study. It utilized a correlational design. Correlational designs use correlational statistics to measure the relationship or degree of relationship between multiple variables. Descriptive statistics were used to explore the relationships between the variables. These statistics provided a complete picture of the population studied. Mean and standard deviations were determined. In this study, the relationships of each between the independent variables and the dependent variable, the transition to credit courses, were explored.
<table>
<thead>
<tr>
<th>Type of Variable</th>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent</td>
<td>Transition to credit</td>
<td>0=No, 1=Yes</td>
</tr>
<tr>
<td>Independent</td>
<td>Demographic</td>
<td>Prior educational attainment</td>
</tr>
<tr>
<td>Demographic</td>
<td>Employment Status</td>
<td>0=unemployed, 1=part-time, 2=full-time, 3=Not in labor force</td>
</tr>
<tr>
<td>Demographic</td>
<td>Age at the time of transfer</td>
<td>Continuous</td>
</tr>
<tr>
<td>Demographic</td>
<td>Career Cluster</td>
<td>1=agriculture, food and natural resources, 2=architecture and construction, 3=arts, a/v technology and communications, 4=business management and administration, 5=education and training, 6=finance, 7=government and public administration, 8=health science, 9=hospitality and tourism, 10=human services, 11=information technology, 12=law, public safety, corrections and security, 13=manufacturing, 14=marketing, 15=science, technology, engineering, and mathematics, 16=transportation, distribution, and logistics</td>
</tr>
<tr>
<td>Demographic</td>
<td>Public Assistance</td>
<td>0=no, 1=yes</td>
</tr>
<tr>
<td>Demographic</td>
<td>Marital Status</td>
<td>0=no, 1=yes</td>
</tr>
<tr>
<td>Demographic</td>
<td>Gender</td>
<td>0=man, 1=woman</td>
</tr>
<tr>
<td>Demographic</td>
<td>Disability Status</td>
<td>0=not disabled, 1=disabled, 2=did not disclose</td>
</tr>
<tr>
<td>Academic</td>
<td>Bridge Participation</td>
<td>0=no, 1=yes</td>
</tr>
<tr>
<td>Demographic</td>
<td>Homeless</td>
<td>0=no, 1=yes</td>
</tr>
<tr>
<td>Demographic</td>
<td>Migrant/Seasonal Worker</td>
<td>0=no, 1=yes</td>
</tr>
<tr>
<td>Demographic</td>
<td>Ex-Offender</td>
<td>0=no, 1=yes</td>
</tr>
<tr>
<td>Demographic</td>
<td>Single Parent</td>
<td>0=no, 1=yes</td>
</tr>
<tr>
<td>Demographic</td>
<td>Long-Term Unemployment</td>
<td>0=no, 1=yes</td>
</tr>
</tbody>
</table>

(Continued on following page)
In addition to exploring the relationships between the individual independent variables and the dependent variable, the interaction of the independent variables and the relationship of those interactions to the dependent variable were also be explored. Graphic representations of the data and findings further illustrated the relationships within the data.

Inferential statistical tests were used to explore the hypothesis that there is a relationship between student characteristics and their transition to credit-bearing courses. Correlational tests were run to test the relationships between the variables. The rationale for this was that correlational statistics measure the association between two or more variables (Creswell & Creswell, 2018). In this case, the correlation between transitioning to credit courses and the independent variables were being measured. This included descriptive statistics calculating mean, median, range, and standard deviation. The Pearson correlation statistic was used to analyze the relationship between combinations of variables. Logistic regression analysis was utilized to test how combinations of predictor variables interact to predict the level of change in the likelihood of transition to credit courses. This was chosen because the outcome in this study, whether the students transition to credit-bearing courses or not, was binary (Field, 2013).

**Table 1** (continued)

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Non-Native English</th>
<th>0=no, 1=yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic</td>
<td>Length of adult education participation</td>
<td>Continuous</td>
</tr>
<tr>
<td>Academic</td>
<td>ICAPS Participation</td>
<td>0=no, 1=yes</td>
</tr>
<tr>
<td>Academic</td>
<td>LC Participation</td>
<td>0=no, 1=yes</td>
</tr>
<tr>
<td>Academic</td>
<td>Transition Advisor</td>
<td>0=no, 1=yes</td>
</tr>
</tbody>
</table>
Additionally, a stepwise regression was performed. Stepwise regressions allow all variables in the model to be assessed to see whether or not they should be removed (Field, 2013). Choosing specific variables to be used in a final model with a stepwise regression will provide programs with the information they need to take the findings of this study and use them to bolster the transition rate of their adult education students.

**Limitations**

One limitation will be the quality of the data. Due to stipulations set forth by the grant, the department is required to have paper copies of all of the students’ data at registration. The data is then entered into DAISI from the paper copies. There are several individuals responsible for data entry into DAISI. These various points of contact lead to a greater chance of incorrect data entry.

Another reason the data can be incorrect is due to the students’ comprehension of the registration process. The students’ address and dates of birth are verified. However, the other demographic data is not. Given the fluency level of many of the ESL students, it is possible that the students gave incorrect responses when asked for their information. Another limitation is that students who enroll in credit courses at other institutions or complete their adult education programs at other institutions and then enroll are not accounted for in the DAISI and Colleague data. It is possible that sample size will be a limitation. However, incorporating data from years prior to 2010 could mitigate that limitation.

Finally, it is estimated that over 50 percent of adult education students have undiagnosed learning disabilities (Corley & Taymans, 2002). These students are undiagnosed for a variety of
reasons. Some of them are undiagnosed due to a lack of language resources. Learning disability diagnostics must be performed in the learner’s first language. Therefore, finding diagnostic resources can be extremely difficult. Other students are undiagnosed because they do not have the financial resources to undergo the diagnostic process. Immigration status could also be a potential barrier to diagnosis. This large undiagnosed population makes it difficult for adult educators to meet the needs of their students. Additionally, the data system used in adult education in Illinois only allows for students’ disability status to be entered if the students have official diagnoses. As a result, not every student who self-reports a disability is able to provide the documentation necessary to classify them as disabled in the database. Therefore, the data on disability status on students is likely not reflective of the actual disability status of the sample.

**Significance of the Study**

This study builds upon the previous research on adult learner’s barriers to education. The situational, dispositional, and institutional barriers that adult learners face are well documented (Comings, 2007; Mercer, 1993). However, the impact that these specific barriers have is not documented. This study builds on existing literature by showing, specifically, which characteristics contribute to the likelihood of adult education students transitioning to credit courses. Though this study is specific to Midwestern Community College, it can easily be replicated at any adult education program in Illinois because the intake data is the same for all Illinois adult education programs. The information collected from students during the intake process in Illinois adult education programs is aligned with the National Reporting System under the Workforce and Innovation Act (WIOA). Therefore, replicating the study in other states
would be feasible, assuming that the states’ intake procedures are also aligned with the WIOA standards. Replicating this study in states that collect additional information during the intake process would require altering the variables in accordance with the adult education data programs take in the respective states.

The findings in this study will inform decisions involving programmatic supports and instructional design for adult education programs. Factors that contribute to the likelihood of transition can be bolstered for all students with programmatic supports. For example, if participation in bridge courses, ICAPS, or Learning Communities, programs can develop more of these courses to offer. Similarly, if it is found that students that are veterans are less likely to transition, they can be connected to Veterans Services early on in their adult education program so that they can get the support they need to persist and transition.

Giving adult education programs the ability to provide the students with the opportunities and the supports that they need will bolster transition to credit courses. This elevated transition rate will be beneficial for several stakeholders. First, the students will benefit because they will reach a higher level of educational attainment. As previously stated, their earning potential will increase and their likelihood of being unemployed will decrease with higher educational attainment. The programs will benefit because of the higher number of students transitioning. This is because their performance-based funding will increase as their attainment increases. Because of the higher transition rate, the program will get more money. Institutions will benefit because their adult education programs will become a source of new tuition. Adult education students do not pay tuition. Therefore, institutions do not directly profit from them. However,
more adult education students transitioning to credit means more tuition-paying students for the institution. Finally, the communities benefit from the increased number of adult education students transitioning, as they will have more skilled workers.
CHAPTER 2
WHAT LEADS ADULT EDUCATION STUDENTS TO TRANSITION

Introduction

According to the National Center for Education Statistics (2020), 30% of adults in the U.S. do not have sufficient numeracy skills to make calculations with whole numbers and percentages, estimate numbers or quantity, or interpret simple statistics in text or tables. Similarly, 21% of adults in the U.S. lack the literacy skills required to compare and contrast information, paraphrase, or make low-level inferences. To help mitigate the potentially negative effects of this education gap, the federal government has provided funds with which states can establish and expand basic education programs who have not completed high school. These funds are governed by the Adult Education and Family Literacy Act (AEFLA) and each year, states get a minimum grant of $250,000 to help promote these programs. According to the U.S. Department of Education (2004), part of the purpose of AEFLA is to “assist adults to become literate and obtain the knowledge and skills necessary for employment and self-sufficiency” (Lasater & Elliott, 2004, p. 1-2).

While the purpose of AEFLA dates back over 40 years, the context of it has evolved. According to Georgetown University Center on Education and the Workforce, by 2027, 70% of all jobs in the United States will require some postsecondary education (Carnevale et al., forthcoming). This puts adult educators in a precarious situation. Unlike many of their traditional
counterparts, adult education students are already low-wage workers who are typically not well-prepared for the workforce or postsecondary education (National Coalition for Literacy, 2021). They are also less likely to engage with their institutions (Bean and Metzner, 1985), persist, and complete their programs (Kazis, et al., 2007). However, the rapid evolution of the job market, especially as it relates to technology, gives adult education programs and their institutions an even bigger task. Rather than solely preparing students for their high school equivalency exams, programs must establish a clear pathway by which the students can obtain the skills and knowledge necessary for employment. Kazis, et al. (2007) suggest that one way to support adult student success is to develop shorter programs that support the students attaining vocational and technical degrees and certificates. This structure provides adult learners with the opportunity to reach their goals in a shorter amount of time. In many cases, this support is an integrated education and training (IET) model. According to the Center for Law and Social Policy (CLASP), a national, nonpartisan nonprofit, organization established to advance policy solutions for low-income people, IET programs prepare and train adult education students for the workforce while also providing the necessary pre-college level academics needed by the students (CLASP.org, 2018).

There is limited extant literature about adult education students transitioning to credit courses. Tyler (2003) found that only roughly 30% of students who obtain their high school equivalency go on to obtain any postsecondary education. While 5%-10% obtain at least one year of postsecondary education, only .5%-3% obtain an associate degree (Zafft et al., 2006). Similarly, Patterson et al. (2010) found that among the high school equivalency holders who
attended college, 82.9% of them attend a two-year institution and a fraction of them would earn a college credential. With 81 providers, Illinois has one of the five largest adult education programs in the United States (Illinois Community College Board [ICCB], 2018a). While the majority of these programs are based in community colleges, they can also be provided by community-based organizations regional offices of education, and the Department of Corrections. The grant-funded status of adult education programs and the fact that the programs are required to work within the parameters set forth by the grants often lead to adult education programs operating as a separate entity under the same institution. These independent departmental practices, along with many of the characteristics associated with non-traditional students lead to several obstacles that the students face when integrating into their institutions (Jacobs & Tolbert-Bynum, 2008).

To better understand and support adult students’ transition rate, the current study aims to explore what factors contribute to adult education students’ successful transition to college credit courses. Using a quantitative design, this study explores and analyzes observational data from a midsize community college in Illinois to determine which factors, if any, contribute to the likelihood of adult education students transitioning to credit courses. The following questions guided the research:

1. What factors are related to the likelihood of adult education students transitioning to credit courses?
2. To what extent does the likelihood of adult education students transition to credit courses vary across student groups defined by demographic information and enrollment history?

**Review of the Literature**

There are adult education programs in all 50 states, Washington DC, and U.S. territories that are authorized under Title II of WIOA to help adults build the skills and earn the credentials necessary to transition to postsecondary education, sustain employment, and attain economic self-sufficiency (NASDAE, 2021). Illinois has 81 adult education providers, making the state one of the five largest adult education systems in the country (ICCB, 2018a). The majority of these providers are community colleges, though some of them are also community-based organizations and regional offices of education. Illinois adult education programs provide a large array of services and programs, such as Adult basic education (ABE), English language instruction, civics education, family literacy, and workplace education.

There is limited literature about adult education students transitioning to credit course. However, it is evident that the rate of adult education students is low (Tyler, 2003; Zafft et al., 2006). Patterson et al. (2010) and Reder (2007) estimate that only 11%-12% of high school equivalency holders have a college credential. Certain programmatic factors contribute to adult education students transitioning to credit courses. Among these are institutional supports, financial assistance, childcare assistance, and orientation into the college environment all contribute to a higher transition rate for adult education students (Zafft et al., 2006). It is important to understand the influence of programmatic factors on adult education students’
transition to credit courses. However, given the varying structures of adult education programs, it is imperative to understand the student factors that impact adult education students’ likelihood of transitioning to credit. In addition to understanding the student factors, we must understand how they interact with various structures in adult education.

**Barriers to Academic Success for Adult Learners**

According to the Coalition on Adult Basic Education (2021), there are over 1.5 million students are enrolled in adult education programs across the United States. Those 1.5 million students have diverse goals and backgrounds. Their goals could be related to English fluency, literacy skills, numeracy skills, job or contextualized training, family literacy, or a high school equivalency. Their language and cultural backgrounds differ greatly. 1.1 million of the 1.5 million adult education students are people of color and over 943,000 adult education students are English Language Learners (Coalition on Adult Basic Education, 2021). They also have various barriers to employment. 321,000 adult education students are low-income. 113,580 adult education students are single parents. 65,117 adult education students have been unemployed for at least six months at the time of their enrollment in adult education courses. 92,877 adult education students were previously incarcerated (NCES, 2019). Because of this diversity, adult education students have a variety of needs that are represented on a much larger scale than they are in the traditional community college student population.

At two-year institutions, college persistence for students with high school diplomas is approximately double that of students with a GED (Reder, 1999). The National Center for the Student of Adult Learning and Literacy (NCSALL) states that there are several reasons for this.
Among these reasons are limited exposure to college-level reading and algebra, use of computers, and writing research papers, limited knowledge of and/or access to financial aid, lost wages, and unanticipated costs of college such as transportation and childcare, lack of strategies to simultaneously manage work, family/relationships, childcare needs, and school, difficulty navigating a new academic environment, and lack of confidence in one’s ability to succeed and a need for counseling (Zafft et al., 2006).

Adult learners’ barriers can be organized into situational barriers, dispositional barriers, and institutional barriers (Comings, 2007; Mercer, 1993). Situational barriers are life circumstances that are often specific to non-traditional students. These include job responsibilities, financial strain, and family obligations. Family obligations can include childcare, eldercare, time constraints due to family members’ schedules, and disruption of education due to family changes such as having a baby. Dispositional barriers are an individual’s attitude and beliefs. As previously mentioned, many adult education students, particularly those in Adult Basic or Secondary Education programs, have negative associations with school due to their previous experiences. Though they dropped out of high school for a number of different reasons, the fact that it was a negative experience is shared by all of the students. Adult learners lack motivation and confidence due to the fact that they have been out of an academic setting for a significant amount of time (Osam et al., 2017). Institutional barriers are policies and procedures that can hinder adult learners’ ability to participate in educational opportunities. Institutional barriers include a lack of accessible childcare, registration procedures that are not accessible for the students, and inconvenient scheduling.
Adult Education in the United States

Integrated Education and Training (IET) began with Washington’s I-BEST program in 2006. I-BEST allowed adult students to simultaneously build foundational and technical skills. The Workforce Innovation and Opportunity Act (WIOA) was released in 2016. It provided assured and incentivized partnerships between workforce preparation and training and adult education and literacy parties to establish pathways for adult learners (CLASP, 2018). The implementation of WIOA and the success of the I-BEST model led to similar structures being created across the country. As of 2016, 18 states had at least one form of integrated education and training policy (Bergson-Shilcock, 2016).

While the purpose of adult education programs has evolved in the last 15 years to include career pathways and emphasize contextualized instruction, programs are still dedicated to helping students develop basic literacy, numeracy, and language skills. According to the Coalition on Adult Basic Education (COABE) (2021), there are currently more than 2,000 federally funded adult education programs in the United States. In 2017, 72% of the students participating in these programs earned a high school diploma or recognized equivalent. This success rate was up from 60% in 2015 (COABE, 2021).

Adult Education in Illinois

Adult education programs in Illinois serve approximately 81,000 learners each year (ICCB, 2018a). Adult education students enroll in programs for a specific reason; they want to obtain a high school equivalency, improve their English fluency, or prepare to obtain their United States citizenship. Illinois offers several different types of courses to meet the needs of
their adult learners. Adult basic education (ABE) classes offer instruction for students who have below a ninth-grade reading level. These students can come from a variety of language backgrounds and are working towards obtaining their high school equivalency. Also, for students pursuing a high school equivalency, Illinois offers adult secondary and high school equivalency classes for students from a variety of language backgrounds who have at least a ninth-grade reading level. For students who have completed a significant amount of high school coursework, there are high school credit recovery programs so that they can complete their high school education (ICCB, 2018a).

There are over 40,000 English language learners enrolled in adult education programs in Illinois that want to improve their reading, writing, listening, and speaking skills. These students come from a variety of backgrounds and have a variety of levels of educational attainment in their home countries. There are also civics classes that integrate literacy skills with civics education to help these students acclimate to American culture and gain the skills and knowledge necessary for citizenship.

In addition to classes for language acquisition and high school equivalency preparation, there are also classes with an emphasis on transition to career and/or credit courses. Bridge programs provide adult education students with instruction, contextualized to their specific occupations, thus preparing them for successful transitions to job training programs. Transition courses emphasize the academic and college readiness skills needed for adult education students to successfully transition to postsecondary educational settings. Integrated Education and Training (IET) and Integrated Career and Academic Preparation System (ICAPS) programs,
modeled after Washington’s I-BEST program, use a team-teaching approach. Students are co-enrolled in their adult education and workforce and career and technical training so that they improve their English fluency and/or earn their high school equivalency and a postsecondary credential, often industry specific (ICCB, 2018a).

From the student perspective, transitioning to credit courses can enhance several aspects of their lives and their children’s lives. The benefits of transitioning are multigenerational. It improves the quality of life for the next generation. According to a 2010 study by the National Institutes of Health, a mother’s reading skill is the greatest determinant of her children’s future academic success (Sastry & Pebley, 2010). Moreover, a more educated population improves many aspects of society. Better educated parents raise better educated, more successful children, who are less likely to end up in poverty or prison (Flores et al., 1999). A more educated citizenry is also more likely to vote, make charitable contributions, and contribute to economic growth as their level of education rises. In addition to increasing the potential for the district’s youth, adult education programs also increase economic status. On average, 43% of adults at the lowest levels of literacy live in poverty compared to only 4% of those at the highest (Bowen, 1998). According to the Bureau of Labor Statistics, unemployment rates of 8.4% for individuals with less than a high school education compared to 4% for those with an associate degree and 3.3% for those with a bachelor’s degree (Zafft et al., 2006). Other societal benefits of education include lower rates of smoking and less money spent on social programs for individuals with higher educational attainment (Beder, 1999; De Walque, 2007). Furthermore, as previously stated, high school dropouts are more likely to be unemployed, poverty-stricken, using public assistance, in
prison on death row, unhealthy, divorced, and single parents of children who drop out of high school. It is estimated that just a year of college credit can result in a 4%-7% increase in earnings (Kane & Rouse, 1995).

From the program perspective, transitioning to credit courses is important for the adult education programs. The Adult Education and Family Literacy Act (AEFLA) is the primary source of federal funding for state adult education programs. The Office of Career, Technical, and Adult Education (OCTAE) administers AEFLA. According to OCTAE, one of the purposes of AEFLA is to assist adults in transitioning to postsecondary education and training (AEFLA Resource Guide). Regardless of the settings in which adult education programs are held, the programs are funded by grants. During continuation years, funding is partly contingent on the programs’ performance in the preceding year. In competitive years, one of the evaluation criteria for funding is level of performance. Because transition to credit is a measure of success, programs benefit from students transitioning (ICCB, 2018b).

Despite the importance of students transitioning to credit courses, there are not a lot of procedures or structures in place to facilitate these transitions. Some programs have scholarships available for students who complete the adult education program. For example, some community colleges offer a free credit course to any adult learner who completes the adult education program. Some programs have transition advisors to help the students plan and register for credit courses once they have completed their adult education program. These transition advisors might be full-time or part-time and could be funded by grants or by the institution. At some institutions, these advisors help the students throughout the first semester of their credit coursework. The
transition advisors at other institutions might serve as the students’ academic advisor through the duration of their credit program. There is no literature pertaining to the effectiveness of these transition advisors.

Adult learners have several characteristics that set them apart from their traditional counterparts. Furthermore, the structure of adult education programs can impact the ease with which a student can transition by providing or lacking certain supports for the students. The unique barriers to academic success, the distinctive motivational factors of adult students, and the supports offered within the adult education program informed this study. They, along with the conceptual framework, provided the factors that were explored as potential indicators of a student’s likelihood of transitioning to credit-bearing courses.

**Conceptual Framework**

This study was informed by Bergman’s (2012) theory of adult learner persistence in degree completion programs. This isolates specific factors and understanding their individual influences on adult student persistence by combining Braxton et al.’s (2004) theory of student departure in commuter college and universities and Bean and Metzner’s (1985) conceptual model of undergraduate nontraditional student attrition (Bergman, 2012). Centering around adult student characteristics and learning experience, Bergman’s (2012) theory explores student entry characteristics and both internal (campus/academic) and external environmental factors. Student entry characteristics include gender, age, ethnicity, parental education, previous college credit, educational goals, children, marital status, socioeconomic status, and motivation. Internal environmental factors are enrollment status, cumulative GPA, institutional support, academic
advising, faculty support, financial aid, cost, flexibility of course options, active learning, and prior learning assessment. External environmental factors include finances, family influences, work influences, significant life events, community influences, and hours of employment.

Bergman’s theory (2012) examined variables that impact the adult learner’s ability to persist in academic settings. It provides the necessary framework to effectively contribute to the literature on adult learners returning to an academic setting.

Bergman’s (2012) theory focuses specifically on adult students’ persistence. However, this theory guides the current study in selecting possible predictors of adult students’ transition to credit-bearing courses, which carries important implications for student success. Gender has been tied to utilization of study strategies, rate of progress, persistence, and attrition risk in adult learners (Bean & Metzner, 1985; Grimes, 1997; Markle, 2015; Robertson, 1991; Tinto, 1993; Watkins & Hattie, 1981). Age has been found to be an indicator of completion of adult basic education programs (Dirkx & Jha, 1994) and growth in basic reading skills in adult ESL students (Condelli, 2006). Students who have goals pertaining to transitioning to credit-bearing courses are potentially more likely to transition (Comings, 2007; Markle, 2015; Spurling, et al., 2008). Students in IETs and contextualized courses are often working towards a specific goal. MCC students who are enrolled in IETs or contextualized courses have seen program’s transitions coordinator to discuss goals and pathways. Due to Bergman’s (2012) theory and the supporting adult education literature, it was hypothesized that these factors impact students’ likelihood of transitioning to credit courses.
Method

This study sought to determine which factors contributed to the likelihood of adult educations students transitioning to credit courses and to what extent that contribution varied. This study utilized a quantitative design to explore the relationships among variables (Creswell & Creswell, 2018).

Data Source and Sample

This study used student-level data of adult students at Midwestern Community College (MCC) in northern Illinois. In the fall of 2019, MCC’s enrollment was 9,917, which is consistent with the fall enrollment for the previous five years. The student composition was 67.6% part-time students, which is slightly higher than the national composition of 63% part-time students (AACC, 2021) Women represented a larger portion of the enrollment than men did with their populations being 54.7% and 45.3% respectively. MCC is a Hispanic Serving Institution. Its largest racial/ethnic representation was LatinX students, who comprised 45.5% of the student population. The next largest representation was white students, who made up 38.2% of the population. 7.4% of the population was Asian, 4.6% was African American, and 3.1% were unknown. Native American/Alaska Native, nonresidents, and Pacific Islanders were each fewer than 1% of the population. The largest age group represented for Fall 2019 was the 18–22-year-old demographic, making up 55% of the student body. 23–29-year-olds represented 19% of the population, 30–39-year-olds represented 10% of the population, 40-49-year-olds represented 6% of the population, students 17 years and under represented 5% of the population, 50-59-year-olds represented 3% of the population, and 60+ comprised 2% of the population. The student
breakdown by enrollment status, gender, and race/ethnicity are all consistent with the population for the previous five years. The distribution of the age group demographics remained consistent from 2015 to 2017. In Fall 2018, the 17 and under demographic outnumbered the 50-59 age group for the first time.

In Fall 2019, the adult education program enrolled 1,209 students, which represented 12.2% of the institution’s total enrollment. All of the 1,209 students were enrolled part-time. There was a larger difference in enrollment by gender in the adult education program than there was in the overall institution. Program enrollment was 63% women and 37% men. Like the racial/ethnic representation of MCC, the largest group represented was the LatinX population with 83.1% of the program’s students identifying as LatinX. The next largest group was white students, who represented 8.7% of the program. 6.3% of the students in the program were Asian. 1.8% of the students were African American. Similar to MCC’s total enrollment, less than 1% of the adult education program enrollment was Native American/Alaska Native. The source for the age breakdown data was different for the institutional data, which was taken from Datatel, and the program data, which was taken from DAISI. Therefore, the age groups are different for the MCC data and the adult education data. The largest age group represented in MCC’s adult education program was 25–44-year-olds represented 50.6% of the population. 45–59-year-olds represented 23.3% of the population. The next largest population was 19–24-year-olds, who represented 19.5% of the population. The two smallest groups were the oldest and youngest demographics represented in the program. Students 60 and older made up 4.4% of the program and students between 16 and 18 made up 2.2% of the program.
At MCC, the adult education program provides educational opportunities and support to prepare adults with the knowledge and skills necessary to effectively participate as citizens, workers, and family and community members. The adult education program at consists of two primary groups of students: the English as Second Language (ESL) students and students that are working towards their high school equivalency. As per the grant, the students are required to take a standardized test to show level gains. In particular, the ESL program consists of ten levels of classes. The students are placed into these levels by the ESL staff and faculty who use writing samples and individualized, informal verbal interactions to gauge the students’ levels of both written and oral English fluency. The program for students pursuing their high school equivalency consists of math and language arts classes. The students are placed into these classes based on standardized test scores.

The program also offers classes that provide contextualized and integrated instruction in the form of bridge courses, learning communities and Integrated Career and Academic Preparation System (ICAPS) courses. Bridge courses offer contextualized instruction in three different career clusters. ICAPS classes consist of students taking two corequisite classes: one is a career certificate-based course, and the other is an adult education support class. Like ICAPS classes, learning communities consist of corequisite classes. However, rather than career-based classes, these are academically based. The students in learning communities take one introductory academic credit course and one adult education support class.
Sample Selection

The study used secondary institutional data from MCC to track students’ enrollment and participation in credit courses. Data included enrollment information and demographic information. The data sample consisted of adult students enrolled in the Adult Education Program between 2014 and 2019 (n = 3,047). The sample was restricted to students who have met a certain academic milestone. For students in the Basic and Secondary Education Program, the sample only included students who have completed the two highest levels of math and language arts (n = 941). Students in these levels are considered to be academically ready to take their high school equivalency tests. The high school equivalency tests are independent from the program. Therefore, data was taken from the top two levels to accommodate any students that choose to take their high school equivalency tests prior to the completion of the entire adult education program. Appendix C provides detailed educational functioning descriptors for the students in each level of the program.

For students in the ESL program, the sample consisted of students in levels six through ten (n = 2,106). The rationale for choosing these ESL courses is due to the students’ academic and linguistic demands of the specific courses. The students in these levels possess a level of fluency that enables them to navigate work and school settings without barriers due to language. Due to this level of fluency reached in level six, levels seven through ten are established to provide students with academic content so that they are prepared to transition to credit courses. As a result, the curricula for these courses consists largely of research, presentations, and academic papers. It is not unusual for students in any of the levels six through ten to exit the ESL
program and move on to other career or academic pursuits. Appendix D provides detailed educational functioning descriptors for the students in each level of the program. The sample also included students from contextualized bridge programs, ICAPS programs, and learning community courses.

The rationale for choosing the bridge, ICAPS, and learning community courses is that the students participating in these courses are at the same academic level or level of fluency as the students in the ESL, and math and language arts courses from which the data was taken. For the purposes of this study, the students who were enrolled in ICAPS and learning communities were considered adult education students and not credit students. To be considered transitioned to credit courses, the students had to enroll in credit courses after completing their ICAPS or learning communities, taking credit courses independently.

Variables

As indicated in Table 1, the dependent variable is a binary variable indicating if a student transitioned to for-credit courses within six years of adult education completion. If a student transitioned to credit bearing courses, it is coded as 1, and 0 otherwise.

Guided by the conceptual framework and previous literature (Dirkx & Jha, 1994; Spurling, et al., 2008), the independent variables were separated into demographic information and academic support. The binary demographic variable was gender. This variable was binary due to the fact that it is listed as binary in the database. However, at the time of publication, MCC has expanded their database to be more gender inclusive. The student’s age was the only
continuous demographic variable. Race/ethnicity information was not available for this study. Therefore, it was not used as a variable.

There are nine independent variables representing students’ academic support. They were all continuous. The variables are number of bridge courses completed, number of ICAPS courses completed, number of learning community courses completed, number of ESL courses completed, number of HSE courses completed, number of learning community courses completed, number of Spanish HSE courses completed, number of computer courses completed, total number of courses completed, total number of contact/credit hours completed, and average number of withdrawals. While college-level courses are measured in credit hours, adult education courses are measured in contact hours. A three-contact hour course would indicate that the class met for three hours twice a week for a semester. For variable purposes, credit hours and contact hours have been combined.

**Analytical approach**

Descriptive statistics were analyzed for all of the variables and are detailed in the results section. The mean and standard deviation were calculated for each variable. Additionally, data was analyzed with the dependent variable being overall transition to credit courses, transition to credit courses within 4 years of enrollment, and transition to credit courses within 2 years of enrollment.

A logistic regression was performed to test the data for multicollinearity and ensure that the independent variables were not highly correlated. The Variance Inflation Factor (VIF) is used to indicate whether a predictor has a strong linear relationship with other predictors (Field,
2013). Table 2 shows the test for multicollinearity. Total number of adult education course, total number of ESL courses, total number of HSE courses, and total number of Spanish HSE courses were removed because they did not pass the assumption of multicollinearity. The test was run again after the removal of those variables. Because the VIF values are smaller than 10 and the Tolerance is greater than 0.1, the assumption of multicollinearity was met (Table 3).

**Table 2**

Test for Multicollinearity: Transition

<table>
<thead>
<tr>
<th>Variable</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.931</td>
<td>1.074</td>
</tr>
<tr>
<td>Age</td>
<td>.805</td>
<td>1.243</td>
</tr>
<tr>
<td>AvgCred</td>
<td>.512</td>
<td>1.951</td>
</tr>
<tr>
<td>Attempts</td>
<td>.930</td>
<td>1.075</td>
</tr>
<tr>
<td>Withdrew</td>
<td>.754</td>
<td>1.327</td>
</tr>
<tr>
<td>ICAPS Total</td>
<td>.124</td>
<td>8.085</td>
</tr>
<tr>
<td>LC Total</td>
<td>.347</td>
<td>2.878</td>
</tr>
<tr>
<td>Total Courses</td>
<td>.397</td>
<td>2.520</td>
</tr>
<tr>
<td>Adult Ed Total</td>
<td>.004</td>
<td>227.912</td>
</tr>
<tr>
<td>ESL Total</td>
<td>.005</td>
<td>205.739</td>
</tr>
<tr>
<td>HSE Total</td>
<td>.007</td>
<td>143.347</td>
</tr>
<tr>
<td>Computer Total</td>
<td>.512</td>
<td>1.953</td>
</tr>
<tr>
<td>Bridge Total</td>
<td>.492</td>
<td>2.020</td>
</tr>
<tr>
<td>SpHSE Total</td>
<td>.094</td>
<td>10.622</td>
</tr>
</tbody>
</table>

*Dependent Variable: Transition*

After the assumption of multicollinearity was met, a stepwise regression was used to determine the relative contribution of each independent variable in predicting the likelihood of transitioning to credit courses. Additional Stepwise regressions were used to determine the same information for the dependent variables of transitioning in 2 years and transitioning in 4 years. The two year and four year dependent models were highly consistent.
Table 3

Test for Multicollinearity with Variables Removed (Transition)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.932</td>
<td>1.073</td>
</tr>
<tr>
<td>Age</td>
<td>.925</td>
<td>1.081</td>
</tr>
<tr>
<td>AvgCred</td>
<td>.637</td>
<td>1.569</td>
</tr>
<tr>
<td>Attempts</td>
<td>.931</td>
<td>1.074</td>
</tr>
<tr>
<td>Withdrew</td>
<td>.799</td>
<td>1.251</td>
</tr>
<tr>
<td>ICAPS Total</td>
<td>.612</td>
<td>1.633</td>
</tr>
<tr>
<td>LC Total</td>
<td>.848</td>
<td>1.180</td>
</tr>
<tr>
<td>Total Courses</td>
<td>.626</td>
<td>1.598</td>
</tr>
<tr>
<td>Computer Total</td>
<td>.947</td>
<td>1.056</td>
</tr>
<tr>
<td>Bridge Total</td>
<td>.953</td>
<td>1.050</td>
</tr>
</tbody>
</table>

Dependent Variable: Transition

Limitations

There are several limitations that need to be addressed. The limitations can be categorized as statistical limitations or temporal limitations.

Statistical Limitations

The first statistical limitation is the reliability of the student data. All of the demographic information is self-reported by the students. All the adult education students have low literacy skills in English, and the majority of the adult education students in the program in this study have limited English fluency. Therefore, there is a large margin of error for the demographic information.

The second statistical limitation is the scope of the data. We have no means of tracking our adult education students to other institutions. This is largely because the way they would be tracked between institutions is their social security numbers. Adult education students often do
not have or do not disclose their social security numbers and are therefore tracked by institutionally generated ID numbers. Therefore, the students can only be tracked within the institution.

The final statistical limitation is the coding of the courses. Adult education students participate in credit courses through learning communities or ICAPS. These students are receiving additional adult education supports that would not be available to them if they were not participating through these programs. These credit courses are coded the same for students participating in adult education programs and traditional students. Therefore, it is difficult to distinguish which students are receiving these supports when looking at transition data. When looking at program or institutional data, there is no difference between students who participated in learning communities and ICAPS and students who simultaneously took adult education courses and credit courses. Students receiving these supports cannot be tracked institutionally unless someone with specific knowledge of the adult education courses and schedules manually notes which students are participating in which programs.

**Temporal Limitations**

The temporal limitation is the timeframe during which the study was conducted. Changes in the GED test and the implementation of the TASC and HiSET tests for high school equivalency options led to an overhaul of curricula and course offerings in 2014. The COVID-19 pandemic led to a dramatic drop in enrollment and changes in course offerings affecting the program from 2019 on. This study would be more impactful and reliable as a longitudinal study. However, the 2014 changes and 2019 pandemic dictated the five-year timeframe.
Results

Descriptive analyses

The sample consisted of 3,047 students (see Table 4). The majority of the students in the sample were female (56.8%). The average age of the students when they took their first course was 31.39. The minimum age at the time of the course was 16 years old and the maximum age was 74.9 years old. The average number of total credit hours taken was 29.6. The minimum number of credit hours was 3 and the maximum was 159. The average number of credit hours taken per semester was 4.6. The minimum was 1.5 and the maximum was 6.5. 57% of the students withdrew from at least one course during their time enrolled. The average number of attempts per class per student was 1. The average number of withdrawals was 1.79 per student. The maximum number of withdrawals was 14. The minimum was zero. The average number of courses taken was 6.8. The minimum was 1 course and the maximum was 50 courses.

Stepwise regression analysis

Table 5 displays the results of the stepwise regression of the dependent variable of transition and 7 independent variables. Stepwise regressions consist of variables being entered into a model based on statistical criterion. Once a new variable is entered into the model, all variables are then assessed to see whether or not they should be removed (Field, 2013). The variables that were added to the models were average credits, learning community classes, age, attempts, withdrawals, ICAPS classes, and computer classes. Gender and participation in Bridge courses were not included in the model in the stepwise regression indicating that they are not predictive variables. All of the variables were statistically significant ($p<.05$).
Table 4

Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>Transition to credit within 6 years</th>
<th>Transition to credit within 4 years</th>
<th>Transition to credit within 2 years</th>
<th>No transition within 6 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>50.49%</td>
<td>50.13%</td>
<td>47.6%</td>
<td>57.7%</td>
</tr>
<tr>
<td>Male</td>
<td>49.51%</td>
<td>49.87%</td>
<td>52.54%</td>
<td>42.3%</td>
</tr>
<tr>
<td>Age</td>
<td>27.48 (10.11)</td>
<td>27.61 (10.26)</td>
<td>27.47 (10.34)</td>
<td>31.99 (11.21)</td>
</tr>
<tr>
<td>Total Hours Completed</td>
<td>(27.71)</td>
<td>(27.30)</td>
<td>(26.58)</td>
<td>(21.07)</td>
</tr>
<tr>
<td>Hours per Semester</td>
<td>3.80 (0.68)</td>
<td>3.76 (0.68)</td>
<td>3.7 (0.69)</td>
<td>4.7 (0.63)</td>
</tr>
<tr>
<td>Course Taken per Student</td>
<td>12.84 (8.0)</td>
<td>12.75 (8.02)</td>
<td>12.46 (8.07)</td>
<td>5.88 (5.13)</td>
</tr>
<tr>
<td>Total Withdrawals per Student</td>
<td>2.2 (1.82)</td>
<td>2.18 (1.71)</td>
<td>2.16 (1.75)</td>
<td>1.72 (1.10)</td>
</tr>
<tr>
<td>Attempts per Course per Student</td>
<td>1.02 (0.06)</td>
<td>1.02 (0.06)</td>
<td>1.02 (0.07)</td>
<td>1.02 (0.13)</td>
</tr>
<tr>
<td>Total ESL Courses</td>
<td>12.84 (7.95)</td>
<td>1.75 (2.74)</td>
<td>1.39 (2.40)</td>
<td>2.84 (3.58)</td>
</tr>
<tr>
<td>Total HSE Courses</td>
<td>1.45 (2.60)</td>
<td>1.34 (2.50)</td>
<td>1.03 (1.81)</td>
<td>1.77 (2.99)</td>
</tr>
<tr>
<td>Total ICAPS Courses</td>
<td>1.75 (3.46)</td>
<td>1.86 (3.53)</td>
<td>2.03 (3.60)</td>
<td>0.30 (1.51)</td>
</tr>
<tr>
<td>Total LC Courses</td>
<td>0.58 (1.12)</td>
<td>0.55 (1.05)</td>
<td>0.47 (0.96)</td>
<td>0.10 (0.48)</td>
</tr>
<tr>
<td>Total Computer</td>
<td>0.03 (0.24)</td>
<td>0.03 (0.22)</td>
<td>0.02 (0.13)</td>
<td>0.04 (0.23)</td>
</tr>
<tr>
<td>Total Bridge</td>
<td>0.07 (0.28)</td>
<td>0.07 (0.28)</td>
<td>0.06 (0.27)</td>
<td>0.05 (0.23)</td>
</tr>
<tr>
<td>Total SpHSE</td>
<td>0.11 (0.73)</td>
<td>0.07 (0.60)</td>
<td>0.06 (0.54)</td>
<td>0.13 (0.78)</td>
</tr>
<tr>
<td>Total Students</td>
<td>n=406</td>
<td>n=373</td>
<td>n=295</td>
<td>n=2641</td>
</tr>
</tbody>
</table>

Note. Standard deviations are presented in parentheses.
Table 5

Stepwise Regression Analysis of Transition to Credit Courses

<table>
<thead>
<tr>
<th>Variable</th>
<th>expB</th>
<th>SE</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>AvgCred</td>
<td>0.825</td>
<td>0.009</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>LCTotal</td>
<td>1.122</td>
<td>0.009</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Age</td>
<td>0.997</td>
<td>0.000</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Attempts</td>
<td>0.809</td>
<td>0.044</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Withdrew</td>
<td>1.02</td>
<td>0.004</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>ICAPSTotal</td>
<td>1.01</td>
<td>0.003</td>
<td>0.009</td>
</tr>
<tr>
<td>CompTotal</td>
<td>0.944</td>
<td>0.024</td>
<td>0.014</td>
</tr>
<tr>
<td>R²</td>
<td>.254</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>3047</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent Variable: Transition

The odds ratio for average credits was 0.825 (expB=0.825). Therefore, one unit increase in average credits is statistically significantly associated with a 17.5% decrease in the likelihood of transitioning to credit courses. The first variable entered into the model. The next variable in the model was total Learning Community courses taken. One unit increase in learning community courses is statistically significantly associated with a 12.2% increase in the likelihood of transitioning to credit courses. The odds ratio for age indicated that a one unit increase in age is statistically significantly associated with a 3% decrease in the likelihood of transitioning. The fourth variable added to the model was attempts. The odds ratio for attempts shows that a one unit increase of attempts is statistically significantly associated with a 19.1% decrease in the likelihood of transitioning to credit courses. Average withdrawals was the fifth variable in the model. Based on the odds ratio (expB=1.02), a one unit increase in average withdrawals is statistically significantly associated with a 2% increase in the likelihood of transitioning to credit courses. The sixth variable in the model was the total number of ICAPS courses taken. The odds
ratio indicates that a one unit increase in ICAPS courses is statistically significantly associated with a 1% increase in the likelihood of transitioning to credit courses. The final variable in the model was the number of computer courses taken. The odds ratio indicates that a one unit increase in computer courses taken is statistically significantly associated with a 6% decrease in the likelihood of transitioning to credit courses. The model had an R-squared value of .254, meaning that the combination of the seven independent variables accounted for 25.4% of the variability in transitioning to credit courses.

**Discussion**

This study examined the likelihood of adult education students transitioning to credit courses. It explored demographic factors such as gender and age and academic factors such as participation in contextualized courses and course history. Overall, with the dependent variable as transitioning, transitioning within two years, and transitioning within four years, the models accounted for roughly 25% of the variability.

Gender has been used as an indicator of persistence, rate of progress, and attrition (Bean & Metzner, 1985; Grimes, 1997; Markle, 2015; Robertson, 1991; Tinto, 1993; Watkins & Hattie, 1981). The results of this study indicate that gender was not a predictive variable in determining transition to credit courses. While age has been found to be an indicator of completion of adult education programs (Dirkx & Jha, 1994) and growth in basic reading skills in adult ESL students (Condelli, 2006), this study found that age was negatively predictive, meaning that older students were less likely to transition to credit courses upon completion of their adult education courses.
Based on Bergman’s (2012) theory and the supporting literature (Comings, 2007; Markle, 2015; Spurling, et al., 2008), it was hypothesized that students who participated in IETs would be more likely to transition to credit courses. The results of the study indicated that participation in Learning Communities and ICAPS courses are predictive. However, participation in bridge courses is not. Of the IETs, the most predictive variable is participation in the Learning Community. Unlike career centered ICAPS courses, Learning Communities have an academic focus. Learners in these courses are participating in a college credit course while receiving additional support from adult education faculty. Zafft et al., (2006) stated that two factors leading to the low transition rate of adult education students to credit courses were a lack of knowledge about the college environment and a lack of institutional supports for adult education students. Participation in Learning Communities provides adult education students with the opportunity to engage with college-level content while receiving the supports necessary to successfully make a full transition to credit courses. Unlike Learning Communities, ICAPS courses are career-centered. Learners in ICAPS courses are able to take career-based classes with adult education support and earn an industry credential. The students participating in these classes are working towards career goals and are not necessarily academically focused. Learning Communities have an academic focus. While ICAPS courses are popular in Illinois, Learning Communities are not. The results of this study indicate that more resources allotted to programs like learning communities that provide support for students to achieve their academically focused goals will yield a higher percentage of adult education students transitioning to credit courses upon the completion of their adult education programs.
The results indicated that the most predictive variable is average credits taken. It is negatively predictive, meaning that the more credits a student takes, the less likely they are to transition to credit courses. The predictive nature of attempts and withdrawals was interesting because it seems contradictory. Adult education grant stipulations require that students that score within a specific range on their standardized tests take either ESL, ABE, or ASE courses based on those scores. Due to these stipulations, MCC stacks their classes to accommodate learners with different testing abilities. Therefore, one ESL class could be comprised of 3 unique course codes: an ESL code, an ABE code, and an ASE code. It is possible that students registered in an ESL class tested into the next range before the end of the semester. That ESL student would still be in the same class but would then be registered for an ABE course code and be withdrawn from their ESL course code. This would lead to more withdrawals without a corresponding increase of attempts per course. This is one possible explanation for the negative predictive relationship between transitioning and attempts and the positive predictive relationship between transitioning and withdrawing.

**Practical Implications**

This study sought to identify variables that contributed to the likelihood of adult education students transitioning to credit courses. Based on the results of the stepwise regression, the most predictive variables were average hours taken per semester, Learning Community participation, age, average attempts per class, average withdrawals per semester, participation in ICAPS classes, and computer classes.
Adult learners require support when transitioning from adult education courses to either career or academic courses. Programs should make their students aware of IETs and contextualized offerings so that they understand the resources they have available to them and can set goals knowing what supports are in place.

Adult education programs should continue to pursue partnerships that lead to the development of IETs. It is recommended that more resources are allotted to the development of academically geared IETs such as the learning communities. Washington’s I-BEST program widely offers both job-training and academic transfer classes in conjunction with their adult education courses. Illinois should continue to follow the path set forth by Washington. It is also recommended that further research is conducted so that there is a better understanding of the need of specific supports to help students reach both academic and career-related goals. This research should guide these partnerships.

Data accuracy is imperative to informing programmatic decisions. Adult education programs must be able to accurately track their successes and challenges. In order for this to happen, there has to be more training offered to adult education staff. There also has to be more collaboration in data practices. For example, it is currently difficult to track adult education students if they transition to another institution. This is especially true if there is not a social security number associated with the student. In order to fully understand the impact adult education programs are having and the areas they have to improve upon, common databases and identifiers must be established.
Conclusion

The purpose of adult education is to “assist adults to become literate and obtain the knowledge and skills necessary for employment and self-sufficiency” (Lasater & Elliott, 2004, p. 1-2). Given the rapid evolution of the job market and the increasing skills gap, it is more important than ever for adult education programs to be prepared to help their students achieve their goals. In some cases, reaching these goals is dependent on students’ ability to transition to credit-bearing courses. This study identified predictive factors that led to an increased likelihood of adult education students transitioning to credit-bearing classes. The results have provided MCC with insight on what supports are needed to increase the likelihood of students transitioning to credit courses. The results will impact future program decisions that will bolster transition of adult education students and prepare them to navigate the next step in their academic journeys.
CHAPTER 3
CONCLUSIONS AND SUMMARY

Practical Implications and Recommendations

One of the purposes of adult education is to prepare adult learners to transition to credit-bearing courses (AEFLA; ICCB, 2018b). Existing literature states that adult learners have difficulty navigating academic environments (Zafft et al., 2006) and that IETs support students transitioning to credit courses (COABE, 2021). The findings of this study corroborate the literature due to the fact that both Learning Community and ICAPS participation were predictive variables. There are currently three Learning Communities offered. Developing these courses can be time consuming, as it requires interdepartmental buy-in and collaboration throughout the development process. It is recommended that MCC continues to expand their Learning Community offerings.

Learning Communities are only offered to students who are in classes that are categorized as advanced based on their corresponding levels dictated by the National Reporting System (NRS). Currently, MCC’s ESL students are introduced to the American education system when they are considered to be high beginning (NRS Level 3). It is recommended that MCC includes more robust lessons on potential academic pathways throughout their programs. While introducing students to the American education system is important, that information should be built upon and contextualized for the students as they move up through the program.
Additionally, it is recommended that students are made aware of resources such as campus tours, possible areas of study, and transition supports more consistently throughout the program.

Throughout the dissertation process, it became evident that there was not enough emphasis put on data accuracy. At MCC, there is not a lot of training provided for the professionals that complete the student intake process or enter the data. This is not unusual for adult education programs in Illinois. There are two different aspects of this that need to be addressed. The first is the need for training for those professionals who are completing intake and entering data for adult education programs. A more thorough intake process will provide MCC and other programs with more accurate data. More accurate and robust data will give programs they need to make more informed decisions and conduct further research. This will help them meet the needs of their students. It will also provide programs with the opportunity to articulate their accomplishments and challenges in a richer and more complete way, which is particularly important given the fact that they are grant funded.

In addition to understanding the importance of a thorough intake process, the professionals completing intake must also be given tools to complete this process with incoming students that have barriers to communicating. ESL students can have obstacles to communicating with intake staff due to language differences. It is estimated that over 50 percent of adult education students have undiagnosed learning disabilities (Corley and Taymans, 2002). Due to the neurodiversity and linguistic diversity of adult education students, it is imperative that intake staff is trained to properly support adult education students through the intake process.
The second need for training is for administrative professionals, managers, and administrators in the programs. Adult education professionals in those roles must have the knowledge and skills to periodically review their program data to adjust procedures as needed. This is necessary so that they can make data-driven decisions for their programs. Currently, the Illinois Community College Board offers a credentialing system in the form of Professional Pathways for adult education professionals. They currently offer Pathways credentials for ABE/ASE, ESL, Career Navigators, Transitional Instructional Staff, and Equity and Access (Professional Pathways, n.d.). ICCB is planning to develop a Data Professional Pathway. The Data Professional Pathway will hopefully address some of the needs in the field. Once the Data Professional Pathway has been developed and implemented, adult education professionals across Illinois will have the tools they need to conduct robust research and make informed, data-driven decisions.

**Future Research**

The first recommendation is to continue this study by pursuing a qualitative component. This quantitative study yielded a predictive model of variables that contribute to the likelihood of transitioning to college credit. However, it did not explore the personal experiences of the adult education students who choose to transition or not transition to credit. Conducting a qualitative study consisting of interviews with a sample similar to that of the quantitative study could give programs a better understanding of exactly why certain variables had a positively or negatively predictive relationship with the dependent variable. It would also help contextualize the findings.
of this study and provide MCC and other programs with more specific ideas of how to implement the supports needed to bolster transition to credit courses.

Another recommendation for future research is to conduct a similar study with longitudinal data. Given the limitations of the new GED curriculum in 2014 and the changes in enrollment, persistence, and modalities that were caused by COVID, the scope of this study was limited. Conducting the study again in several years would provide the opportunity to explore the data without the temporal limitations. It would provide a larger data set and the prospect of a more robust study.

Another recommendation is to incorporate additional demographic data. This study used institutional data with Colleague as the data source. The intake data for adult education programs in Illinois is more robust than the intake data for institutions. Therefore, it is recommended that future research utilize the demographic information from DAISI, the adult education database. This would provide several more variables to explore as potential characteristics that impact the likelihood of transitioning. Additional characteristics include ex-offender status, single parenthood, migrant worker status, and employment status. At the time this research was conducted, Colleague at MCC only offered a binary definition of gender. However, it has since expanded gender to fifteen possible identities. Future research utilizing Colleague as the data source should incorporate the broader gender identity into the demographic information and also use race/ethnicity information.

A similar study should be conducted on adult education students that improve their employment status by earning credentials or entering the workforce. This study shed light on
predictive variables leading to adult education students transitioning to credit courses. However, many adult education students have non-academic goals. Conducting comparable studies with career-related dependent variables will provide adult education programs with the information they need to support their students with career-oriented goals.

Finally, to further understand the negative relationship between credit hours and transitioning, a similar study should be conducted specifically on HSE students and ESL students separately. ESL students typically take one class at a time. It is not uncommon for HSE students to take both a math and a language arts class concurrently. Conducting the study on the individual HSE population and ESL population would provide more insight into potential reasons for the negative correlation. It would also allow the researcher to determine whether the current independent variables are predictive regardless of context or if they are functioning as proxies for characteristics associated with either the ESL or HSE population.

**Reflection on the Dissertation Process**

As I reflect on this dissertation process, I must acknowledge that while this was not the process I envisioned, it was one that was consistently driven by my passion for the mission of adult education and the unique needs of adult education students. Over the last fifteen years, I have worked with several types of students. They include elementary, middle, and high school students, traditional undergraduate students, and adult education students. While I have enjoyed working with all of those students, my most rewarding time has been spent in adult education.

It is easy to feel like adult education is overlooked because of its unique funding structure and various settings. The field of adult education consists of people who work for community
colleges, regional offices of education, departments of correction, and community-based organizations, as well as numerous volunteers. The field is unique in that the vast majority of the instructors are part-time and the students are unlike any others. In one classroom, students can range in age from sixteen to eighty. They represent so many different cultural and linguistic backgrounds. They bring a wealth of life experiences, both good and bad, and have walked many different paths. The qualities that make adult education so unique and exciting are the same qualities that make it challenging. It was my passion for adult education and the challenges programs in all settings face that I knew I wanted to focus on helping adult education students meet their goals regardless of their educational settings.

When I began this process, I was an instructor in an adult education program. This allowed me to work closely with the students and understand their unique needs. During the process, I took a position as an administrator. I also began to serve on the board of my state professional organization for adult education. These professional changes gave me the perspective I needed to fully understand what type of research had to be done. As an administrator I was able to participate more directly in course development. As an instructor, I had written curriculum. However, I was never close enough to the process to fully understand what factors contributed to the development of new courses or the rewriting of existing courses. As a board member in our professional organization, I was able to hear from other leaders in my field and hear their stories. My adult education colleagues have taught me about the challenges they face in their programs that are in different educational settings or are in more rural or urban settings. Hearing about the different supports, resources, and constraints that different programs
have was the driving force behind my focus on student-level data. I wanted my students at MCC to benefit from my study, but I also wanted other programs to be able to implement what I found in a way that was feasible for their distinct circumstances.

The most important thing I have gained from this process is a passion for data. Before I started my coursework, I had no background in data. I had taken courses in assessment, but my education was primarily in pedagogy. I now use data in everything I do. It allows me to be strategic when I am making decisions. I am able to be organized and make informed decisions because of my data utilization. My passion for data has not only helped me, but it has helped the field of adult education in my state. I have been able to collaborate with our community college board to offer a variety of data trainings for adult education administrators across the state. These trainings have helped administrators organize their data and make sense of it. My goal is to continue to hold these trainings and improve data literacy in the field of adult education. It is my hope that, through training opportunities, administrators in adult education will become more comfortable with data and begin implementing data-driven practices more regularly in their own programs. Once there have been sufficient trainings for administrators, I hope to hold similar trainings for adult education instructors. Our students and our programs are so diverse. However, our field has a wealth of data. Because we are grant funded, we have very robust intake data, a state adult education database with required outcomes for each student, and a required standardized test that students take every 40 instructional hours. We generate so much data in adult education. Practitioners are accustomed to reporting data. We now have to focus on accuracy and on using the data we have available to us.
This process has made me a better practitioner. I have been an administrator for three years. Prior to that, I taught for 13 years. The way I approached problems was often from the perspective of a teacher. I thought about individual students or classes and how they would be impacted by decisions. My administrative role has required me to look at things at the program level. It is still important to me to consider the impact decisions have on individual students, teachers, and classes. However, I can now see the impact decisions have on the entire program and on other partners and stakeholders. My new perspective, combined with my passion for data and the knowledge I gained from my coursework, has given me the tools I need to be a more organized, effective, and efficient administrator.

This process has made me a better researcher. This was not a linear process for me. I know that many people deal with unexpected obstacles during their dissertation processes. I looked forward to facing those obstacles and using them as an opportunity to learn and grow. As prepared as I was for surprises, I was not expecting to have to change my topic due to a global pandemic. Throughout this process, I have had to be adaptable. I have learned that there is no perfect data. When I began this study, I wanted to incorporate data from multiple sources. Unfortunately, that did not work out. I did not get the robust demographic information that I had hoped for. I also did not get as much of the academic history as I had hoped for. I let this lack of data derail me and push my timeline for a long time. Eventually, I realized that, rather than wait for the data I wanted, I had to do the study with the data I had available to me. While I did not get the robust demographic information I wanted, I was still able to conduct a study that yielded important and useful results. This lesson will serve me well in future research endeavors. I now
know that I can get beneficial and practical results from data, even if the data is not as robust as I would have liked. These results can still help the field, and there can always be future studies conducted with the data that was not obtained the first time around. I look forward to taking the lessons that I learned throughout this process and using them to grow as a practitioner and as a researcher.
REFERENCES


APPENDIX A
EXEMPTION DETERMINATION
Exempt Determination

18-Mar-2021
Heather Martin (01859584)
Counseling, Adult and Higher Education

RE: Protocol # HS21-0206 "A Quantitative Analysis of Factors Contributing to Adult Education Students' Transition to Credit Courses"

Dear Heather Martin,

Your application for institutional review of research involving human subjects was reviewed by the Office of Research Compliance, Integrity, and Safety on 18-Mar-2021 and it was determined that it meets the criteria for exemption 2.

Although this research is exempt, you have responsibilities for the ethical conduct of the research and must comply with the following:

Amendments: You are responsible for reporting any amendments or changes to your research protocol that may affect the determination of exemption and/or the specific category. This may result in your research no longer being eligible for the exemption that has been granted.

Record Keeping: You are responsible for maintaining a copy of all research related records in a secure location, in the event future verification is necessary. At a minimum these documents include: the research protocol, all questionnaires, survey instruments, interview questions and/or data collection instruments associated with this research protocol, recruiting or advertising materials, any consent forms or information sheets given to participants, all correspondence to or from the IRB, and any other pertinent documents.

Please include the protocol number (HS21-0206) on any documents or correspondence sent to the IRB about this study.

If you have questions or need additional information, please contact the Office of Research Compliance, Integrity, and Safety at 815-753-8588.

Please see the RIPS website for guidance on the impact of COVID-19 on research(including face-to-face data collection) https://www.niu.edu/divresearch/covid/index.shtml
APPENDIX B
IRB APPROVAL
May 13, 2021

Heather Martin
Elgin Community College / Adult Basic Education Center

Dear Ms. Martin,

Thank you for submitting your research proposal, A Quantitative Analysis of Factors Contributing to Adult Education Students’ Transition to Credit Courses, to the Institutional Review Board (IRB) at Elgin Community College. Members of the Board have reviewed your proposal and grant approval to conduct the research as described in your materials.

Your study involves analysis of existing student data identifiable by student IDs. When you are ready to begin, please coordinate logistics with David Rudden (drudden@elgin.edu), Managing Director of Institutional Research. He will serve as your primary contact to coordinate dates and provide a digital text file consisting of student level data of those students enrolled in courses as stipulated in the Nondisclosure Agreement. Your timeframe and scope of work are limited to the parameters set forth by him.

Additionally, as you carry out your study, please adhere to the following standard IRB conditions:

1. Any substantive changes to the procedures or instruments (as described in your materials) will need to be resubmitted for IRB review.
2. Your timeframe is limited. You must conduct the research between the date of this letter and December 31, 2021. If any activity is expected to continue after this date, you are responsible for initiating continuing review of your project through my office.
3. IRB approval does not waive the right of any participant or individual affiliated with the project (e.g., participant, co-investigator, etc.) to opt out of participation at any time and without consequence.
4. In your final report, you must not refer to Elgin Community College by name and must take efforts to protect its identity (e.g., “a Midwestern community college”).
5. You must provide a summary report to Elgin Community College’s Planning and Institutional Effectiveness office upon completion of your project.

Please let me know if you have any questions. Best wishes in carrying out this research, and I look forward to hearing the outcome of your investigation.

If you have any questions or concerns, please do not hesitate to contact me. Best wishes for success with this research, and I look forward to hearing about the outcome of your study.

Sincerely,

Philip Garber, PhD
IRB Chair and Vice President, Planning, Institutional Effectiveness and Technology
Phone: (847) 214-7285, pgarber@elgin.edu

Our Mission
To Improve People’s Lives Through Learning
APPENDIX C

ADULT BASIC AND SECONDARY EDUCATION EDUCATIONAL FUNCTIONING DESCRIPTORS
**Adult Basic and Secondary Education Educational Functioning Descriptors**

<table>
<thead>
<tr>
<th>Course</th>
<th>Basic Reading and Writing</th>
<th>Numeracy Skills</th>
<th>Functional and Workplace Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>Individual has no or minimal reading and writing skills. May have little or no comprehension of how print corresponds to spoken language and may have difficulty using a writing instrument. At the upper range of this level, individual can recognize, read, and write letters and numbers but has a limited understanding of connected prose and may need frequent re-reading. Can write a limited number of basic sight words and familiar words and phrases; may also be able to write simple sentences or phrases, including very simple messages. Can write basic personal information. Narrative writing is disorganized and unclear, inconsistently uses simple punctuation (e.g., periods, commas, question marks), and contains frequent errors in spelling.</td>
<td>Individual has little or no recognition of numbers or simple counting skills or may have only minimal skills, such as the ability to add or subtract single digit numbers.</td>
<td>Individual has little or no ability to read basic signs or maps and can provide limited personal information on simple forms. The individual can handle routine entry level jobs that require little or no basic written communication or computational skills and no knowledge of computers or other technology.</td>
</tr>
<tr>
<td>Level 2</td>
<td>Individual can read simple material on familiar subjects and comprehend simple and compound sentences in single or linked paragraphs containing a familiar vocabulary; can write simple notes and messages on familiar situations but lacks clarity and focus. Sentence structure lacks variety, but individual shows some control of basic grammar (e.g., present and past tense) and consistent use of punctuation (e.g., periods, capitalization).</td>
<td>Individual can count, add, and subtract three-digit numbers, can perform multiplication through 12, can identify simple fractions, and perform other simple arithmetic operations</td>
<td>Individual is able to read simple directions, signs, and maps, fill out simple forms requiring basic personal information, write phone messages, and make simple changes. There is minimal knowledge of and experience with using computers and related technology. The individual can handle basic entry level jobs that require minimal literacy skills; can recognize very short, explicit, pictorial texts (e.g., understands logos related to worker safety before using a piece of machinery); and can read want ads and complete simple job applications.</td>
</tr>
<tr>
<td>Level 3</td>
<td>Individual can read text on familiar subjects that have a simple and clear underlying structure (e.g., clear main idea, chronological order); can use context to determine meaning; can interpret actions required in specific written directions; can write simple paragraphs with a main idea and supporting details on familiar topics (e.g., daily activities, personal issues) by recombining learned</td>
<td>Individual can perform with high accuracy all four basic math operations using whole numbers up to three digits and can identify and use all basic mathematical symbols.</td>
<td>Individual is able to handle basic reading, writing, and computational tasks related to life roles, such as completing medical forms, order forms, or job applications; and can read simple charts, graphs, labels, and payroll stubs and simple authentic material if familiar with the topic. The individual</td>
</tr>
</tbody>
</table>
vocabulary and structures; and can self and peer edit for spelling and punctuation errors.

**Level 4**

Individual is able to read simple descriptions and narratives on familiar subjects or from which new vocabulary can be determined by context and can make some minimal inferences about familiar texts and compare and contrast information from such texts but not consistently. The individual can write simple narrative descriptions and short essays on familiar topics and has consistent use of basic punctuation but makes grammatical errors with complex structures.

Individual can perform all four basic math operations with whole numbers and fractions; can determine correct math operations for solving narrative math problems and can convert fractions to decimals and decimals to fractions; and can perform basic operations on fractions.

Individual is able to handle basic life skills tasks such as graphs, charts, and labels and can follow multistep diagrams; can read authentic materials on familiar topics, such as simple employee handbooks and payroll stubs; can complete forms such as a job application and reconcile a bank statement. Can handle jobs that involve following simple written instructions and diagrams; can read procedural texts, where the information is supported by diagrams, to remedy a problem, such as locating a problem with a machine or carrying out repairs using a repair manual. The individual can learn or work with most basic computer software, such as using a word processor to produce own texts, and can follow simple instructions for using technology.

**Level 5**

Individual can comprehend expository writing and identify spelling, punctuation, and grammatical errors; can comprehend a variety of materials such as periodicals and nontechnical journals on common topics; can comprehend library reference materials and compose multiparagraph essays; can listen to oral instructions and write an accurate synthesis of them; and can identify the individual can perform all basic math functions with whole numbers, decimals, and fractions; can interpret and solve simple algebraic equations, tables, and graphs and can develop own tables and graphs; and can use math in business transactions.

Individual is able or can learn to follow simple multistep directions and read common legal forms and manuals; can integrate information from texts, charts, and graphs; can create and use tables and graphs; can complete forms and applications and complete
main idea in reading selections and use a variety of context issues to determine meaning. Writing is organized and cohesive with few mechanical errors; can write using a complex sentence structure; and can write personal notes and letters that accurately reflect thoughts.

**Level 6**

Individual can comprehend, explain, and analyze information from a variety of literacy works, including primary source materials and professional journals, and can use context cues and higher order processes to interpret meaning of written material. Writing is cohesive with clearly expressed ideas supported by relevant detail, and individual can use varied and complex sentence structures with few mechanical errors.

Individual can make mathematical estimates of time and space and can apply principles of geometry to measure angles, lines, and surfaces and can also apply trigonometric functions.

Individual is able to read technical information and complex manuals; can comprehend some college level books and apprenticeship manuals; can function in most job situations involving higher order thinking; can read text and explain a procedure about a complex and unfamiliar work procedure, such as operating a complex piece of machinery; can evaluate new work situations and processes; and can work productively and collaboratively in groups and serve as facilitator and reporter of group work. The individual is able to use common software and learn new software applications; can define the purpose of new technology and software and select appropriate technology; can adapt use of software or technology to new situations; and can instruct others, in written or oral form, on software and technology use.
## Educational Functioning Descriptors English as a Second Language

<table>
<thead>
<tr>
<th>Course</th>
<th>Listening and Speaking</th>
<th>Basic Reading and Writing</th>
<th>Functional and Workplace Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 1</strong></td>
<td>Individual cannot speak or understand English, or understands only isolated words or phrases.</td>
<td>Individual has no or minimal reading or writing skills in any language. May have little or no comprehension of how print corresponds to spoken language and may have difficulty using a writing instrument.</td>
<td>Individual functions minimally or not at all in English and can communicate only through gestures or a few isolated words, such as name and other personal information; may recognize only common signs or symbols (e.g., stop sign, product logos); can handle only very routine entry-level jobs that do not require oral or written communication in English. There is no knowledge or use of computers or technology.</td>
</tr>
<tr>
<td><strong>Level 2</strong></td>
<td>Individual can understand basic greetings, simple phrases and commands. Can understand simple questions related to personal information, spoken slowly and with repetition. Understands a limited number of words related to immediate needs and can respond with simple learned phrases to some common questions related to routine survival situations. Speaks slowly and with difficulty. Demonstrates little or no control over grammar.</td>
<td>Individual can read numbers and letters and some common sight words. May be able to sound out simple words. Can read and write some familiar words and phrases, but has a limited understanding of connected prose in English. Can write basic personal information (e.g., name, address, telephone number) and can complete simple forms that elicit this information.</td>
<td>Individual functions with difficulty in social situations and in situations related to immediate needs. Can provide limited personal information on simple forms, and can read very simple common forms of print found in the home and environment, such as product names. Can handle routine entry level jobs that require very simple written or oral English communication and in which job tasks can be demonstrated. May have limited knowledge and experience with computers.</td>
</tr>
<tr>
<td><strong>Level 3 (Students are approaching these competencies but have not yet developed the writing skills they need for proficiency)</strong></td>
<td>Individual can understand common words, simple phrases, and sentences containing familiar vocabulary, spoken slowly with some repetition. Individual can respond to simple questions about personal everyday activities, and can express immediate needs, using simple learned phrases or short sentences. Shows limited control of grammar.</td>
<td>Individual can read most sight words, and many familiar phrases and simple sentences containing familiar vocabulary, spoken slowly with frequent repetition. Individual can ask and answer simple questions about personal and social topics, and can express immediate needs, using simple learned phrases. Shows limited control of grammar.</td>
<td>Individual can function in some situations related to immediate needs and in familiar social situations. Can provide basic personal information on simple forms and recognizes simple common forms of print found in the home, workplace and community. Can handle routine entry level jobs requiring basic written or oral English communication and in which job tasks can be demonstrated. May have limited knowledge or experience using computers.</td>
</tr>
<tr>
<td><strong>Level 4 (Students are demonstrating proficiency in each area)</strong></td>
<td>Individual can understand simple learned phrases and limited new phrases containing familiar vocabulary spoken slowly with frequent repetition; can ask and answer simple questions about personal and social topics, and can express immediate needs, using simple learned phrases. Shows limited control of grammar.</td>
<td>Individual can read simple material on familiar subjects and comprehend simple and compound sentences in single or linked paragraphs containing a familiar vocabulary; can write simple notes and messages on familiar situations but Individual can interpret simple directions and schedules, signs, and maps; can fill out simple forms but needs support on some documents that are not simplified; and can handle routine entry level jobs that involve some written or oral English communication but in which job tasks can be demonstrated. Individual can use simple computer programs and can perform a</td>
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<tr>
<td><strong>Level 5</strong></td>
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</table>
respond to questions using such phrases; can express basic survival needs and participate in some routine social conversations, although with some difficulty; and has some control of basic grammar.

lacks clarity and focus. Sentence structure lacks variety but shows some control of basic grammar (e.g., present and past tense) and consistent use of punctuation (e.g., periods, capitalization).

sequence of routine tasks given directions using technology (e.g., fax machine, computer).

Individual can understand learned phrases and short new phrases containing familiar vocabulary spoken slowly and with some repetition; can communicate basic survival needs with some help; can participate in conversation in limited social situations and use new phrases with hesitation; and relies on description and concrete terms. There is inconsistent control of more complex grammar.

Individual can meet basic survival and social needs, can follow some simple oral and written instruction, and has some ability to communicate on the telephone on familiar subjects; can write messages and notes related to basic needs; can complete basic medical forms and job applications; and can handle jobs that involve basic oral instructions and written communication in tasks that can be clarified orally. Individual can work with or learn basic computer software, such as word processing, and can follow simple instructions for using technology.

Individual can understand and communicate in a variety of contexts related to daily life and work. Can understand and participate in conversation on a variety of everyday subjects, including some unfamiliar vocabulary, but may need repetition or rewording. Can clarify own or others’ meaning by rewording. Can understand the main points of simple discussions and informational communication in familiar contexts. Shows some ability to go beyond learned patterns and construct new sentences. Shows control of basic grammar but has difficulty using more complex structures. Has some basic fluency of speech.

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