Nontraditional Students Success in Compressed Courses within a Community College Cohort

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NONTRADITIONAL STUDENTS’ SUCCESS IN COMPRESSED COURSES 
WITHIN A COMMUNITY COLLEGE COHORT

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By 
Elizabeth K. Tanner 
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NONTRADITIONAL STUDENTS' SUCCESS IN COMPRESSED COURSES WITHIN A COMMUNITY COLLEGE COHORT

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Nontraditional students are an untapped population for American higher education institutions. Private baccalaureate-granting universities have taken the lead on creating programs for this population’s needs. These programs typically include combinations of online instruction, cohorts, compressed or accelerated courses, and prior learning assessment. Similarly constructed programs for nontraditional students at public community colleges are less common. A review of the Council for Accelerated Programs’ website reveals only twelve of the 98-member institutions are community or technical colleges, and only one is in California (Council for Accelerated Programs, n.d.). In 2016, Shasta-Tehama-Trinity Joint Community College District in California created the Accelerated College Education (ACE) program specifically for working adults. ACE utilizes a cohort model, compressed courses, structured scheduling, and dedicated staff and faculty. However, little research exists that evaluates the combination of these elements for correlation to course success or student feelings of connectedness at a community college. This study uses Tinto’s framework of academic and social integration, including criticisms of its applicability to nontraditional students, to evaluate academic and social integration of Shasta College students who completed ACE compressed courses between June 2016 and December 2017. Course grade data showed higher participation by nontraditional students in these courses, and the ACE-cohort
students’ course success rate was significantly higher than non-ACE-cohort students’ course success rate. Survey results demonstrated that ACE-cohort students had significantly more interactions with and feelings of connectedness to program/student support staff and other students than non-ACE-cohort students, and that these connections may have contributed to the success of their overall academics.
Introduction

Background Information

Colleges’ and universities’ focus on the high school to college pipeline for recruiting and enrollment efforts ignore a sizeable population of potential students – nontraditional students. In 2018, there will be approximately 3.3 million high school graduates (Hussar & Bailey, 2008), but there are currently 45+ million adults over the age of 25 with some college but no degree in the United States (U.S. Census American Fact Finder, 2016). The Public Policy Institute of California predicts that if current trends continue, California will be short 1.1 million college graduates by the year 2030 (Johnson, Cuellar Meija, & Bohn, 2017). With K-12 populations decreasing in far northern California and other parts of the state, public community colleges are beginning to turn their attention to nontraditional students, especially those with some college but no degree.

Many private, four-year colleges and universities have developed programs designed to recognize the unique needs of nontraditional learners. These programs often feature some or all of the following elements: alternative scheduling (shorter terms and/or compressed/accelerated courses), online and/or hybrid course offerings, cohorts, faculty that teach multiple courses, dedicated staff that serve as a “one-stop shop” for student support, and prior learning assessment. Few public colleges and universities in California have designed programs specifically for nontraditional students. Those that exist typically focus on bachelor-degree completion programs. Associate degree level programs designed specifically for nontraditional students at California public institutions are few and far between. The exceptions are Pierce College, Berkeley City
College, San Diego Mesa College, and most recently, Shasta-Tehama-Joint Community College District ("Shasta College").

Shasta College is a California public community college attempting to address Associate degree completion for the nontraditional student in a rural environment. In Shasta College’s tri-county service area (Shasta, Tehama, and Trinity Counties), 32% of adults over 25-years old have completed some college but no degree (U.S. Census, 2016). Shasta College is the only public institution of higher education in the 10,000-square mile region. Changes in the local economy have shifted living-wage jobs from blue-collar resource extraction jobs to the fields of education, government, and health care, all of which require education and training beyond high school. In response to the significant numbers of non-degreed adults in the region, Shasta College began the Accelerated College Education (ACE) Program in June 2016.

ACE is an open-cohort program featuring compressed courses in a structured schedule. It is designed for working adults to complete an associate degree in Business or Psychology in 24 months of full-time study (fewer if they have previously completed coursework). The cohort model was chosen as a way for students to create a sense of community among learners and develop a peer support group. Compressed online and hybrid Tuesday/Thursday evening courses present a way for working adults to work full-time and attend college full-time while focusing on only two classes at any one time. ACE participants have anecdotally commented that they have benefitted getting to know other students, faculty, and staff through the duration of their program and that they appreciate the pace of the compressed courses. However, the college does not have any evidence-based data that ACE students’ academic success or feelings of
connectedness in compressed courses correlates to their membership in the cohort. This study attempts to analyze differences between ACE-cohort and non-ACE-cohort students’ academic performance in compressed courses and sense of connectedness using Tinto’s framework on academic and social integration.

In searching for research relevant to the combined elements of the ACE program and how they might contribute to academic and social integration, I found two studies that focused on cohorts at community colleges. One focused on the effects of cohort support for helping women manage stress in community college (Johnson, Schwartz, & Bower, 2000), but the study was conducted at a large, urban two-year college in the southeast, and focused solely on women. The results did show that membership in a cohort mitigated stress for female participants. Another study focused on graduation rates for students in a cohort-based program offered at Los Angeles Mission Community College (LaMonica, 1997). Cohort graduation rates were compared to general population graduation rates; cohort students graduated at a rate of ten times that of general population students (6% compared to 0.53%). The LaMonica study differed from this study in two ways: 1) it focused on an urban environment from which students had a variety of institutions of higher education to choose, and 2) it did not survey students about their level of engagement with other cohort members, faculty, or staff. The literature indicates these programs produce promising results generally but do not address the element of compressed courses.

Studies on compressed and accelerated courses abound, but mostly for developmental (remedial) or baccalaureate level coursework. Almquist (2015) revealed that not only were compressed developmental courses helpful to students reaching
college level coursework faster, the students consistently performed better in compressed courses than in full-term courses. While these findings support the use of compressed coursework, Almquist’s research did not look at compressed courses in the context of a cohort program. Geltner and Logan’s (2001) research of 414,000 student records at Santa Monica College, a large urban community college in southern California, revealed that students earned higher grades in six-week classes than in eight-week classes, and higher grades in both than in traditional full-term classes. Again, this was a study of an urban college where students could choose to attend a variety of institutions with no investigation of the impact of a cohort on course success in compressed courses. Payne and Mullen’s (2014) research compared outcome measures of students in traditional and accelerated nursing programs. Using a standardized exam, the National Council Licensure Exam (NCLEX), they compared scores of students from traditional nursing programs with those from accelerated programs and found no discernable difference between the two groups. Payne and Mullen’s study was limited to baccalaureate and post-baccalaureate level nursing programs which limits the applicability to this research. None of these studies addresses the cohort’s effect on building relationships among students, faculty, and/or staff.

Faculty and staff play a key role in helping students integrate into the college environment. Shasta College’s ACE program has a Director and a Student Success Facilitator co-located in an office that serves as much as possible as a one-stop shop for ACE-cohort students. An academic counselor is designated for ACE-cohort students for all matters related to academic and degree requirements. The program identifies full-time and part-time faculty comfortable with teaching compressed courses. Instructors
who do well with this format are asked to teach for the program on a recurring basis. Kasworm’s 2014 analysis of the National Survey of Student Engagement and the Community College Survey of Student Engagement’s results showed that nontraditional students’ “sense of engagement was based in their academic learning in the classroom, not through out-of-class and collegiate-orchestrated social experiences” (Kasworm, 2014). Spaid and Duff (2009) found that working adults in accelerated cohorts gained confidence from familiarity with other students in the cohort, which allowed them to take academic risks. The program Spaid and Duff studied also featured consistent training for full- and part-time faculty, block scheduling for an entire year, and dedicated staff who serve as complete one-stop shops for every student. These elements are consistent with the ACE program, but the context of this study (a small, private, religious four-year institution in the southeast) is significantly different than Shasta College (a public community college). Similar to the program in Spaid and Duff’s research, the ACE program has dedicated staff, instructors, and structured scheduling. This creates opportunities for ACE-cohort students to develop continued relationships with staff and instructors. These relationships can serve as the foundation for creating a sense of community for nontraditional students, thereby fostering academic and social integration (Davidson & Wilson, 2013; Tinto, 1997).

**Problem Statement**

Little research has investigated cohort programs featuring compressed courses and dedicated faculty and staff at rural, public community colleges. At a local level, the initial success of students completing the ACE program and course success rates in compressed ACE courses may result in Shasta College adopting compression for stand-
alone course offerings for general population students and/or expanding the ACE program to include additional academic programs as cohorts. Currently, the ACE program allows non-ACE-cohort students to enroll in compressed ACE courses. An analysis of non-ACE-cohort students’ academic performance in these classes compared to ACE-cohort students may reveal the need for further discussion about whether to limit compressed courses to a cohort. On a larger scale, other California community colleges have expressed interest in replicating the ACE program at their institutions. Complete College America included the ACE Program as a best practice for nontraditional students at their 2017 annual meeting. With local, state, and national attention, it is incumbent upon Shasta College to start evaluating this model and identify what elements of the program are appropriate for replication and for scale.

**Purpose Statement**

The purpose of this research is to evaluate elements of the ACE program against a framework of academic and social integration. Course success rates and students’ feelings about their level of connectedness will be a proxy for academic and social integration. Specifically, this study will analyze a) academic course success rates in ACE-compressed courses and b) student feelings of connectedness with instructors, campus staff, and peers, for both ACE-cohort and non-ACE-cohort students. The following questions will be used to guide this research:

- Is there a statistically significant difference in the course success rate between ACE-cohort and non-ACE-cohort students in compressed ACE course sections?
- How do feelings of connection with instructors, counselors, staff or other students compare for ACE-cohort and non-ACE-cohort students?
Significance of the Study

This research will evaluate how ACE-cohort and non-ACE-cohort students perform in ACE compressed courses and whether there are any links between cohort participation, academic performance in compressed courses, and academic and social integration (as measured by feelings of connections between students and staff, students and faculty, and among students). The results could inform practitioners about how to market these programs, the relevant impact of cohort membership, and the need for dedicated staff and faculty for student success in compressed courses.

In analyzing who is enrolling in ACE compressed courses, the research may help colleges develop a better understanding how to market these programs. Creating marketing tools focused on the predominant populations utilizing these programs could lead to more efficient marketing. The research may also identify gaps in demographic inclusion. This could lead to the college making a greater effort to reach out to specific populations to encourage participation.

In analyzing course success patterns between cohort and non-cohort students in compressed courses, a significant difference in course success rates may lead to expansion of the use of cohorts in academic programs. California Community Colleges are embarking upon an effort to develop guided pathways to better assist students in moving through and completing college. If cohort membership in compressed courses correlates to greater academic achievement, these elements could be incorporated into how academic programs are mapped for guided pathways. Conversely, if the difference in course success rates between cohort and non-cohort students is negligible, then the
institution could determine whether a cohort model is necessary or if the availability of compressed courses is sufficient for student success.

Analyzing student survey responses about levels of connection can help in several ways. If cohort and non-cohort students alike are demonstrating that they are connecting with faculty about non-course related subjects such as career goals, additional opportunities for professional development could be provided for faculty. At a minimum, training faculty about available resources so they can make better referrals would benefit students. Identifying levels of connections with academic counselors for cohort and non-cohort students could reveal gaps in students asking for and receiving quality guidance on degree requirements and career opportunities. Finally, identifying levels of connection with program staff, especially among cohort students, can help determine if having dedicated staff for cohort-based programs is necessary or not.

Definitions of Terms

The following terms used in this study are defined below.

**Accelerated**: Courses that are “shortened not only in terms of duration (eight weeks or fewer) but also in terms of contact hours with an instructor (thirty-two hours or fewer)” (Wlodkowski & Ginsberg, 2010, p. vii). In California, the term “accelerated” is being used to identify efforts to accelerate students’ progress through remedial math and English coursework (http://accelerationproject.org/). For purposes of this study, the term “compressed” will be used to designate non-standard term length courses that include full content and instructional hours. (See “compressed.”)

**ACE**: Accelerated College Education. (http://www.shastacollege.edu/ACE).
**ACE Director:** The staff person responsible for primary support of the ACE-cohort students, program logistics, and liaison with ACE faculty.

**ACE Student Success Facilitator:** The staff member responsible for secondary support of the ACE-cohort students, the ACE Director, and managing student data.

**Asynchronous:** Online “communications that are not conducted in real time” (Broderson & Melluzzo, 2017, p. 15).

**California Community Colleges:** The California Community Colleges is the largest system of higher education in the nation, with 2.1 million students attending 114 publicly-funded colleges. California Community Colleges offer Associate degrees, coursework for transfer to four-year universities, career technical education certificates, community education courses, and remedial coursework. 15 California Community Colleges are currently authorized to offer baccalaureate degrees in a pilot project (http://www.cccco.edu/).

**Canvas:** The online learning management system for Shasta College. It is used for all online and hybrid courses.

**Closed cohort:** A closed cohort is highly structured with all students beginning and ending together in a “lock-step sequence” (Harris, 2006, p. 86).

**Cohort:** Harris uses Barnett and Cafarella’s definition of a cohort as “a group of between 10 and 25 students who enter a program of studies together, completing a series of common learning experiences over a one- to two-year period” (Harris, 2006, p. 84)

**Compressed:** “A course that schedules the total classroom time typical of a traditional semester course in fewer calendar weeks. The number of the weeks for these courses
varies, but courses are most often three to eight weeks in length” (Almquist, 2015, p. 25).

**Counselor:** “Counselors provide academic, career and personal counseling services to help students successfully achieve their goals” (www.shastacollege.edu/counseling).

**Course success rate:** “The percentage of A, B, C, or Pass/Satisfactory grades as a percentage of all grades for a class” (Almquist, 2015, p. 26).

**Hybrid:** A course in which content is delivered using both online and face-to-face instruction (Broderson & Melluzzo, 2017).

**Nontraditional Students:** Age (over 24 years old) has typically been a proxy to distinguish older students from younger, “traditional” students. The definition has been broadened to include a range of characteristics to define students who exhibit one or more of the following characteristics: delayed or interrupted college enrollment after high school, family dependents other than a spouse, working full-time while enrolled, financial independence from parents, and/or non-standard high school completion (“Nontraditional students,” n.d.).

**Online:** A course in which “content and instruction are delivered through the Internet” (Broderson & Melluzzo, 2017, p. 2).

**Open cohort:** An open cohort allows students to come into (and out of) the program, and typically allows some flexibility in scheduling coursework (Harris, 2006).

**Structured schedule:** “A redesigned schedule with shorter terms, year-round enrollment, and consistent time blocks” (“A Better Deal,” n.d.).

**Traditional students:** Students who enroll in college immediately after high school as full-time students (“Nontraditional students,” n.d.).
Transferable: “A transferable course is a course taken at one college or university that can be used for credit at another institution. Transferable courses may be used for major preparation, general education, or elective credit” (www.assist.org). In the instance of the Shasta College ACE program, the coursework offered is specifically transferrable to public California universities, and is likely to be transferrable to a wide variety of other states’ public universities and private universities.

Literature Review

Introduction

The purpose of this research is to evaluate elements of the ACE program against a framework of academic and social integration. Course success rates and students’ feelings about their level of connectedness will be a proxy for academic and social integration. Specifically, this study will analyze a) academic course success rates in ACE-compressed courses and b) student feelings of connectedness with instructors, campus staff, and peers, for both ACE-cohort and non-ACE-cohort students. The following questions will be used to guide this research:

- Is there a statistically significant difference in the course success rate between ACE-cohort and non-ACE-cohort students in compressed ACE course sections?
- How do feelings of connection with instructors, counselors, staff or other students compare for ACE-cohort and non-ACE-cohort students?

As the ACE program targets nontraditional students and features cohorts and compressed courses, the literature review focuses on these three areas. Literature was retrieved between January 2017 and January 2018, using Western Kentucky University’s and National University’s EBSCOHost online libraries, accessing articles
from ProQuest, SAGE Journals, Wiley Online, and the U.S. Department of Education’s Institute of Education Sciences ERIC database. Search terms included: nontraditional students, nontraditional learners, adult students, adult learners, accelerated courses, accelerated classes, compressed courses, compressed classes, academic cohort, course success, and combinations thereof. Additional resources for finding relevant research included organizations focused on nontraditional learners. The Council on Adult and Experiential Learners (CAEL) (https://www.cael.org/) provided links to research studies related to adult learning theory. Complete College America’s recent research into designing higher education for nontraditional learners (“A Better Deal,” n.d.) led to research studies on alternative scheduling such as compressed courses. The Council on Accelerated Programs (http://caphighered.org/) provided links to Wlodkowski’s work on accelerated learning. Additional data was retrieved from the Department of Education National Center for Educational Statistics, the United States Census, Shasta College’s website, and the California Community College Chancellor’s Office website.

Tinto’s Framework of Social and Academic Integration

The use of a cohort model in the ACE program directly reflected the Shasta College administration’s belief that students who are connected to each other and their academic environment are more likely to achieve their academic goals. That belief is reflected in Tinto’s framework of social and academic integration’s impact on persistence. Tinto found that students who develop connections with faculty and other students are more likely to persist and complete their degree (Tinto, 1993). Developed in the early 1970’s, this framework focused on traditional, full-time, residential students in a university setting. In 1997, Tinto evaluated the applicability of his framework to
students who commute to college. He noted that for nonresidential students, “if academic and social involvement or integration is to occur, it must occur in the classroom” (Tinto, 1997, p. 599).

Involvement for the traditional student typically means living on campus, active membership in student clubs and organizations, and participation in on-campus jobs, faculty research projects or internships, and Tinto admitted that his model of involvement was “not readily suited to the study of attrition at commuting institutions” (Davidson & Wilson, 2013, p. 330). Nontraditional students typically cannot involve themselves in this way, due to their competing responsibilities. They can, and do, connect with other students and faculty inside and outside the classroom, but their time is limited due to demands from work and family. Often, nontraditional students’ only opportunity to find involvement and connection with peers and faculty is inside the classroom (Tinto, 1997; Tinto, 1998). Research finds that nontraditional students’ social contacts with other people, especially with faculty outside the classroom, were instrumental to student success and completion, especially at community colleges (Davidson & Wilson, 2013; Tinto, 1993).

Although Tinto maintains that social and academic integration are necessary to student persistence for residential students, he acknowledges that academic integration is more important to two-year college students and nonresidential students (Tinto, 1998). Others have analyzed Tinto’s framework for applicability to nontraditional students, with particular attempts to clarify how academic and social integration is defined for nontraditional students. Some criticisms of his framework include Tierney’s disagreement that students needed to forego their previous identity in order to integrate
into their new college identity. Tierney found the implications of this particularly troubling for students with strong affiliations to particular cultural groups (Davidson & Wilson, 2013). Another limitation of Tinto’s framework was the assumption that students were coming directly from high school and had made a geographical move. This is not the case for distance education students, who are often nontraditional students (Davidson & Wilson, 2013). The nature of social integration can look different for nontraditional students. Nontraditional students may experience strong social support from family, employers, and coworkers instead of membership in clubs and organizations on campus, according to Kember (Davidson & Wilson, 2013). Overall, these criticisms help illuminate the variance in definitions for social and academic integration for nontraditional students. However, even with differences from Tinto’s original framework, “when students form meaningful relationship with others connected to the institution, they are more likely to persist” (Davidson & Wilson, 2013, p. 341). Tinto’s research into the link between student involvement, student learning, and retention has consistently found that “the more students are involved in the social and intellectual life of a college, the more frequently they make contact with faculty and other students about learning issues, especially outside the course, the more students are likely to learn” (Tinto, 1993, p. 69). Tinto’s framework of social and academic integration, including its limitations to nontraditional students, will inform this study.

**Nontraditional Students**

**Definition of nontraditional student.** The definition for what constitutes an “adult” or “nontraditional” student (or learner) has evolved over time. “The field of adult education has evolved a vocabulary possibly unparalleled in its confusion” (Courtney,
1989, p. 15). In the late 1800’s and early 1900’s, an adult student would have been defined strictly by age (25 or older), while a nontraditional student was characterized by race, gender, or socioeconomic status (Compton, Cox, & Laanan, 2006). The Department of Education National Center for Educational Statistics has broadened the definition beyond a simple age cut-off. Today, the definition includes any or all of the following characteristics: a) a delay in postsecondary enrollment after high school, b) college enrollment less than full-time, c) full-time employment, d) financial independence, e) dependents other than a spouse, and f) lack of a high school diploma, or high school completion through a General Educational Development (GED) test (“Nontraditional students,” n.d.). Because gradations of nontraditional characteristics make a difference to students’ persistence, the National Center for Education Statistics further defined these students with the descriptors “minimally,” (only one characteristic) “moderately,” (two to three characteristics) or “highly” (four of more characteristics) (Hutchens, 2016; “Nontraditional students,” n.d.).

**Growth of nontraditional students in higher education.** The number of nontraditional students in American colleges and universities has been increasing throughout the twentieth century, starting with the exponential growth in college enrollment created by the implementation of the GI Bill after World War II. The civil rights movement and women’s movement continued the increase of nontraditional students in the 1970’s and 1980’s. More recently, living-wage jobs all over the United States are shifting from blue-collar to white-collar jobs that require post-secondary education and training, and comfort levels with technology and computing have increased. Similarly, the norm of what is an appropriate role for women in American
society has shifted. The norm of one income as adequate support for a household is being replaced by the need for two-income households, and educational and employment opportunities have increased for women. As a result, women are now the majority population in post-secondary education (Compton, Cox, & Laanan, 2006; Deutsch & Schmertz, 2011; Kasworm, 2003b).

While enrollment of nontraditional learners is projected to continue to increase at colleges and universities around the country (Hussar & Bailey, 2008), nontraditional students have varied results in college completion according to studies using National Clearinghouse data. Nontraditional students face more challenges than the typical traditional student that put them at risk for non-completion, including but not limited to: a) part-time enrollment, b) part- to full-time employment, c) family responsibilities, d) first-generation college status, and e) lower socio-economic backgrounds. Kasworm’s research found that nontraditional completion rates are lower than for traditional students at four-year institutions, public and private. However, at two-year public colleges, completion rates for the two groups are comparable (35.7% for nontraditional and 36.4% for traditional students). Completion rates at private, for-profit institutions for nontraditional students is 8.9% percentage points higher than for traditional students (Kasworm, 2014). Since community colleges and for-profit institutions tend to offer a greater range of course offerings and scheduling, instructional modalities, low tuition (for community colleges), and open admissions, they tend to attract more nontraditional students than traditional four-year universities.

**Nontraditional student motivation.** Environment plays a role in college persistence and completion, but so does motivation. Nontraditional learners’ motivations
for pursuing higher education are varied. Nontraditional learners primarily pursue learning to meet vocational or personal goals, in reaction to a life transition, or for mental stimulation (Deutsch & Schmertz, 2011; Kasworm, 2003b; Knowles, 1984, Merriam, Caffarella, & Baumgartner, 2007). Nontraditional students can meet multiple objectives by completing a degree. For some students, pursuing higher education can help them answer the “identity versus role confusion” stage of Erikson’s Stages of Identity Development and help them define who they will be in the occupation area of their life. Others may see completing their degree as a means to motivate and inspire their own children or grandchildren. Others were encouraged by children or grandchildren to return, which address Erikson’s “generativity versus self-absorption and stagnation” stage (Bee & Bjorklund, 2003, p. 35-36). Levinson’s Theory of Seasons of Adulthood, which originally focused solely on men and included a smaller sample of women later, addresses questions about life often considered by people in their late twenties through fifties. Some evaluate their minor and major adult choices and invest in their work, others pursue a career change that necessitates further schooling (Bee & Bjorklund, 2003). Women who had children at a younger age, particularly during the “traditional learner” ages of 18-22, find themselves returning to college later in an effort to finally finish what they started (or wanted to start) before their life trajectory was significantly altered. There is often a distinct sense that now it is their “turn” to go to college, after supporting husbands and children through their experiences (Bee & Bjorklund, 2003; Deutsch & Schmertz, 2011). What nontraditional learners have in common is that they enter or re-enter higher education seeking change, and as such, are meeting Courtney’s own definition of adult education as “an intervention into the
ordinary business of life – an intervention whose immediate goal is change, in knowledge, or in competence” (Courtney, 1989, p. 25).

**Challenges for nontraditional students.** Entering or re-entering higher education is a significant change for many nontraditional students. Some falter, but many are equipped to deal with the challenge of change due to their motivation about their goals. Eppler and Harju’s (1997) study on applying Carol Dweck’s model of achievement motivation found that nontraditional students also deal with academic challenges differently than traditional students typically due to their orientation toward their learning goal. They are more likely to employ persistence, try a variety of strategies to solve problems, and enjoy academic challenges. Additionally, nontraditional students are typically older and have life experiences in multiple roles, particularly parenthood, that have taught them there is often no single right way to accomplish something. Part of this finding can also be attributed to a greater inclination by nontraditional students to value learning for learning’s sake and to be self-directed learners (Arghode, Brieger, & McLean, 2017; Knowles, 1984).

Intrinsic motivation, persistence, and experience all contribute to nontraditional students coping with challenges while in college. The primary challenge for adults is to balance multiple responsibilities: work, family, and learning opportunities. Research has demonstrated that while these constraints are generally heavy, nontraditional students have often developed life skills, such as time management, that help them manage competing responsibilities (Fairchild, 2003; Graham & Gisi, 2000; Hutchens, 2016). Nontraditional students utilize skills and knowledge they have acquired through life and
work, have experienced more complex situations than traditional students, and can better relate their life experiences to what they are learning in a course.

Females face additional challenges. Traditional gender roles encourage men to seek higher education for career advancement. This is less true for women, who make up the bulk of the work force in lower-status jobs, and whose career trajectories could benefit from additional education. Additionally, parenthood typically increases the amount of time women spend on household and childrearing tasks, whereas the same is not true for men (Deutsch & Schmertz, 2011). This is exacerbated by the fact that most single-parent household heads are female; in 2012, fifteen million single-parent households were headed by women as compared to five million headed by men (Vespa, Lewis, & Kreider, 2012). Financial strains for women are often greater due to lower salaries and additional childcare needs. Emotional and time strains are also increased for women due to cultural expectations on women to care for immediate and extended family members. Women are typically the primary responders when an aging parent or a child falls sick. Even when women have supportive partners who share household and family responsibilities, women having positive experiences in college still feel guilty about not meeting traditional gendered cultural expectations. Even though male parents also feel guilty about spending time on school instead of children, women who have multiple roles and competing demands on their time are less likely to persist than men with similar roles and time demands. (Deutsch & Schmertz, 2011; Fairchild, 2003, Hutchens, 2016). Kasworm (2014) noted that connections in the classroom, and especially a strong relationship with an instructor, “becomes the most powerful influence on their academic career” (p. 70).
Nontraditional students and instruction. Several factors contribute to nontraditional students’ positive relationships with faculty. The similarities in age and life roles between faculty and nontraditional students creates a level of comfort that encourages nontraditional students to approach faculty. In turn, faculty often appreciate the maturity level and life experiences of nontraditional students (Deutsch & Schmertz, 2011; Graham & Gisi, 2000; Hutchens, 2016; Wyatt, 2011). Despite these familiarities, it is necessary for faculty to learn about and incorporate teaching methods relevant to nontraditional learners, whether the environment is in-person or online (Arghode, Brieger, & McLean, 2017; Johnson & Rose, 2015; Knowles, 1984; Wyatt 2011)

Nontraditional students typically are focused about their educational choice and view their education as an investment, both financial and personal. This is reflected in the effort they put into their academic experiences (Fairchild, 2003; Hutchens, 2016). Through a review of the Indiana University Center’s National Survey of Student Engagement, Wyatt (2011) found that nontraditional students’ engagement and activity in the classroom is considerably higher than that of traditional students. Nontraditional students were more likely to ask questions or speak up in classroom discussions than traditional students (80% to 72%), prepare multiple drafts of papers (61% to 40%), and come to class prepared with complete assignments (87% to 76%). Various theorists have made attempts to identify why adults have increased levels of engagement in their studies. One of the earliest educational theorists to focus on nontraditional/adult learners was Malcolm Knowles.

Knowles recognized that there was a difference between teaching children and teaching adults and promoted the model of andragogy to distinguish teaching adults
from the model of pedagogy (teaching children). The basic tenets of andragogy are: a) the adult is responsible for her own learning, b) the adult has a wealth of experience on which to build their learning and can offer themselves as resources for learning to others, c) adults learn when they have a need to learn, d) adults learn better when instruction is centered around a particular task to be done or a problem to be solved, e) and adults respond more positively when learning is associated with “self-esteem, recognition, better quality of life, greater self-confidence, self-actualization, and the life” (Knowles, 1984, p. 12). Approaching instruction in this manner means that faculty need to take into account the life experiences and learning motivation of adults and nontraditional learners. Instructors function as facilitators of learning rather than as content deliverers. Knowles recommended that the instructor should create a comfortable and welcoming climate where all learners show respect for, trust, and support each other. The learning environment should provide opportunities to collaborate, and participants are open, authentic and human with each other. He also proposed allowing adults to have some say in the direction of the learning. Adults will engage more in the learning if they can identify what, how, why, and when they want to learn, and provide opportunities for self-evaluation (Knowles, 1984). Knowles’ work focused on in-person instruction, but his recommendations can be extended to online environments as well. However, it is not enough for the instruction to be designed for adult learners; the logistics of higher education offerings also need to be designed for nontraditional learners.

For centuries, higher education was designed for the traditional student: residential, full-time, and day-time. While changes made to course delivery systems in
the last few decades have put college in reach of nontraditional students, adults still find it difficult to access higher education. Nontraditional students often choose institutions that are accessible to them, which may mean physical proximity, but increasingly it means that the institution’s course schedules or course delivery formats are flexible and can accommodate their work and childcare schedules (Hutchens, 2016; Kasworm, 2003b, Kasworm, 2014; La Monica, 1997). Colleges with course schedules that do not address the needs of students who work during the weekdays can lose nontraditional learner enrollment (Graham & Gisi, 2000). Online instruction is a critical tool for nontraditional learners as it addresses the fact that these students are often working, many of them full-time, and that they need the flexibility of learning on their own schedule (Compton, Cox, & Laanan, 2006). However, unless instructors have received or sought out training in implementing andragogical approaches in their teaching, online instruction does not always provide opportunities for deep instructor-student or student-student connections or for acknowledging adults’ experiences.

Instruction that accommodates nontraditional learners’ experiences and circumstances is not enough. Counselors and non-instructional student support staff need a similar understanding in order to be effective support for nontraditional students. Recruitment and retention efforts from student services focus on first year experiences often featuring living-learning communities, week or weeks-long summer bridge programs, college success courses geared toward the development of the young adult, and other programs in which nontraditional students cannot participate or for whom the content is not appropriate. Several researchers recommend having dedicated counselors or programs that support only nontraditional students (Goncalves & Trunk, 2000; Wyatt,
One of the realities of nontraditional students is when, not if, life circumstances will impact academics. For some students, it may be minimal, such as when a babysitter is sick, and the student has to miss class to be home with their child. For others, it may mean leaving college for a semester or two to care for an ailing parent. Others may experience disruption in their academic goals due to job transfers that move them away from their institutions. Nontraditional students need counselors who will treat them as individuals, not as a homogeneous group. Counselors must recognize and have empathy for these students as they start and stop their college experience (Kasworm, 2014).

Nontraditional students are diverse in their life experiences and responsibilities, as well as their experience with higher education, which can range from none to decades. These experiences can be positive or negative. At a basic level, advising needs to be available to nontraditional students when they can make use of it, typically evenings and weekends, and advisors must respond quickly to students who are participating in accelerated programs (Compton, Cox, & Laanan, 2006; Fairchild, 2003; Kasworm, 2003b, Kasworm, 2014; Wlodkowski, 2003).

**Nontraditional students summary.** The literature on nontraditional students is rich. It reveals that the definition of nontraditional students has changed over time (Hutchens, 2016; “Nontraditional students,” n.d.), and that nontraditional student enrollment in college is steadily increasing (Compton, Cox, & Laanan, 2006; Deutsch & Schmertz, 2011; Kasworm, 2003b). Nontraditional learners primarily pursue learning to meet vocational or personal goals, in reaction to a life transition, or for mental stimulation (Deutsch & Schmertz, 2011; Kasworm, 2003b; Knowles, 1984, Merriam, Caffarella, & Baumgartner, 2007). While nontraditional students face challenges in
higher education, they are often well-equipped to deal with these challenges due to life experiences (Fairchild, 2003; Graham & Gisi, 2000; Hutchens, 2016). To aid nontraditional students, it is incumbent on institutions to evaluate their teaching approach and the logistics of course offerings to create environments that facilitate nontraditional student success (Compton, Cox, & Laanan, 2006; Graham & Gisi, 2000; Hutchens, 2016; Kasworm, 2003b, Kasworm, 2014; Knowles, 1984; LaMonica, 1997). Finally, dedicated staff and faculty trained to work with nontraditional students can also improve success rates (Compton, Cox, & Laanan, 2006; Fairchild, 2003; Goncalves & Trunk, 2000; Kasworm, 2003b, Kasworm, 2014; Wlodkowski, 2003; Wyatt, 2011).

However, the literature does not address the needs of nontraditional students who are involved in a cohort program utilizing compressed courses at the community college level.

**Cohorts**

**Definition of cohorts.** Cohorts are a small group of students who begin their program of study together and follow the same pattern of coursework through the completion of their program (Harris, 2006). Tinto’s framework for social and academic integration recommends scheduling students together in blocks of courses together to create opportunities for relationship development. Tinto also recommends learning communities, although learning communities are typically either limited to one term or one year of co-scheduled courses around a theme (often a first-year experience or developmental education) and/or can involve a residential component (Tinto, 1998). Both of these can be impractical for nontraditional students. Due to the nature of repeated contact in the same set of courses over time, cohorts can achieve a similar sort
of social familiarity for nontraditional students. This can increase connections within the academic environment. Developing relationships among students, faculty, and staff, can increase nontraditional students’ feelings of belonging in higher education and potentially decrease feelings of fear and doubt about their participation. Cohorts have been used to promote academic success at every level of higher education, from graduate and professional school programs to undergraduate nursing programs, and more recently, with students in accelerated developmental education at community colleges. Data analysis of the last group has shown that students in the development education cohort had a three-year graduation rate of 54.9% compared to a non-cohort group which had only a 24% rate (Tinto, 2013). Strong social relationships in the learning context can lead to nontraditional students helping each other develop a sense of belonging in the college environment (Tinto, 1998).

**Cohorts and social integration for nontraditional students.** Having a sense of belonging can strengthen positive college experiences and help mitigate negative ones. Many nontraditional students have previous positive and negative experiences in higher education; increasing positive social experiences could increase the likelihood of developing a concept of self-efficacy, or how competent nontraditional students are likely to feel in a specific environment (Beachboard, Beachboard, Li, & Adkison, 2011; Merriam, Caffarella, & Baumgartner, 2007; Wlodkowski, 2003). For nontraditional female students in particular, smaller class sizes, positive relationships with faculty, and life experiences often help them feel more valuable to the learning community. Creating a sense of community and building relationships, particularly with other nontraditional women, is key to succeeding in college. (Deutsch & Schmertz, 2011; Fairchild, 2003).
"We are created, not for isolation, but for relationships" (Johnson & Johnson, 2013, p. 96). However, nontraditional students have less time than traditional students to devote to building relationships. The typical ways for traditional students to increase social connections – living on campus, involvement in clubs and organizations, on-campus jobs, first year experiences – do not work for the typical nontraditional student (Hutchens, 2016). Cohorts can provide the mechanism for repeated and frequent exposure to the same small group of students, staff, and faculty, accelerating social interaction and relationship building. Additionally, in a cohort, the students know that they will be with the same group of peers for the next several months, semesters, or years, depending on the length of the program. Harris’ (2006) research focused on creating community in learning environments found that peer-to-peer relationships can increase a sense of belonging at the institution. When a nontraditional student gets to know more students like themself as successful college students, it helps the nontraditional student’s transition into college. Having friends in college, especially friends who share similar experiences, can lead to student satisfaction with the institution (Harris, 2006). Additionally, Harris (2006) found that close relationships among students in a cohort led to members feeling responsible for each other emotionally; they support each other through successes and struggles. Harris also found that having a shared goal (of college completion) was a significant factor in completing college (2006). Johnson and Johnson researched group cohesion and found that smaller groups are more likely to have members that remain in the group, reach their shared goals, and influence each other (2013). Students with similar experiences such as time limitations and family/work obligations can provide empathy and concrete suggestions
for time management, completing campus procedures, academic study skills and other success strategies (Merriam & Brockett, 2007). Additional research found that support from peers in college can reduce stress. This is particularly true among adult women students, due to the limited support network adult women typically have outside the college environment (Johnson, Schwartz, & Bower, 2000). This statement from an adult student in a cohort-based program reflects these findings:

And over time, they become your support group, and you learn to talk about your fears and your problems and anything you are having difficulties within school, as well as out of school with this group of people. And they help you work through things (Kasworm, 2003a, p. 20).

**Link between social integration and academic integration.** Many educators, including the American Association for Higher Education, the American College Personnel Association, and the National Association of Student Personnel Administrators recognize that learning is a social activity (“Powerful partnerships,” 1998; Jacoby, 2000; Lei, Gorelick, Short, Smallwood, & Wright-Porter, 2011). Tinto poses the question that perhaps “fulfilling the one need, social, is, for many students, a developmental precondition for addressing the need for intellectual engagement?” (Tinto, 1997, p. 618). Institutions should therefore try to create an environment in which students feel included. Being part of a cohort can help students immediately identify with one another and lessen the anxiety of being a new or returning student (Tinto, 1997). The inclusivity developed in a cohort can increase trust among members, which can help students weather times of uncertainty and dissent that can accompany learning. Due to higher levels of trust and respect, students feel safer in taking risks in their class
participation. This can facilitate students coming together in groups for collaborative learning (Engstrom & Tinto, 2008; Spaid & Duff, 2009; Wlodkowski & Ginsberg, 2010). In hybrid cohorts, face to face interactions in in-person courses help build familiarity and trust which can enrich the online experience because students know who they are communicating with when posting and responding to discussion topics. In addition, the expectation that every person contributes to the discussion in the online portion of hybrid cohorts can positively contribute to face to face discussions by helping cohort members to feel more comfortable speaking up in the classroom (Rausch & Crawford, 2012). Students who have developed relationships in cohorts will also reach out to one another for academic supports such as study groups, guidance on assignments, or collectively approaching an instructor with an issue about a course (LaMonica, 1997; Lei, Gorelick, Short, Smallwood, & Wright-Porter, 2011; Tinto, 1997).

One recommendation to help facilitate these relationships is that colleges reorganize their curriculum into co-registration or block scheduling, which is a hallmark of cohort programs (Tinto, 1998). This can help create a community and promote “academic- and career-related relationships, rather than social relationships” (Davidson & Wilson, 2013, p. 341). Kasworm’s research on adult connection in college also found that nontraditional students view connection differently than traditional students in that their “sense of engagement was based in their academic learning in the classroom” (Kasworm, 2014. P. 69). Nontraditional students value strong connections with faculty; cohort programs enhance these student-faculty connections when faculty teach multiple courses for the program. Faculty connected to cohorts can often serve as conduits to
other student support services, such as tutoring and personal counseling, which can also serve as social relationships (Davidson & Wilson, 2013; Engstrom & Tinto, 2008).

**Negative attributes of cohorts.** It is also possible that cohorts can hinder learning. Students do not have choices about the courses they take in a closed cohort, which may engender lack of engagement in a particular course. Social cliques can develop in a cohort, and some members may be excluded (Lei, Gorelick, Short, Smallwood, & Wright-Porter, 2011). A sense of isolation can deepen for a member of a cohort who sees other members coming together in relationship, but who does or cannot build those relationships for herself. Non-cohort participants can also feel socially shunned in courses (Beachboard, Beachboard, Li, & Adkinson, 2011). Cohorts can also form strong negative ideas about instructors. Saltiel and Russo (2001) found adverse learning effects in situations where a cohort labels an instructor as ineffectual and negate their contributions to learning (p. 61). Lei, Gorelick, Short, Smallwood, and Wright-Porter (2011) also found that cohort members will sometimes negatively compare instructors teaching within a cohort, and verbally share frustrations with students, staff, and other instructors about the amount of reading, writing, or exams from a particular instructor. When a cohort develops a collective personality of negativity, the benefits of the cohort are undermined. However, these risks seem small when weighed with the potential benefits offered by cohort membership.

**Cohort summary.** Learning communities, with carefully integrated instruction and/or a residential component, have been used by institutions to facilitate social and academic integration for traditional students. These are often impractical for nontraditional students. Cohorts can approximate the social and academic integration
benefits of learning communities for nontraditional students due to repeated exposure to the same group of students, and faculty. Cohorts can help build a sense of self-efficacy, community, and belonging in the college environment for this population - especially for women students (Beachboard, Beachboard, Li, & Adkinson, 2011; Deutsch & Schmertz, 2011; Fairchild, 2003; Merriam, Caffarella, & Baumgartner, 2007; Tinto, 1998; Wlodkowski, 2003). Due to shared goals, cohorts can develop as peer support groups offering encouragement and success strategies among members (Harris, 2013; Johnson & Johnson, 2013; Johnson, Schwartz, & Bower, 2000; Merriam & Brockett, 2007). The social relationships developed in cohorts can influence academic relationships and lead to greater levels of trust and risk-taking when discussing educational content, as well as the development of support for outside study among members (Engstrom & Tinto, 2008; La Monica, 1997; Lei, Gorelick, Short, Smallwood, & Wright-Porter, 2011; Rausch & Crawford, 2012; Spaid & Duff, 2009; Tinto, 1997; Wlodkowski & Ginsberg, 2010). Because nontraditional students have little time outside of class for social interactions due to competing life responsibilities, social integration often takes place inside the classroom with other students as well as with instructors (Davidson & Wilson, 2013, p. 341; Kasworm, 2014; Tinto, 1993; Tinto, 1997). Lastly, there are risks that cohorts may develop negative group identities that shut out non-cohort students or unfairly target instructors (Beachboard, Beachboard, Li, & Adkinson, 2011; Lei, Gorelick, Short, Smallwood, & Wright-Porter, 2011; Saltiel & Russo; 2001). In general, it appears that cohorts have the potential to facilitate social and academic integration for nontraditional students with minimal negative impacts. The literature does not address the efficacy of
cohorts for nontraditional students at the community college when compressed courses are utilized.

**Alternative Terms and Time-Compressed Courses**

**Definition of academic terms and time-compressed courses.** The original academic year, starting in late summer/early fall and ending in late spring, accommodated the labor force needs of agrarian societies. The most common course term is the semester system: fall and spring, with summers off or reserved for optional study. Less common is the 10-week quarter system – fall, winter, spring, with summer as an option. The quarter system is utilized by all public two- and four-year institutions in Oregon, and also at most of the University of California campuses. The efficacy of various term lengths has long been a topic of debate in the United States. James (1930) surveyed 121 colleges and universities throughout the United States about their academic term length and their beliefs about the administrative and instructional effectiveness of each. Of the 109 respondents, 77 were on the semester system, 22 on the quarter system, and the remainder on an alternative schedule. Approximately 20% of the institutions had changed from one system to the other in the previous five years. In general, college presidents expressed a preference for the system their college utilized. While the surveys were simple, and the results based on the perceptions of only one representative from each institution, the research does indicate that educators’ questions about term length effectiveness is not new (James, 1930).

**Use of alternative terms in higher education.** In more recent years, educators have been more creative with the academic calendar. Some offer compressed courses between fall and spring semesters. Many California State Universities and some
California Community Colleges offer 3-week “intersession” courses during the January break. Other institutions create a variety of length of courses in the summer (some as short as two weeks). Many community colleges, including California community colleges, offer late-start courses that begin one, two, or more weeks after the regular term starts to allow students who may only consider attending college when they hear that the term is starting. Other institutions have created “terms within terms,” that allow students to enroll full-time but concentrate on fewer courses at one time. This is the model for the Shasta College ACE program. Still others, like National University, utilize block scheduling where students take only one course at a time, usually one per month.

Alternative calendars provide flexibility for instructors and students alike. For instance, some students may not be able to spend a full year studying abroad, but they are able to spend one month in summer taking a single course in another country. For nontraditional students, alternative calendars can provide the means to attend college and keep up with other responsibilities such as work, military deployment, and family (Almquist, 2015; Wlodkowski, 2003).

**Use of compressed courses for nontraditional students.** The growth of nontraditional populations in colleges in the 1960’s and 1970’s found colleges moving towards degree-focused adult programs that utilized compressed courses and alternative schedules as a way for working students to complete their schooling in a timely fashion (Husson & Kennedy, 2003; Johnson & Rose, 2015; LaMonica, 1997; Wlodkowski, 2003). Alternative schedules coupled with compressed courses increase enrollment and momentum. This is particularly desirable for older students who feel the pressure of time and want to complete their degrees as soon as possible. Compare the following
traditional fall/spring semester with summers off schedule (Table 1) to a year-round schedule utilizing 8-week terms within the semesters (Table 2):

Table 1: *Community College Semester Enrollment Featuring Traditional Schedule and Course Lengths – Full-Time*

<table>
<thead>
<tr>
<th>Academic Term</th>
<th>Fall Semester (4 months)</th>
<th>Spring Semester (4 months)</th>
<th>Summer (3 months)</th>
<th>Units completed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year 1</strong></td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td>n/a</td>
<td>30 units/year</td>
</tr>
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<td></td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td></td>
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<td>Course – 3 units</td>
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<td></td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Year 2</strong></td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td>n/a</td>
<td>30 units/year</td>
</tr>
<tr>
<td></td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
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<td></td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
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<td></td>
</tr>
</tbody>
</table>

Total units completed in 21 months: **60 units**

Table 2: *Community College Semester Enrollment Featuring 8-week Blocks Within Traditional Semesters Plus Summer Enrollment – Full-Time*

<table>
<thead>
<tr>
<th>Academic Term</th>
<th>Fall Semester (Two 8-week blocks)</th>
<th>Spring Semester (Two 8-week blocks)</th>
<th>Summer (One 8-week block)</th>
<th>Units completed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year 1</strong></td>
<td>Course-3 units</td>
<td>Course-3 units</td>
<td>Course-3 units</td>
<td>30 units/year</td>
</tr>
<tr>
<td></td>
<td>Course-3 units</td>
<td>Course-3 units</td>
<td>Course-3 units</td>
<td></td>
</tr>
<tr>
<td><strong>Year 2</strong></td>
<td>Course-3 units</td>
<td>Course-3 units</td>
<td>Course-3 units</td>
<td>30 units/year</td>
</tr>
<tr>
<td></td>
<td>Course-3 units</td>
<td>Course-3 units</td>
<td>Course-3 units</td>
<td></td>
</tr>
</tbody>
</table>

Total units completed in 24 months: **60 units**
In the example of the traditional schedule in Table 1, a working nontraditional student with family responsibilities must balance the needs of those existing obligations with content from five different courses, five different instructors, and five sets of classmates. If the coursework is taught solely face-to-face, and the student worked a Monday-Friday 8:00 am to 5:00 pm schedule, the student would attend class from roughly 5:30 to 9:30 or 10:00 pm every night of the week. Additionally, they would pause their momentum for three months in the summer. Should a work or family crisis occur in week ten of any semester that necessitated the student taking a break from their studies and dropping their courses, all progress for that semester would be lost and the student will take longer to complete the degree. Even if the interruption is less severe and the student only drops one or two courses, they would still need an extra semester to complete those missing courses. Life can quickly turn a 21-month program into a 25-month (or longer) program. This results in a loss of student time and effort, as well as a loss of money (the student’s or financial aid funds). Additionally, there is the loss to the institution’s time-to-degree completion and enrollment statistics.

The schedule featured in Table 2 represents the traditional August to May fall/spring semester schedule, but also makes use of the summer months and features 8-week compressed courses that fit within the semester. Compressed courses are more intense in their pace but allow students to focus on a smaller number of courses, instructors, and classmates at any one time; in this example, only two courses at a time (Kasworm, 2003a). A student interviewed about his experience in a program featuring accelerated courses stated, “you do have to think very hard for class, but you don’t have to think of anything else” (Kasworm, 2003a, p. 17). Focusing on only two classes at a
time reduces the student’s cognitive load, which is already burdened with work and family obligations (Almquist, 2015). This schedule also spreads the load out over the summer. Juggling work, family, and two courses is still a heavy load, but more manageable. In addition, if the student has a work or family crisis in week ten of the semester and has to reduce their workload, they would only have to drop two courses, and they would have already completed six units in the first half of the semester. Further, their overall program length would be extended by only two months to make up the missing courses.

The above two scenarios present a student attending school full-time. The time to completion differences are more dramatic if a student attends college part-time. The following student taking only one class at a time could be enrolled at her community college for ten years to complete what is commonly referred to as a two-year degree (Wlodkowski & Ginsberg, 2010):

Table 3: Community College Semester Enrollment Featuring Traditional Schedule and Course Lengths – One Course at a Time

<table>
<thead>
<tr>
<th>Year</th>
<th>Academic Term</th>
<th>Fall Semester (4 months)</th>
<th>Spring Semester (4 months)</th>
<th>Summer (3 months)</th>
<th>Units completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td></td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td>none</td>
<td>6 units/year</td>
</tr>
<tr>
<td>Year 2</td>
<td></td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td>none</td>
<td>6 units/year</td>
</tr>
<tr>
<td>Year 3</td>
<td></td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td>none</td>
<td>6 units/year</td>
</tr>
<tr>
<td>Year 4</td>
<td></td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td>none</td>
<td>6 units/year</td>
</tr>
<tr>
<td>Year 5</td>
<td></td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td>none</td>
<td>6 units/year</td>
</tr>
<tr>
<td>Year 6</td>
<td></td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td>none</td>
<td>6 units/year</td>
</tr>
<tr>
<td>Year 7</td>
<td></td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td>none</td>
<td>6 units/year</td>
</tr>
<tr>
<td>Year 8</td>
<td></td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td>none</td>
<td>6 units/year</td>
</tr>
<tr>
<td>Year 9</td>
<td></td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td>none</td>
<td>6 units/year</td>
</tr>
<tr>
<td>Year 10</td>
<td></td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td>none</td>
<td>6 units/year</td>
</tr>
</tbody>
</table>

Total units completed in 10 years: **60 units**
The same student could decrease her time to completion to seven years by taking one additional course each summer, as shown in Table 4:

Table 4: *Community College Semester Enrollment Featuring Traditional Schedule and Course Lengths Plus Summer Enrollment – One Course at a Time*

<table>
<thead>
<tr>
<th>Academic Term</th>
<th>Fall Semester (4 months)</th>
<th>Spring Semester (4 months)</th>
<th>Summer (3 months)</th>
<th>Units completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td>9 units/year</td>
</tr>
<tr>
<td>Year 2</td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td>9 units/year</td>
</tr>
<tr>
<td>Year 3</td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td>9 units/year</td>
</tr>
<tr>
<td>Year 4</td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td>9 units/year</td>
</tr>
<tr>
<td>Year 5</td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td>9 units/year</td>
</tr>
<tr>
<td>Year 6</td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td>9 units/year</td>
</tr>
<tr>
<td>Year 7</td>
<td>Course – 3 units</td>
<td>Course – 3 units</td>
<td>none</td>
<td>6 units/year</td>
</tr>
</tbody>
</table>

Total units completed in 7 years: **60 units**

Using compressed courses, if the student chose to take only one course at a time, she could complete an associate degree in four years (Table 5).

Table 5: *Community College Semester Enrollment Featuring 8-week Blocks Within Semesters Plus Summer Enrollment – One Course at a Time*

<table>
<thead>
<tr>
<th>Academic Term</th>
<th>Fall Semester (Two 8-week blocks)</th>
<th>Spring Semester (Two 8-week blocks)</th>
<th>Summer (One 8-week block)</th>
<th>Units completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>Course-3 units</td>
<td>Course-3 units</td>
<td>Course-3 units</td>
<td>15 units/year</td>
</tr>
<tr>
<td>Year 2</td>
<td>Course-3 units</td>
<td>Course-3 units</td>
<td>Course-3 units</td>
<td>15 units/year</td>
</tr>
<tr>
<td>Year 3</td>
<td>Course-3 units</td>
<td>Course-3 units</td>
<td>Course-3 units</td>
<td>15 units/year</td>
</tr>
<tr>
<td>Year 4</td>
<td>Course-3 units</td>
<td>Course-3 units</td>
<td>Course-3 units</td>
<td>15 units/year</td>
</tr>
</tbody>
</table>
Student, faculty, and administrative interest in compressed courses. It is not difficult to understand why nontraditional students might be attracted to alternative scheduling and compressed courses, whether pursuing their studies full-time or part-time. It is worth noting that compressed courses take significant adjustment for students. A student in Kasworm’s (2003a) study stated

Starting this program, it just comes right in at once and it was very confusing, a lot of information real fast. And it’s a lot to absorb, a lot to comprehend. So probably for the first month, I was really confused. But as time progressed, you get your feet on the ground, and you understand how the system works. You become more comfortable and go from there (Kasworm, 2003a, p. 17).

Almquist’s (2015) research into compressed courses and student success found that California Community College students surveyed in 2002 stated significant interest in taking compressed summer and winter intersession courses (70% and 60% respectively). The same research found that full-time faculty members were less interested in teaching these courses (16% interested in 10-week summer, 26% interested in 5-week summer courses, with half of the faculty interested in winter intersession classes). Part-time adjunct faculty were willing to teach anytime, in any format (Almquist, 2015). There is a disconnect between student enthusiasm for taking compressed courses and full-time faculty willingness to teach them.

Some full-time faculty at public institutions have concerns about maintaining academic rigor and facilitating in-depth learning in compressed courses. Some faculty
worry that they, or other faculty, may reduce course content or be more lenient in
assessing students in a compressed course, or that students will not have sufficient
enough time with instructors and students to develop trust (Brookfield, 2003; Husson &
Kennedy, 2003; Wlodkowski, 2003). Further, the association of compressed classes and
alternative scheduling with the for-profit higher education world worries some faculty.
“Accelerated learning formats, because they are often linked to proprietary institutions,
are seen in the critical tradition as suspect” (Brookfield, 2003, p. 74; Wlodkowski,
2003). For-profit colleges have made their institutions more accessible to nontraditional
students, through rolling admissions, multiple start dates through the year, alternative
scheduling, online instruction, and compressed and accelerated courses. Faculty at brick
and mortar institutions of higher education, especially public institutions, have been
reluctant to deviate from the traditional schedule, citing academic integrity as the reason
(Swenson, 2003). It is important to note that there is often little question about the
validity of the instruction or learning taking place in traditional term length, face-to-face
format. In other words, “traditional higher education has based some of its standard
practices on assumptions that beg for examination” (Swenson, 2003, p. 85).

However, research comparing accelerated courses and traditional length courses
found that educational outcomes were typically as good as and sometimes better than
traditional length courses (Johnson & Rose, 2015; Payne & Mullen, 2014; Scott, 2003;
Wlodkowski, 2003). A small, interpretive qualitative study interviewing faculty
teaching both accelerated and traditional length course found since the majority of the
students in the accelerated courses were adults, instructors often shifted their teaching
methods from lecture to case studies, discussion, and application. Additionally, many
instructors were asked to teach an accelerated course without any preparation or training, and also admitted they often felt isolated from other faculty and normal campus operations (Johnson & Rose, 2015). To combat the perception that accelerated or compressed courses are “less-than,” it is critical to support faculty who are teaching these courses and include the faculty in the life of the campus. Compressed courses and their instructors, like their traditional full-term counterparts, need to be monitored and evaluated by peers and administration (Wlodkowski & Kasworm, 2003).

Common concerns among administrators at public institutions include: a) course success rates for students, b) faculty push-back, and c) other administrative processes may not support compressed courses (e.g., registration, financial aid, assessment and placement). Administrators do need to consider how implementing compressed coursework or programs that make use of compressed courses will impact their institutions’ administrative and instructional practices (Almquist, 2015; Husson & Kennedy, 2003). Additionally, nontraditional students in compressed courses could increase enrollments for higher education institutions. National Center for Educational Statistics data showed that 21.7% of nontraditional students in 2011-2012 were enrolled in private non- and for-profit institutions administrations (“Demographic,” 2015). Public institution administrators could realize increased enrollments if they were willing to make changes (LaMonica, 1997; Wlodkowski & Kasworm, 2003). In short, the demand for compressed courses and alternative schedules is not going away. Faculty and administrators must ensure that they carefully plan their implementation of these strategies to increase student success (Wlodkowski & Kasworm, 2003).
**Student success in compressed courses.** Student success is achievable in compressed courses. Geltner and Logan’s (2001) research of 414,076 students who took compressed and full-term coursework at Santa Monica College, a California Community College, found that students taking compressed (6-week and 8-week) courses had higher success rates, higher average grades, and higher rates of course completion than 16-week full-term courses. One possible connection between compressed courses and higher success rates is that “proximal goals are far more achievable than distal goals” (Wlodkowski & Westover, 1999). Additional research conducted at the same college that focused on 21,165 student records from compressed developmental education courses demonstrated that

Students enrolled in compressed-format courses were more likely to succeed than students enrolled in regular-length courses. Higher successful course completion rates for compressed courses were observed across all departments, with the highest successful course completion rates in the eight-week format in English. Further, students—irrespective of age, race, or gender—were more likely to successfully complete compressed-format courses than their counterparts in regular-length courses (Sheldon & Durdella, 2009, p. 39-40).

Spurling’s (2001) research into student success focused on the increased number of instructional hours per week in compressed formats as well as high intensity courses (courses taken in the same subject area concurrently). For instance, a 3-unit lecture course in a 16-week semester meets three hours per week. In a compressed 8-week class, students meet for six hours per week. He hypothesized that the increased number of hours per week could be a contributing factor in increased student success but
admitted that further research needed to be conducted on the topic. Multiple studies comparing traditional Bachelor of Science in Nursing students with post-baccalaureate accelerated BSN programs demonstrated that, overall, the accelerated students had no discernable differences in grade point averages or National Council Licensure Examination (NCLEX) pass rates (Payne & Mullen, 2014). Wlodkowski and Westover’s (1999) research compared a small set of courses offered in traditional and accelerated formats by the same set of instructors. They found that student performance in either format was not statistically different, with the exception of financial accounting courses, which showed slightly better student outcomes in the accelerated format.

Even though initial research on student success in compressed courses is positive, it is incumbent upon institutions to provide support to students and faculty alike to increase the possibility of success. Additional recommendations for implementing compressed coursework include providing academic supports such as tutoring (LaMonica, 1997), non-academic supports such as case management and academic advising, ensuring instructors receive training and continued professional development on best teaching practices for compressed courses, and selecting appropriate subject matter content for compression (Almquist, 2015; Wlodkowski, 2003). Case management and academic advising appear to help increase students’ awareness about appropriate student load (number of units enrolled during a term as well as expectations about the amount of time required for instruction, reading, homework, and assignments). Ensuring students’ readiness for college level coursework through assessment is another critical factor. Programs such as in City University of New York’s Accelerated Study in
Associate Programs and the Community College of Denver’s FastStart program have utilized these strategies with success (Almquist, 2015; LaMonica, 1997).

**Instructional strategies for compressed courses.** Academic supports in compressed courses include instructional strategies such as active and applied learning, interaction among class members, and discussion (Scott, 2003; Wlodkowski and Ginsberg, 2010). An overreliance on the lecture as an instructional method can make a compressed course a negative experience (Scott, 2003; Swenson, 2003). Swenson (2003) points out that “teaching is neither a necessary nor sufficient condition to ensure that learning occurs” (p. 84). Swenson goes on to say that in order to evaluate the quality of learning in an accelerated program, instructors should follow these principles:

- Does instruction require learners to be actively involved in their own learning?
- Does instruction make use of the learner’s life and work experience?
- Does instruction allow adequate time for reflection?
- Does the program individualize instruction to the greatest possible degree? (Swenson, 2003, p. 89-90).

Swenson’s recommendations are consistent with Knowles’ theory of andragogy and its assumptions about adult learners: that adults are self-directed; that they have life experience that can inform their own and other students’ learning; and that reflection can help them determine how to best personalize their learning and make it meaningful to themselves (Knowles, 1984). Since compressed courses often have higher than average enrollments of adult students, instructors should take advantage of their students’ experiences and show an openness to learning from their students (Scott, 2003; Wlodkowski & Ginsberg, 2010). According to Geltner and Logan (2001), the selection
of the optimal length for compressed courses is still a matter for additional research and may vary according to the subject matter and unit value of the course. Even though there is still discussion about optimal length of time for a course, there is agreement that using appropriate teaching methods for nontraditional students in compressed courses is always a good idea.

Another resource for instructors teaching compressed courses is Wlodkowski and Ginsberg’s model for a Motivational Framework for Culturally Responsive Teaching. Wlodkowski’s background in accelerated teaching and learning, coupled with Ginsberg’s expertise in culturally responsive teaching have been blended to provide guidance to instructors working with any student population. The goal is to increase students’ motivation by ensuring that the following conditions are present in any learning environment:

1. *Establishing inclusion* by demonstrating and expecting respect and connection among participants and the instructor

2. *Developing an attitude* for learning by making content relevant to learners

3. *Enhancing meaning* through engagement and providing challenging experiences

4. *Engendering competence* by helping learners connect what they have learned to their real-world experiences (Wlodkowski & Ginsberg, 2010)

Although the above conditions benefit any learning environment, creating a learning environment that incorporates these elements is particularly relevant in a compressed course. Due to the overall shorter duration of the course, quickly establishing these elements creates an environment conducive to facilitating deeper discussions about academic content. This is especially effective when instructors have longer blocks of
time per class session, which is common to compressed courses (Wlodkowski & Ginsberg, 2010). Adhering to these principles can also help students academically integrate into the college environment and consequently increase persistence and success.

**Alternative terms and time-compressed courses summary.** Alternative calendars and compressed courses can be the means to help nontraditional students balance work, college, family, and other responsibilities (Almquist, 2015; Husson & Kennedy, 2003; Johnson & Rose, 2015; Kasworm, 2003a; LaMonica, 1997; Wlodkowski). Compressed courses can allow students to make full-time progress while concentrating on fewer classes at any one time. There is concern by some faculty that compressed courses do not allow sufficient time for learning (Brookfield, 2003; Husson & Kennedy, 2003; Wlodkowski, 2003), but studies have demonstrated that learning outcomes for compressed and accelerated courses often are as good as and sometimes even better than traditional length courses (Geltner & Logan, 2001; Johnson & Rose, 2015; Payne & Mullen, 2014; Scott, 2003; Sheldon & Durdella, 2009; Wlodkowski, 2003; Wlodkowski & Westover, 1999). Non-academic and academic supports such as tutoring, case management, and professional development for instructors can increase students’ chances for success in compressed courses (Almquist, 2015; LaMonica, 1997; Wlodkowski, 2003). While there is currently no definitive best length of time agreed upon for a compressed course (Geltner & Logan, 2001), it is important that instructors teaching compressed coursework receive professional development to ensure they understand and can implement best practices for learning theory relevant to compressed instructional time frames (Scott, 2003; Swenson, 2003; Wlodkowski and Ginsberg,
2010). Overall, the literature on compressed courses indicates compressed courses are a viable instructional strategy. However, the literature does not address the efficacy of compressed courses in a cohort program for nontraditional students at the community college level.

**Literature Review Summary**

The number of nontraditional students in American colleges and universities is increasing (Hussar & Bailey, 2008). In general, institutions of higher education are increasingly looking at how to offer better supports to nontraditional students with alternative instructional delivery systems and schedules and dedicated staffing (Goncalves & Trunk, 2014; Hutchens, 2016; Kasworm, 2003b; Kasworm, 2014; LaMonica, 1997). Nontraditional students have competing responsibilities for their time (Deutsch & Schmertz, 2011; Fairchild, 2003; Graham & Gisi, 2000; Hutchens, 2016). Their multiple roles can both help and hinder their progress as students (Eppler & Harju, 1997). Nontraditional students engage with college in a different manner than traditional students: the focus for engagement resides within the classroom and relationships that can be fostered with faculty and peers within that time constraint (Arghode, Brieger, & McLean, 2017; Davidson & Wilson, 2013; Fairchild, 2003, Hutchens, 2016; Kasworm, 2014; Wyatt, 2011). Relationships developed within the classroom can help nontraditional students integrate into the college environment socially and academically, although the social integration looks different than for traditional students (Davidson & Wilson, 2013). Cohort-based programs can facilitate and accelerate the development of relationships among and between students, staff, and faculty (Deutsch & Schmertz, 2011; Fairchild, 2003; Harris, 2006; Johnson & Johnson, 2013; Kasworm, 2003; Tinto,
Institutions should also be careful to recognize and deal with situations when cohorts develop negative attitudes as these can impair learning (Beachboard, Beachboard, Li, & Adkinson, 2011; Lei, Gorelick, Short, Smallwood, & Wright-Porter, 2011; Saltiel & Russo, 2001). Time-compressed courses can be of particular use to nontraditional students as a means to increase full-time enrollment, momentum, and completion (Almquist, 2015; Husson & Kennedy, 2003; Johnson & Rose, 2015; LaMonica, 1997; Wlodkowski, 2003; Wlodkowski & Ginsberg, 2010). Studies have demonstrated that learning outcomes are on par or sometimes better in compressed classes than traditional length courses (Johnson & Rose, 2015; Payne & Mullen, 2014; Scott, 2003; Sheldon & Durdella, 2009; Wlodkowski, 2003). However, compressed courses without support or fully trained and engaged faculty may result in lower course success and diminished learning opportunities for students (Johnson & Rose, 2015; Scott, 2003; Swenson, 2003; Wlodkowski & Ginsberg, 2010; Wlodkowski & Kasworm, 2003).

Disparate research exists about nontraditional learners, cohorts, and compressed coursework, but little has focused on the combination of the three elements, especially at the community college level. Researchers have studied nontraditional learners in cohorts, but primarily at the bachelor’s or graduate level. There has been research into the success of both traditional and nontraditional learners in compressed courses at both the university and community college level. Less research exists that focuses on Associate degree level cohorts of nontraditional learners making use of compressed courses.
Methodology

Purpose

The purpose of this research is to evaluate elements of the ACE program against a framework of academic and social integration. Course success rates and students’ feelings about their level of connectedness were used as a proxy for academic and social integration. Specifically, this study analyzed a) academic course success rates in ACE-compressed courses and b) student feelings of connectedness with instructors, campus staff, and peers, for both ACE-cohort and non-ACE-cohort students. The following questions guided this research:

- Is there a statistically significant difference in the course success rate between ACE-cohort and non-ACE-cohort students in compressed ACE course sections?
- How do feelings of connection with instructors, counselors, staff or other students compare for ACE-cohort and non-ACE-cohort students?

Setting

All data reported in this study is from Shasta College, a public, two-year institution that is part of the California Community College system. It is the only public institution of higher education in a 3-county, 10,000-square mile service area in far northern California. The college is located in Redding, the largest California city north of Sacramento with an overall population of roughly 90,000 people. Redding is located 150 miles north of Sacramento and 120 miles south of the Oregon border. The overall region is considered rural, with some portions of the service area classified as frontier. The overall population of the tri-county area is 255,689 per July 1, 2017 U.S. Census Quick Facts estimates. The racial makeup of the tri-county area is 1.0% Black or
African-American, 3.3% American Indian and Alaska Native, 2.5% Asian, 0.2% Native Hawaiian and other Pacific Islander, 4.2%, 77.6% White (not Hispanic or Latino), 13.4% Hispanic or Latino (of any race), and 4.2% two or more races. 50.7% of the tri-county population is female (U.S. Census Quick Facts, 2016).

**Participant Sample**

The participant population consisted of all Shasta College students over the age of eighteen years old who completed an Accelerated College Education compressed course between June 2016 and December 2017. These students were either in the ACE program (“ACE-cohort”) or general population students (“non-ACE-cohort”). These students may or may not have been enrolled at Shasta College at the time the data was collected. Students younger than 18 years old were removed from the data set, as these students are typically still in high school and taking classes through concurrent enrollment. Age, gender, and race demographics of the participant population were collected from Colleague, the college’s student information system.

**Student Demographics**

While student demographics were not part of the research questions, a basic understanding of who took ACE compressed classes helped identify whether the program attracts nontraditional students, as the program was intended to do. Demographics also help determine if the survey response sample population had population validity to the overall student population taking ACE compressed classes.

**Race.** As can be shown from Figure 1, the racial make-up of non-ACE-cohort students taking ACE compressed classes is similar to the overall student population of Shasta College students, with the only notable exception of a much lower participation
rate in ACE compressed classes by Hispanic students (15.6% of the general student population at Shasta College, but only 3% of the non-ACE-cohort students taking ACE compressed classes), and a much higher participation rate of students identifying as “two or more races” (4.6% of general population students compared to 18% of non-ACE-cohort students). Non-ACE-cohort survey respondents had similar percentages of White students (67.14% of survey respondents compared to 66% of actual non-ACE-cohort students), but the percentage of non-ACE-cohort survey respondents who identified as Hispanic (12.9%) were much higher than the actual non-ACE-cohort population (3%).

The ACE-cohort student population shows similar patterns to the non-ACE-cohort racial breakdown, which the exception of slightly lower Black/African-American and Asian student participation (0% and 1%, respectively) and higher participation by White students (73%). The one exception is the slightly higher rate of participation in ACE compressed classes by ACE-cohort students who identified as American Indian and Alaska Native (5%) than non-ACE-cohort students (3%) and the general student population (2.7%). Unrelated to the current study, the demographic analysis indicates a need to engage in targeted marketing and outreach to the local Hispanic community. Regarding population validity, White ACE-cohort students were more likely to respond to the survey (80.7%, compared to 73% White students in the ACE-cohort). Hispanic ACE-cohort students responded to the survey in greater numbers as well (9.6% Hispanic survey respondents compared to 3% of Hispanic students in the ACE-cohort). Overall, the ACE-cohort survey respondents consisted of more White and Hispanic than the actual ACE-cohort population.
**Figure 1.** Racial Demographics of Shasta College Service Area and Student Populations

![Racial Demographics Graph](image)

**Figure 1.** Racial demographics of Shasta College tri-county service area (Shasta, Tehama, and Trinity Counties), Student Population, and Students in Compressed Courses.

3. 4 Shasta College Colleague Data, 2018

**Gender.** The gender breakdown of students taking ACE compressed classes shows that students taking these classes tend to be overwhelmingly female (Figure 2).

The overall population in the Shasta College service area is approximately half male and half female, and the general student population at Shasta College roughly reflects that
(56% female). However, non-ACE-cohort students are almost two-thirds female (63%). Survey respondents from the non-ACE-cohort were even more female (78.6%), a fifteen-percentage point difference. The gender distribution within the ACE-cohort population is significantly more female: a full three-quarters of ACE-cohort students are female (75%). The survey respondents from the ACE-cohort group were also significantly more female (84.6%); a percentage difference of almost 10 percentage points. In general, the survey respondents for both non-ACE-cohort and ACE-cohort students reflect higher numbers of female students than are reflected in each overall population size. This may affect the population validity of survey responses.

**Figure 2.** Gender Distribution of Shasta College Service Area and Student Populations

![Figure 2](image)

*Figure 2. Gender distribution of Shasta College tri-county service area (Shasta, Tehama, and Trinity Counties), Student Population, and Students in Compressed Courses.*

3. Shasta College Colleague Data, 2018
**Age.** Figure 3 provides a picture of the age distribution of students taking ACE compressed courses. In 2016, the overall Shasta College student population was 60.4% traditional aged students (24 and under) and 39.6% nontraditional aged (25 or older). The non-ACE-cohort taking ACE compressed classes is similar to the overall Shasta College student population (58% traditional aged or 24-years-old and younger). The non-ACE-cohort students responding to the survey were 57.1% 25-years-or-older, so the survey respondent population was similar to the non-ACE-cohort population in general. However, the students in the ACE-cohort are decidedly nontraditional (as defined by age), with no students younger than 18-years-old and only 17% between 18 and 24-years-old. The ACE-cohort program, which was designed for working adults, is definitely attracting nontraditional students (83% of the ACE-cohort student population). ACE-cohort survey respondents were 92.3% 25-years-old or older, which means that the survey respondents from the ACE-cohort skewed older than the overall ACE-cohort student population. Overall, the age of survey respondents for non-ACE-cohort students provides population validity, while the age of survey respondents for ACE-cohort students may affect population validity.
Summary of demographics of students taking ACE compressed courses. In general, the percentage of white, female, and nontraditional (defined by age) students is higher in the ACE-cohort than in the non-ACE-cohort student group and the overall Shasta College population. Non-ACE-cohort students tend to be more aligned with the general Shasta College population in terms of age, but they do tend to be more female. White non-ACE-cohort students are reflected in the same proportion as the general Shasta College student population, but non-ACE-cohort students in ACE compressed courses tend to have fewer Hispanic students. Overall, survey respondents from both
ACE-cohort and non-ACE-cohort do not have population validity with the actual ACE-cohort or non-ACE-cohort students in race or gender. There is population validity in age of non-ACE-cohort survey respondents to the overall non-ACE-cohort students, but the survey respondents from the ACE-cohort skews older than the actual ACE-cohort population. This means there are limitations to how well the survey data can be applied to larger populations.

**Data Collection Instruments**

ACE compressed course grade rosters were downloaded from Colleague, Shasta College’s official student information system, into Excel. Rosters included student identification numbers and demographic data (age, gender, and race). Individual student records were identified as “ACE-cohort” or “non-ACE-cohort” by comparing the student identification numbers against the student identification numbers of students in the ACE program database. In order to be a member of the ACE program, students submitted an application and have been entered into the ACE program database. Therefore, the identification of students as “ACE-cohort” and “non-ACE-cohort” is accurate. To protect student identities, a record code was created so that personally identifiable information (i.e., student names and identification numbers) was replaced with unique anonymous identifiers (“Data de-identification,” 2013). The record code is housed in a separate electronic sub-folder from the grade and demographic spreadsheets. All data will remain on the electronic ACE folder on the password-protected Shasta College server for five years from the end of the study. The only Shasta College staff with access to the ACE folder are the ACE Director, the ACE Student Success Facilitator, and the Research Office staff.
Additional data about students’ interactions and connections with instructors, academic counselors, program/student support staff, and other students was collected via a survey (Appendix C). The survey development began with a review of the University of Indiana’s National Survey on Student Engagement followed by discussions with a Research Analyst from the Shasta College Office of Research. A survey was then developed to assess respondents’ frequency of various interactions with instructors, academic counselors, program/student support staff, and other students, the value the respondent placed on those interactions, and feelings of connectedness to each group. The survey was approved by Western Kentucky University’s Institutional Review Board through expedited review. Permission to access data in Colleague and to send out surveys was granted by the Shasta College Dean of Institutional Effectiveness and Research. Shasta College does not have an Institutional Review Board. The survey was piloted to a small group of students (five individuals) to determine if there were any confusing or misleading questions. The pilot indicated that the survey questions were clear, so no changes were made. The survey did not ask for any personally identifiable information. Data was retrieved and analyzed and will be housed on Shasta College computers located in the ACE Office, which is locked whenever staff are not present.

The survey was sent to all Shasta College students who completed an ACE compressed course at Shasta College between June 2016 and December 2017. The entire group, 858 total students (121 ACE-cohort and 737 non-ACE-cohort students), was sent an email (Appendix A) inviting them to complete the online survey using Survey Monkey. The Implied Consent (Appendix B) was embedded in the email. Due to the electronic nature of the anonymous online survey, the student acknowledged implied
consent by clicking the link to the survey instead of signing the implied consent
document. The participant sample initially had a two-week window in which to respond
to the survey. There was an initial problem with a low number of survey responses. The
Western Kentucky University Institutional Review Board (IRB) was contacted, and a
continuing review application was submitted asking if incentives could be used to
increase survey responses. That request was approved on March 29, 2018. An additional
Survey Monkey survey was created that collected one item – the respondent’s email.
The link to this secondary survey was included at the end of the original survey. By
doing so, students could still complete the survey anonymously, then link to the
secondary survey to have their email address entered into a random drawing for a $25
electronic Amazon gift card.

Data from the survey was downloaded from Survey Monkey into an Excel
spreadsheet that will be kept in the electronic ACE folder on the Shasta College server
which is password protected. All data will remain on the electronic ACE folder on the
password-protected Shasta College server for five years from the end of the study. The
only Shasta College staff with access to the ACE folder are the ACE Director, the ACE
Student Success Facilitator, and the Research Office staff.

Data Validity

Student demographic and grade data was gathered directly from Colleague, the
Shasta College’s student information system. Demographic data was self-reported on
each student’s application to the college. Demographic data in Colleague was pre-
populated from student admission applications. Grade data was entered by Shasta
College instructors into Colleague and verified by the Shasta College Office of
Admissions and Records. Student demographic and course grade data are assumed to be valid since Colleague is the official system of record for the campus.

Determining validity for surveys can be difficult as the responses are self-reported. While it is recommended to embed surveys with validity checks to corroborate self-reported information with other data (Gall, Gall, & Borg, 2015), the opportunity to do so in this study was hampered because there were no personal identifiers asked for in the survey. Therefore, there were no opportunities to cross-reference survey responses with other more reliable data such as student information system data. For purposes of this study, the assumption was that survey respondents were truthful in their answers. In addition, age, gender, and demographic questions were included on the survey to determine if the survey respondent group had population validity to the overall group of students who took ACE compressed courses.

A problem arose that made the initial survey responses invalid. The original intent was to use the first question of the survey (Question 1: “At any point between June 2016 and December 2017, I was in the ACE (“Associate Completion in the Evenings” or “Accelerated College Education”) program”) to separate responses between ACE-cohort and non-ACE-cohort students. The problem became apparent when there were more responses from students indicating that they were a part of the ACE program than actual ACE program participants. A total of 133 respondents answered the first question “yes,” indicating they were part of the ACE program. Since the ACE program records clearly showed that there were only 121 students in the ACE program between June 2016 and December 2017, this meant that the initial survey
responses could not be used as it could not be clearly determined how to separate actual ACE-cohort from non-ACE-cohort respondents.

To address this issue, the original survey was copied, and the survey was re-sent separately to the ACE-cohort student email addresses and to the non-ACE-cohort student emails addresses. Via the re-sent emails, the students were informed that the original survey responses were not useable, to please redo the survey, and that there was a chance to win one of six $25 electronic Amazon gift cards. The survey sent to the 121 ACE-cohort students was labelled “ACE compressed Course Enrolled Students Survey (AC)” and the survey sent to the 737 non-ACE-cohort students was labelled “ACE compressed Course Enrolled Students Survey (NC)” so that responses could be clearly delineated between ACE-cohort and non-ACE-cohort students. Both surveys included the link to the separate survey to collect email addresses so that students could participate in the drawing for incentives. Rejected email addresses included one ACE-cohort member and three non-ACE-cohort members. The emails were re-sent multiple time to try to increase the number of responses. Of the 120 ACE-cohort students who received the message, 51 responded to the survey (42% of total ACE-cohort student population). Of the 734 non-ACE-cohort students who received the message, 70 responded (9.5% of the total non-ACE-cohort population). While the number of non-ACE-cohort student responses was lower than hoped for, there is a high confidence that the respondents accurately represent their affiliation with the ACE program.

Data Analysis

Research questions included the following:
• *Is there a statistically significant difference in the course success rate between ACE-cohort and non-ACE-cohort students in compressed ACE course sections?*

Course grade rosters were collected for all students (ACE-cohort and non-ACE-cohort) who completed a compressed ACE class between June 2016 and December 2017. Data was downloaded from Shasta College’s student information system, Colleague, and exported to an Excel spreadsheet. Each student grade record was identified as ACE-cohort or non-ACE-cohort, and a record code was created to replace each student’s name and identification number so that students were de-identified in the data set (“Data de-identification,” n.d.). Grades earned were converted to course success rates (total number of A’s, B’s, C’s, and “passing” earned divided by total number of all grades earned). Course success rates in ACE compressed courses were calculated for ACE-cohort students and for non-ACE-cohort students (the cohort status being the independent variable). Course success rates of the two groups were compared using an unpaired t-test to determine if there is a statistically significant difference between the means. The t-test used an alpha of 0.05 to determine if the difference between the mean course success rate for ACE-cohort students and the mean course success rate of non-ACE-cohort students in compressed courses was statistically significant. The study used an unpaired t-test because there was no relationship between grades earned by ACE-cohort students and grades earned by non-ACE-cohort students.

• *How do levels of connection with faculty, counselors, program/student support staff or other students compare for ACE-cohort and non-ACE-cohort students?*
Data to answer this question came from the survey (Appendix C) distributed to all Shasta College students who completed a compressed ACE class between June 2016 and December 2017. The survey did not ask for any personal identification. Students had an opportunity to indicate their affiliation with the ACE program, age, gender, and race on the survey so that population validity between the overall enrolled student populations in ACE compressed courses and the survey respondent population could be evaluated. ACE-cohort and non-ACE-cohort students were independent samples as they were distinct individuals. Scaled scores were assigned to survey question responses with the following values:

4 = Often/Strongly Agree
3 = Sometimes/Agree
2 = Seldom/Disagree
1 = Never/Strongly Disagree
0 = n/a

Results

Course Success in ACE compressed Courses

The first research question asked, “is there a statistically significant difference in the course success rate between ACE-cohort and non-ACE-cohort students in compressed ACE course sections?” Course grade data downloaded from Colleague, Shasta College’s student information system, revealed that 884 grades were earned by ACE-cohort students and 890 grades were earned by non-ACE-cohort students in ACE compressed course sections between June 2016 and December 2017. The course success
rate was calculated by the total number of A’s, B’s, C’s, and “passing” divided by the total number of grades earned for each group of students. ACE-cohort students earned 797 A’s, B’s, C’s, and “passing” out of 884 grades for a course success rate of 90.2%. Non-ACE-cohort students earned 691 A’s, B’s, C’s, and “passing” out of 890 grades for a course success rate of 77.6%. An independent two-sample t-test assuming unequal variances was performed in Excel to determine if the course success rate between the two groups was statistically significant. An alpha of < .05 was used in the calculation. The results were $t (1610) = 7.28, p < .001$. The t-test found the difference between course success rates for ACE-cohort and non-ACE-cohort students to be statistically significant.

Because this study focuses on nontraditional students in compressed courses, a separate course success rate analysis was conducted using only grades earned by students 25-years-or-older. This resulted in 769 grades earned by ACE-cohort students, and 388 grades earned by non-ACE-cohort students. The course success rate for ACE-cohort students 25-years-or-older was consistent with the overall ACE-cohort students at 90.2%. The course success rate for non-ACE-cohort students 25-years-or-older increased to 78.6%. An independent two-sample t-test assuming unequal variances was performed in Excel to determine if the course success rate between the two groups was statistically significant. An alpha of < .05 was used in the calculation. The results were $t (597) = 4.97, p < .001$. The t-test found the difference between course success rates for ACE-cohort and non-ACE-cohort students 25-years-or-older to be statistically significant. Overall, analysis of course grades demonstrated that ACE-cohort students, regardless of whether students were younger or older than 25 years, had higher course
success rates in ACE compressed course sections between June 2016 and December 2017. The t-tests demonstrated that the difference in course success rates between ACE-cohort and non-ACE-cohort students in these courses, regardless of age, was statistically significant.

**Cohort Membership and Feelings of Connectedness**

The second research question asked, “how do feelings of connection with instructors, counselors, staff or other students compare for ACE-cohort and non-ACE-cohort students?” Comparisons between these two student populations and the other sub-populations, as well as Shasta College overall, resulted from an analysis of the survey sent to students who had taken an ACE compressed course between June 2016 and December 2017 (Appendix C). To analyze survey responses, scaled scores were assigned to the following survey responses:

- 4 = Often/Strongly Agree
- 3 = Sometimes/Agree
- 2 = Seldom/Disagree
- 1 = Never/Strongly Disagree
- 0 = n/a

The cohort status was the independent variable. Questions 2 – 29 on the survey focused on the frequency of student interactions with various groups (instructors, academic counselors, program/student support staff, and other students), the value that respondents placed on those interactions, and feelings of connectedness to individual groups as well as to the college overall. In order to assess whether there was a difference between ACE-cohort and non-ACE-cohort student responses to these questions, a
MANOVA (multivariate analysis of variance) was conducted. In performing Wilk's test on the MANOVA results, it was found that there was a statistically significant difference in connectedness based on ACE cohort status, $F(28, 92) = 2.506$, $p < .001$; Wilk's $\Lambda = 0.567$. Overall, ACE-cohort student respondents felt more connected than non-ACE-cohort student respondents.

Follow up one-way ANOVAs (analysis of variance) with post hoc Tukey tests revealed several questions with stronger levels of significance. These results were concentrated in the questions pertaining to program/student support staff and other students. Questions 13, 14, 16, 17, 18, 20, 24, 27, and 28 all revealed a $p$ value < .05. However, five of those nine questions revealed $p < .01$, making them highly significant. These questions were:

- **Question 13:** “I asked questions about procedural matters with program/student support staff (e.g., registration, financial aid, how to access online accounts, etc.).” The post hoc Tukey test for question 13 resulted in $p < .002$. Therefore, ACE-cohort student respondents were significantly more likely to ask staff questions about procedures than non-ACE-cohort student respondents.

- **Question 14:** “I discussed my future goals with program/student support staff (e.g., university transfer plans, career options, a letter of recommendation for a scholarship or job/volunteer opportunity, etc.).” The post hoc Tukey test for question 14 resulted in $p < .001$. Therefore, ACE-cohort student respondents were significantly more likely to discuss their future goals with program/student support staff than non-ACE-cohort student respondents.
• Question 17: “Interaction(s) with program/student support staff helped me be more successful in my overall academics.” The post hoc Tukey test for question 17 resulted in $p < .003$. Therefore, ACE-cohort student respondents were significantly more likely to attribute interactions with staff to their overall academics than non-ACE-cohort student respondents.

• Question 20: “I discussed course content with other students (e.g., studied with another student, explained a concept to another student, or had another student explain a concept to me).” The post hoc Tukey test for question 20 resulted in $p < .006$. Therefore, ACE-cohort student respondents were significantly more likely to connect with other students about course content than non-ACE-cohort student respondents.

• Question 27: “I feel connected with program/student support staff.” The post hoc Tukey test for question 27 resulted in $p < .0001$. Therefore, ACE-cohort student respondents were significantly more likely to feel connected with program/student support staff than with instructors, counselors, or other students than non-ACE-cohort student respondents.

**Discussion**

**Nontraditional Students in ACE compressed Courses**

The ACE program was designed to support working adults, or nontraditional students, in their efforts to earn an Associate degree in a timely manner. While various universities have been creating programs that are working-adult friendly (Husson & Kennedy, 2003; Johnson & Rose, 2015; LaMonica, 1997; Wlodkowski, 2003), public community colleges in California have been slower to respond to this student
population’s needs. In reviewing the demographic data provided from ACE courses rosters, 83% of ACE-cohort students were 25-years-old or older. But age is not the only indicator of a nontraditional student (Hutchens, 2016; “Nontraditional students,” n.d.). From the student survey data, the four ACE-cohort respondents who indicated they were between 18 and 24 years of age also indicated that they work more than 30 hours per week, another characteristic of nontraditional students. This indicates the possibility exists that at least some of the 17% of ACE-cohort students that are between 18 and 24 years old have additional nontraditional student characteristics. Even among non-ACE-cohort students, the percentage of students over the age of 25 (42%) taking ACE compressed courses is higher than the typical Shasta College student population (39.6%). The student survey data revealed that out of the 70 non-ACE-cohort student responses, 40 were 25-years-old or older, but of the younger than 25-years-old respondents, thirteen were working more than 30 hours per week. A total of 75% of non-ACE-cohort survey respondents were nontraditional students. The course data and the student survey responses indicated that the ACE program is attracting nontraditional students to the program and to the individual courses, and that female students in particular were attracted to the format. Implications for practice include surveying current ACE-cohort students to determine what specific aspects of the program (e.g., compressed courses, alternative scheduling, and consistent scheduling) meet their needs.

ACE compressed classes had higher percentages of female students than the overall Shasta College student population. Seventy-five percent of ACE-cohort students were female and 63% of non-ACE-cohort students were female. These higher percentages aligned with Bee & Bjorklund’s (2003) and Deutsch & Schmertz’s (2011)
findings that nontraditional student populations often include women starting or returning to college at a later age. The format of the ACE compressed courses (online and a consistent evening schedule) make it feasible for any nontraditional student, but especially for women who need to work during the day and may need to make childcare arrangements with family or friends in the evening (Hutchens, 2016; Kasworm, 2003; LaMonica, 1997). For female or male students, using alternative scheduling can help nontraditional students gain access to college and maintain other life responsibilities (Almquist, 2015; Wlodkowski, 2003). Implications for practice include interviews with female students in the ACE-cohort to determine why the ACE program was attractive to them, to use quotes from interviews for marketing purposes, and to reach out to businesses and organizations that typically employ women.

**Course Success in ACE compressed Courses**

Geltner and Logan (2001) and Sheldon and Durdella (2009) found that student success is achievable in compressed courses. These findings are borne out in the analysis of the course success data in ACE compressed courses. While this study did not compare student performance in compressed courses to full-term counterpart courses, the success rates in the ACE compressed courses themselves indicate that cohort and non-cohort students can be successful in this format. The course success rate in ACE compressed courses for ACE-cohort students was 90.2% and for non-ACE-cohort students, it was 77.6%. There are various potential explanations why ACE-cohort students performed better in ACE compressed courses. Possible reasons may include ACE-cohort students deliberately choosing to be part of a program featuring compressed courses. ACE-cohort students may have higher levels of familiarity and comfort with the
intensity of compressed courses since their schedules are comprised of compressed courses. A third possibility affecting course success could be attributed to cohort membership, which is discussed in the next section. An additional reason could be that ACE-cohort students were typically focused on only one or two courses at any time, whereas non-ACE-cohort students may have been taking multiple courses and/or juggling compressed and full-semester courses. The smaller number of courses at one time would decrease ACE-cohort students’ cognitive load and help them balance various responsibilities and school (Almquist, 2015; Husson & Kennedy, 2003; Johnson & Rose, 2015; Kasworm, 2003; LaMonica, 1997; Wlodkowski). Regardless of the reasons why they performed better, it is clear that ACE-cohort students had significantly higher course success rates in ACE compressed courses than non-ACE-cohort students.

Because this study also focused on nontraditional students, additional analysis of course success rates by age in ACE compressed courses was conducted. Fairchild (2003) and Hutchens (2016) found that nontraditional students put more effort into their academic experiences and viewed their education as a personal and financial investment. Similarly, Wyatt (2011) found that nontraditional students’ levels of engagement and activity in the classroom is higher than that of traditional students. The comparison of course success rates between students 25 years old and older still showed that ACE-cohort students’ course success rate was significantly higher than non-ACE-cohort students. The difference between course success rates for nontraditional aged students in the two groups was smaller than the difference between the groups when all ages were included, which means that nontraditional non-ACE-cohort students had higher course
success rates than the overall non-ACE-cohort student group, but ACE-cohort students still out-performed non-ACE-cohort students, regardless of age.

To gauge success in ACE compressed courses against overall student performance at Shasta College, we looked at the course success rate in ACE compressed courses (all transferrable courses), to Shasta College’s overall course success rate in all university transferrable coursework taken by all Shasta College students. Except for ACE compressed courses and a small number of “late start” courses (courses that start in week two, three or four of the semester), all courses offered at Shasta College during the fall and spring terms are full-semester length courses. The course success rate for all transferrable coursework completed in Fall 2016, Spring 2017, and Fall 2017 averaged approximately 74% (California Community College Chancellor’s Office Management Information System Data Mart website, n.d.). However, in Summer 2016 and Summer 2017, the course success rates for all students in transferable courses were 82.3% and 83.5%, respectively. As summer courses at Shasta College are offered in seven weeks, they are all compressed courses. Full-time and part-time instructors teach during the summer in addition to the regular academic year. Some discussion has taken place among faculty about the higher course success rates in summer being attributed to higher levels of motivation of students taking summer courses, but that has not been evaluated or confirmed. However, the connection between compressed courses, whether they are ACE program courses or summer offerings, and higher course success rates has been established at Shasta College.

Course success rates in ACE compressed courses may be linked to student preference for compressed courses. Of the 70 non-ACE-cohort students, 77% indicated
they preferred compressed courses, while 94% of ACE-cohort students preferred compressed courses. The high percentage of ACE-cohort students who prefer compressed courses, the majority of whom are nontraditional students, was not surprising. These students self-selected to be part of a program featuring exclusively compressed courses. The non-ACE-cohort students, who were generally taking only one (sometimes two) compressed course(s) mixed with other full-term courses, also indicated preference for compressed courses. In looking at survey respondents’ preference by age, 80% of non-ACE-cohort students under 25 years old preferred compressed courses, while 75% of the same group over 25 years old preferred compressed courses. These results reinforce Almquist’s 2015 research into community college students’ interest in taking compressed courses (70% interest in compressed summer and 60% interest in compressed winter intersession courses). An implication for practice is the possibility of offering more compressed coursework, as students not only perform better in compressed courses, they indicated a preference for them. Since non-ACE-cohort students had a better course success rate in compressed ACE courses than the general population’s course success rate in similar courses, these findings demonstrate that there is no need to limit enrollment in compressed courses to specific program participants.

**Cohorts and Feelings of Connectedness**

This research attempted to discover if participating in a cohort had any correlation to feelings of connectedness with instructors, academic counselors, program/student support staff, and other students. The survey questions that indicated a statistically significance difference between ACE-cohort and non-ACE-cohort students
all centered on connections between the respondents and program/student support staff and other students.

Both groups felt connected with instructors. 78.5% of non-ACE-cohort and 80.4% of ACE-cohort respondents indicated they agreed or strongly agreed that they felt connected to instructors. However, an interesting result of the survey data was that ACE-cohort and non-ACE-cohort students did not have a statistically significant difference in frequency of interactions with instructors, their value of those interactions, nor in overall feelings of connectedness with instructors. Davidson & Wilson (2013), Kasworm (2014), and Engstrom & Tinto (2008) all found that nontraditional students value strong connections with faculty (as well as connections with other students). The ACE-cohort students who responded to the survey were predominantly older than non-ACE-cohort students survey respondents (92.3% compared to 57.1% 25-years-older or older, respectively). Regardless of cohort affiliation or age, respondents felt connected to instructors. These similarities were also consistent among female respondents. Kasworm’s (2013) findings about connections in the classroom, particularly between instructors and nontraditional female students, are supported by the student survey responses overall. Of the 42 female ACE-cohort students respondents, 83% responded that they “agreed” or “strongly agreed” that they felt connected to instructors. Of the 55 female non-ACE-cohort students, 82% “agreed” or “strongly agreed” that they felt connected to instructors. Females, regardless of cohort affiliation, felt connected to instructors.

There are some possible explanations for the lack of difference between the groups regarding connections with faculty. Some of the courses during this period were
extremely short (three or four weeks). According to Tinto’s (1993) research, the more contact a student has with instructors about academic content, the more likely it is that students will build relationships and increase learning. However, creating a relationship with an instructor in just three or four weeks is difficult, especially if the course is online and the students have other responsibilities. Another possible explanation is that the instructors for the ACE compressed courses have not been provided with any specific training related to compressed coursework or andragogy. An implication for practice is to provide specialized training in both of these areas per recommendations from various studies (Arghode, Brieger, & McLean, 2017; Johnson & Rose, 2015; Knowles, 1984; Spaid & Duff, 2009; Wyatt, 2011).

Feelings of connectedness to counselors were similar for both groups as well. ACE-cohort students were more likely to meet with a counselor to develop or discuss their academic requirements. This is likely due to the fact that in order to participate in the ACE program, students are required to meet with a counselor to develop an educational plan that will meet graduation requirements. ACE-cohorts students were also slightly more likely to store their counselor’s contact information in their phone (as prompted by the ACE program staff to do so). Overall, both groups accessed their counselors approximately the same amount, and indicated similar levels of feelings of connectedness with their counselors.

Davidson and Wilson (2013) and Tinto (1997) found that ongoing relationships with staff can serve as a foundation for community on college campuses for nontraditional students. The responses to the survey supported these findings. Out of the six questions about interactions and feelings of connections with program/student
support staff, five out of six showed a statistically significant difference between the two groups with a $p$ value of <.05, and four of those questions revealed a $p$ value of < .01. ACE-cohort respondents were statistically more likely to ask questions about procedural matters, discuss future goals with staff (academic integration), store staff contact information in their phones, and feel that those interactions helped them be more successful in their overall academics. ACE-cohort respondents were significantly more likely to feel connected to staff than non-ACE-cohort respondents. The survey results indicate that staff play an important role in students’ feelings of connectedness and academic success. While the question did not ask about students’ interactions with and feelings of connections with specifically ACE program staff (the question was posed more generically about program/student support staff campus-wide), it is hard for ACE-cohort students to avoid contact with ACE program staff. Students in the ACE program receive weekly contact from the ACE Director or Student Success Facilitator. ACE program staff reach out to students via email and phone to insure they register for classes and apply for financial aid. ACE program staff reach out to students when they see a student has struggled with a class, or when they have done well in a class. Most of the research about nontraditional students’ academic and social integration focuses on the relationships between faculty and students, so these findings are important in developing more information about the relationships between campus staff and students, especially students in a cohort program focused on nontraditional students. An implication of practice is to ensure that staff in these types of programs have specialized training, and that campus staff in general increase their knowledge about nontraditional students (Kasworm, 2014; Goncalves & Trunk, 2000; Wyatt, 2011).
It was not a surprise that ACE-cohort student respondents indicated that they felt more connected to other students overall. In a cohort, students have the opportunity to repeatedly connect with each other over months and years through courses. ACE-cohort respondents were more likely to ask each other about procedural matters and course content, felt that these interactions helped them be more successful in their overall academics, and felt more connected to other students. These findings support various research showing that cohorts help build community and a sense of belonging in the college environment (Beachboard, Beachboard, Li, & Adkison, 2011; Deutsch & Schmertz, 2011; Fairchild, 2003; Merriam, Caffarella, & Baumgartner, 2007; Tinto, 1998; Wlodkowski, 2003). Discussing course content with each other through studying together and mutually explaining concepts to each other indicate an increased level of trust in and support for one another as found in other research about cohorts (Engstrom & Tinto, 2008; LaMonica, 1997; Lei, Gorelick, Short, Smallwood, & Wright-Porter, 2011; Rausch & Crawford, 2012; Spaid & Duff, 2009; Tinto, 1997; Wlodkowski & Ginsberg, 2010). In general, this study’s findings are consistent with other research that indicates cohorts facilitate social and academic integration for nontraditional students taking compressed courses in a community college setting.

However, there was not a statistically significant difference between the two groups of respondents for the questions focused on interactions about future goals and topics unrelated to academics. While it appears that ACE-cohort students are more connected academically with other students, their level of social connection outside of class with other students is similar to non-ACE-cohort students. This is consistent with other research that found nontraditional students’ primary social integration takes place
within the classroom, as life responsibilities leave them little time outside of class to further social relationships (Davidson & Wilson, 2013; Kasworm, 2014; Tinto, 1993; Tinto, 1997). Implications for practice include finding ways to help nontraditional students facilitate deeper levels of connection with other students at the beginning of their college experience, or even prior to classes starting, such as holding expanded orientations that make time for student interactions.

**Summary**

Overall, this study revealed that nontraditional students, especially women, are utilizing compressed coursework offered in a structured schedule to earn their Associate degrees, and that cohort affiliation correlates to higher course success rate in compressed courses and to stronger feelings of connectedness to program/student support staff and other students.

**Limitations**

There are limitations to this study. One limitation is the lack of school choice for students. Shasta College has a captive enrollment population as it is the only public institution of higher education in a rural, 10,000 square-mile area. A second limitation is the irregularity of compressed course lengths analyzed. The course schedule of the first ACE cohort (June 2016 through October 2017) featured courses that varied in length from three to eleven weeks. The program was restructured in subsequent cohorts to have fixed course lengths of eight weeks. Third, this study is limited in the kinds of coursework investigated. The coursework offered by the ACE program includes only lower division general education, Business, and Psychology classes, and all coursework is university transferrable. Additional students may be interested in compressed courses,
but due to the lack of variety (e.g., no career technical education), the student population studied in this research may not be as diverse as it could be. Finally, the population that responded to the survey was not a precise reflection of the demographics of each group of students. Any attempts to replicate the program or research results should take into account the limitations of the student population studied, the lack of choice of institutional options for students’ enrollment, the variation of the length of ACE courses for the first cohort, and the limited academic offerings involved.

**Future Research**

Additional research will be necessary to validate and expand these findings as more institutions create programs featuring cohorts, structured schedules, and compressed courses for nontraditional students. While course success rates were compared for ACE-cohort and non-ACE-cohort students in this study, a deeper analysis of course success rates by demographic groups (age, gender, ethnicity) and by financial aid recipient-status could be made. The small sample population at Shasta College limits the applicability to other populations, particularly for males and students of color. Similar studies could be conducted at other sizes of community colleges that offer similar programs for nontraditional students to see if results are similar or different based on institution location (urban, suburban, rural, general geography) or size of campus population. The limited academic disciplines in this research require additional inquiry into programs featuring other academic fields. One question about preference for compressed courses was asked in this study, but in-depth study about reasons for taking compressed courses could be conducted. Additionally, further surveys or interviews of students about why they think they perform better in compressed courses could be done.
Another population that warrants further study regarding attitudes toward compressed courses and programs using alternative schedules is instructors, especially at the community college level where the faculty’s primary responsibility is instruction (as compared to a research university where faculty responsibilities are mixed). Finally, this study demonstrates that further study into the role that program/student support staff plays in student success, particularly for nontraditional students. In general, the increasing numbers of nontraditional students entering post-secondary institutions warrant further study into the success of nontraditional and traditional students taking compressed courses, the efficacy of cohort membership, and how best to support students, staff, and faculty involved in this learning environment, especially at two-year community colleges.
Literature Cited


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Appendix A: Email to ACE compressed Course Enrolled Students with Link to Online Survey

This email was sent to all Shasta College students who completed an ACE compressed course between June 2016 and December 2017.

Subject Line: Please complete a survey of students who completed an ACE compressed course

Email Body: Dear Shasta College student,

You are receiving this email because you completed an ACE compressed course between June 2016 and December 2017. An “ACE compressed course” is a course taught in less than a regular full-semester length. My name is Buffy Tanner. I am the ACE Program Director. The survey results will be used to help me complete my master’s degree in Adult Education. Your responses will be anonymous, and the survey will take approximately 10-15 minutes to complete. Please read the “Implied Consent” language below, and if you are willing, click the link at the bottom of the message to continue to the online survey.

Please complete the survey by March 27, 2018.

Sincerely,
Buffy Tanner
Shasta College ACE Director
530-242-7714

IMPLIED CONSENT DOCUMENT (see Appendix B)
Appendix B: ACE compressed Course Enrolled Student Survey Implied Consent

IMPLIED CONSENT

Project Title: An Analysis of Student Demographics and Cohort Participation on Success in Compressed/Accelerated Courses in a Community College Setting

Investigator: Elizabeth “Buffy” Tanner, WKU Department of Educational Administration, Leadership, and Research, btanner@shastacollege.edu

You are being asked to participate in a project conducted through Western Kentucky University. The University requires that you give your agreement to participate in this project.

You must be 18 years old or older to participate in this research study.

The investigator will explain to you in detail the purpose of the project, the procedures to be used, and the potential benefits and possible risks of participation. You may ask any questions you have to help you understand the project. A basic explanation of the project is written below. Please read this explanation and discuss with the researcher any questions you may have. You should keep a copy of this form for your records.

1. **Nature and Purpose of the Project:** Students who took a compressed ACE course between June 2016 and December 2017 are receiving this survey. This research study is attempting to evaluate any correlation between course success rates in compressed courses, cohort participation, and nontraditional students’ characteristics.

2. **Explanation of Procedures:** This survey has 36 multiple choice questions and takes approximately 10-15 minutes to complete. You will be given a 2-week window in which to complete the survey.

3. **Discomfort and Risks:** You will be asked to indicate your feelings about your level of connectedness to campus instructors and staff as well as to other students. You will also be asked one question about your academic performance in compressed courses. If you have had negative experiences with campus personnel or other students, or with a course grade, these questions may lead to feelings of discomfort.

4. **Benefits:** Your responses may help us improve the ACE program, and/or consider how other programs on campus are developed.

5. **Confidentiality:** All responses will be confidential. You will not be asked for any personal identifiable information.

6. **Refusal/Withdrawal:** Refusal to participate in this study will have no effect on any future services you may be entitled to from the University. Anyone who agrees to participate in this study is free to withdraw from the study at any time with no penalty. You understand also that it is not possible to identify all potential risks in an experimental procedure, and you believe that reasonable safeguards have been taken to minimize both the known and potential but unknown risks.

*Your continued cooperation with the following research implies your consent.*

THE DATED APPROVAL ON THIS CONSENT FORM INDICATES THAT THIS PROJECT HAS BEEN REVIEWED AND APPROVED BY THE WESTERN KENTUCKY UNIVERSITY INSTITUTIONAL REVIEW BOARD: Robin Pyles, Human Protections Administrator. TELEPHONE: (270) 745-2129

WKU IRB# 18-307
APPROVED: 3/13/2018
END DATE: 4/20/2018
EXPEDITED
ORIGINAL: 3/13/2018
Appendix C: ACE compressed Course Enrolled Students Survey

Question 1 asks about your status with the ACE program.

1. At any point between June 2016 and December 2017, I was in the ACE (“Associate Completion in the Evenings” or “Accelerated College Education”) program. Yes No I don’t know

Questions 2 - 7 relate to interactions with instructors between June 2016 and December 2017.

2. I asked instructors questions about a course syllabus or an assignment.
   Often Sometimes Seldom Never

3. I discussed academic topics with my instructors outside regular course meetings (e.g., in office hours, via email, or phone).
   Often Sometimes Seldom Never

4. I discussed my future goals with my instructors (e.g., university transfer plans, career options, a letter of recommendation for a scholarship or job/volunteer opportunity, etc.).
   Often Sometimes Seldom Never

5. I discussed topics unrelated to academics with my instructors (e.g., shared personal interests, personal matters, etc.).
   Often Sometimes Seldom Never

6. I stored my instructors’ contact information in my phone/email contacts.
   Often Sometimes Seldom Never

7. Interaction(s) with instructors helped me be more successful in my overall academics.
   Strongly agree Agree Disagree Strongly disagree N/A

Questions 8-12 relate to interactions with academic counselors between June 2016 and December 2017.

8. I discussed my academic requirements (“ed plan”) with my academic counselors (e.g., university transfer plans, career options, a letter of recommendation for a scholarship or job/volunteer opportunity, etc.).
   Often Sometimes Seldom Never

9. I discussed my future goals with my academic counselors (e.g., university transfer plans, career options, a letter of recommendation for a scholarship or job/volunteer opportunity, etc.).
<table>
<thead>
<tr>
<th>Question</th>
<th>Often</th>
<th>Sometimes</th>
<th>Seldom</th>
<th>Never</th>
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<tbody>
<tr>
<td>10. I discussed topics unrelated to academics with my academic counselors (e.g., shared personal interests, personal matters, etc.).</td>
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<td></td>
<td>Often</td>
<td>Sometimes</td>
<td>Seldom</td>
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<td>11. I stored my academic counselors’ contact information in my phone/email contacts.</td>
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<td></td>
<td>Often</td>
<td>Sometimes</td>
<td>Seldom</td>
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<td>12. Interaction(s) with academic counselors helped me be more successful in my overall academics.</td>
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<td></td>
<td>Strongly agree</td>
<td>Agree</td>
<td>Disagree</td>
<td>Strongly disagree</td>
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**Questions 13-17 relate to interactions with program/student support staff between June 2016 and December 2017. “Program/student support staff” refers to administrators or staff members from any of the following: ACE Office, Admissions & Records, Financial Aid, Student Success Center, EOPS, TRIO/SSS, DSPS/PACE, Veterans’s Resources Center, STEP UP, SCI*FY, Bookstore, Library, Canvas Online Help Team, Tutoring Center, Athletics, or Dean/Division Office.**

<table>
<thead>
<tr>
<th>Question</th>
<th>Often</th>
<th>Sometimes</th>
<th>Seldom</th>
<th>Never</th>
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<tbody>
<tr>
<td>13. I asked questions about procedural matters with program/student support staff (e.g., registration, financial aid, how to access online accounts, etc.).</td>
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<td></td>
<td>Often</td>
<td>Sometimes</td>
<td>Seldom</td>
<td>Never</td>
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<tr>
<td>14. I discussed my future goals with program/student support staff (e.g., university transfer plans, career options, a letter of recommendation for a scholarship or job/volunteer opportunity, etc.).</td>
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<td></td>
<td>Often</td>
<td>Sometimes</td>
<td>Seldom</td>
<td>Never</td>
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<td>15. I discussed topics unrelated to academics with program/student support staff (e.g., shared personal interests, personal matters, etc.).</td>
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<td></td>
<td>Often</td>
<td>Sometimes</td>
<td>Seldom</td>
<td>Never</td>
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<tr>
<td>16. I stored program/student support staff contact information in my phone/email contacts.</td>
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<td></td>
<td>Often</td>
<td>Sometimes</td>
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<td>17. Interaction(s) with program/student support staff helped me be more successful in my overall academics.</td>
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<td></td>
<td>Strongly agree</td>
<td>Agree</td>
<td>Disagree</td>
<td>Strongly disagree</td>
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**Questions 18-24 relate to interactions with other students between June 2016 and December 2017.**
18. I asked other students about procedural matters (e.g., registration, financial aid, how to access online accounts, etc.).
   Often          Sometimes        Seldom        Never

19. I discussed program or graduation requirements with other students.
   Often          Sometimes        Seldom        Never

20. I discussed course content with other students (e.g., studied with another student, explained a concept to another student, or had another student explain a concept to me).
   Often          Sometimes        Seldom        Never

21. I discussed program my future goals with other students.
   Often          Sometimes        Seldom        Never

22. I discussed topics unrelated to academics with other students (e.g., shared personal interests, personal matters, etc.).
   Often          Sometimes        Seldom        Never

23. I stored other students’ contact information in my phone/email contacts.
   Often          Sometimes        Seldom        Never

24. Interaction(s) with other students helped me be more successful in my overall academics.
   Strongly agree  Agree          Disagree      Strongly disagree  N/A

Questions 25-29 ask about feelings of connection to Shasta College populations and the campus:

25. I feel connected with instructors.
   Strongly agree  Agree          Disagree      Strongly disagree  N/A

26. I feel connected with academic counselors.
   Strongly agree  Agree          Disagree      Strongly disagree  N/A

27. I feel connected with program/student support staff.
   Strongly agree  Agree          Disagree      Strongly disagree  N/A

28. I feel connected with other students.
   Strongly agree  Agree          Disagree      Strongly disagree  N/A

29. Overall, I feel connected to Shasta College.
   Strongly agree  Agree          Disagree      Strongly disagree  N/A
Questions 30-31 relate to your experiences with compressed courses (courses shorter than full-semester length).

30. I prefer compressed courses to full-semester courses.
   Strongly agree  Agree  Disagree  Strongly disagree  N/A

31. My grades are higher in compressed courses than in full-semester courses.
   Strongly agree  Agree  Disagree  Strongly disagree  N/A

Questions 32-36 ask for demographic information.

32. What is your age?  18-24  25-44  45-64  65+

33. Do you work more than 30 hours per week?  Yes  No

34. Are you the parent/guardian of dependent children?  Yes  No

35. Please choose from the following gender identifications:
   I identify as male
   I identify as female
   I prefer not to state

36. Please choose from the following racial identifications (terms aligned with Shasta College application and U. S. Census):
   American Indian/ Alaska Native
   Asian
   Black or African American
   Hispanic or Latino (of any race)
   Native Hawaiian/ Other Pacific
   White
   Two or More Races
   Some Other Race

Thank you for participating in this survey!