

THE EFFECT OF FINANCIAL AID ON PERSISTENCE IN THE AMERICAN COMMUNITY COLLEGE: A CRITICAL LITERATURE REVIEW

by

JANEA JOHNSON

(Under the Direction of Karen Webber)

Over the past three centuries, American higher education evolved from less than 10 colleges preparing wealthy men for public service to over four thousand institutions serving diverse users meeting a myriad of student and community needs. Increases in the number and type of students entering higher education and seeking financial assistance led to the creation and/or overhaul of various state and federal programs. As more students used financial aid to fund their education expenses, stakeholders demanded accountability from university administrators and needed to determine if allocations positively impacted student persistence. However, there is a paucity of literature that specifically examines the breadth and effectiveness of financial aid and for students in community colleges. Therefore, this study seeks to contribute to the gap in the literature by critically examining the limited studies available and offering comments on areas for future research. For cost-sensitive community college students, the effect of financial aid on persistence becomes even more crucial and in need of much more study and discussion.

The critical literature review technique allows the researcher to synthesize knowledge through findings from previously conducted studies during a specific period of time and topical area (Feldman, 1971). This deductive process uses articles as ‘observations’ to draw conclusions

and evaluate findings to offer a comprehensive analysis of research conducted in an academic discipline (Levit, 1968).

A summary of the articles reviewed revealed mixed findings on the effect of financial aid on community college student persistence. In a review of all pertinent articles from 1986 through 2009, none of the studies compared persistence rates by type of financial aid. Few studies disaggregated the data by demographic characteristics such as gender or race nor compared persistence rates based on timing of financial aid awards. Researchers also presented mixed outcomes in these areas (Nora, 1990; Spencer, 1993). However, larger financial aid awards, grants, and work-study positively impacted persistence and part-time students were less likely to remain enrolled based on financial aid allocations. The results of this study set the foundation to map a research agenda and recommendations to improve conditions for community college students.

INDEX WORDS: Two-year college, Student financial aid, School holding power, Persistence, Student attrition

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JANEA JOHNSON

B.S., Iowa State University, 1996

M.Ed., Bowling Green State University, 1998

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JANEA JOHNSON

Major Professor: Karen Webber

Committee: James Hearn
Erik Ness

Electronic Version Approved:

Maureen Grasso
Dean of the Graduate School
The University of Georgia
December 2010

DEDICATION

This dissertation is dedicated to four angels who did not see this day happen but contributed to my success: Homer Gordon, Rosa Gordon Crockett, Annie Ruth Gordon Hodge, and Charles Nicholson. My great-grandparents, Homer Gordon and Rosa Gordon Crockett, paved my road to higher education by earning degrees at a time when few people attended college. Annie Ruth Gordon Hodge, my grandmother, imparted her love of reading and learning, two qualities that aided me throughout this journey. My uncle Charles Nicholson was one of my biggest cheerleaders and taught me to remain gracious and thankful at all times.

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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	v
CHAPTER	
1 INTRODUCTION	1
Framework Guiding this Study	2
Purpose of the Study	9
Significance of the Study	11
Statement of the Problem	11
Research Questions	12
Definitions	12
Organization of Study	14
2 LITERATURE REVIEW	15
Financial Aid	16
Early Years: 1918 – 1969	18
Recent Developments	22
Financial Aid Considerations for Community College Students	36
Summary	37
Community College Overview	38
Historical Perspective	42
Student Characteristics	44
Connecting the Dots	48

	Community College Student Persistence	50
	Conclusion	52
3	METHODS	54
	Introduction	54
	Previous Studies/Background	54
	Research Design	57
	Critical Literature Review Process	58
	Select the Topic and Research Questions for the Review	58
	Consult Previous Reviews on the Same or Similar Topics	59
	Locate the Research Studies to Review	59
	Represent the Characteristics of the Studies and Their Findings	62
	Report the Review	64
	Limitations of the Study	64
4	RESULTS	66
	Summary of Findings	66
	Research Questions	68
	Recommended Research Agenda	70
	Limitations to Current Research	76
	Recommendations for Practice	79
	Conclusion	84
5	RECOMMENDATIONS FOR RESEARCH AND PRACTICE	86
	Advancing the Research Agenda	86
	Challenges to Mapping the Research Agenda	94

Recommendations for Practice	94
Challenges to Fulfilling Recommendations for Practice	106
Conclusion	107
REFERENCES	109
APPENDICES	125
A Studies Used for Review	125
B Study Characteristics	127
C Review Findings	131

CHAPTER 1

INTRODUCTION

In its infancy, higher education in the United States served wealthy men whose families financed their collegiate experience. Institutions provided a liberal arts education modeled by the Oxford and Cambridge tradition and graduates were expected to serve the community and assume positions of government, business, or clergy (Goodchild, 1999). When students from varying socio-economic backgrounds entered the academy, college officials provided opportunities for them to work on campus to subsidize the amount owed to the institution. Even though some students experienced financial hardships throughout their tenure, higher education remained a luxury unattainable by a majority of Americans. Relatively minor changes occurred during the first three centuries of higher education; however, modifications transpired to train graduates for the evolving economy including agriculture in the 1800s as well as the industrial revolution and defense efforts of the 1900s (Thelin, 2004). Higher education began to diversify in the late 1940s as students entered college after earning the G.I. Bill for their military service. Similarly, a surge in enrollment for women and ethnic minorities occurred during the 1960s as the students took advantage of grants, loans, and work-study programs provided through the Higher Education Act. Changes in student backgrounds contributed to changes in the higher education sector: the number of community colleges serving non-traditional students with flexible class schedules close to home, multiplied to meet demand. The notion of a bachelor's degree as the 'holy grail' of higher education diminished somewhat as students pursued two-year

vocational degrees at community colleges (DiCroce, 1989; Simmons, 2003). Increases in the number and type of students entering higher education and seeking financial assistance led to the creation an overhaul of various state and federal government programs. Government sponsored financial aid programs during this era primarily targeted four-year college and veteran students; however, policies slowly shifted to include community college students. As more students used financial aid to fund their education expenses, policy makers and citizens demanded accountability from university administrators and needed to determine if the allocations positively impacted student retention and graduation rates. However, there is a paucity of literature that specifically examines the breadth and effectiveness of financial aid for students in community colleges. Therefore, this study seeks to contribute to the gap in the literature by critically examining the limited studies available and offering comments on areas for future research. For cost-sensitive community college students, the effect of financial aid on persistence becomes even more crucial and in need of much more study and discussion.

Framework Guiding this Study

Community College Students

Affectionately referred to as democracy's college, opportunity college, or the people's college, the history of community colleges and their students in the United States began over a century ago with the creation of Joliet Junior College in Joliet, Illinois in 1901 (C. D. Lovell & Trouth, 2004; DiCroce, 1989). Considered a "stepping stone to educational upward mobility" (Laanan, 2000, p. 3), these institutions strayed from the traditional Oxford and Cambridge model of higher education and offered a uniquely American experience (Kerr, 2001; Thelin, 2004). Especially during the 1960s, community colleges grew rapidly to offer education for adult students in urban and suburban areas instead of the isolated locations housing state flagship

institutions. As of January 2009, community colleges comprised approximately 40 percent of the 4,352 public, private, and for-profit colleges and universities in the United States (American Association of Community Colleges – AACC, 2009b; U.S. Department of Education, National Center for Education Statistics – NCES, 2008a).

DiCroce (1989) supported the notion of access to higher education as the primary role of the community college: she asserted the “narrow definition of education excellence as baccalaureate education” (DiCroce, 1989, p. 178) excluded the educational goals of a significant proportion of college students. With open admission policies and low tuition, the community college is considered the gateway to higher education (Pedersen, 2005; Wells, 2008; Vanwagoner, Boweman, & Spraggs, 2005). Original organizers of the community college aimed for a smooth transition with other education sectors: shifting from an emphasis of a continuation from high school toward a seamless transition to four-year colleges and universities (Mullins & Honeyman, 2008).

The author of the *Higher Education for American Democracy: A Report of the President’s Commission on Higher Education* (Zook, 1946) recognized the gaps in higher education and promoted the concept of education for all – using community colleges to fill the void.

Whatever form the community college takes, its purpose requires of it a variety of functions and program. It will provide college education for youth of the community certainly, so as to remove geographic and economic barriers to educational opportunity and discover and develop individual talents at low cost and easy access. But in addition, the community college will serve as an active center for adult education. It will attempt to meet the total post high school needs of its community (Zook, 1946, pp. 67 – 68).

Responding to social demands, colleges and universities (e.g., community and technical colleges) with diverse missions, including access to the academy, emerged (Toma & Kezar, 1999). The Community Way of the American collegiate ideal followed the Colonial, Frontier, Collegiate, and Town Ways as a paradigm to respond to traditional aged students who wanted to move away from home to attend college. The role of higher education transformed to meet the needs of American society and student expectations. The Colonial Way mirrored the Oxford and Cambridge model of training clergy and business professionals to govern colonial citizenry; the Frontier Way transpired as a result of Americans moving west after the Revolutionary War and needing agricultural training; the Collegiate Way was marked by the socialization of the college experience, including student organizations, athletics and labor laws preventing children from working; and the ‘urbanization’ of higher education can be attributed to the Town Way with institutions founded in city centers instead of rural or hilltop locations—allowing metropolitan students to pursue bachelor’s degrees near home (Goodchild, 1999). As higher education evolved to meet complex societal needs, institutions developed clear missions to meet their target populations. “Internally consistence purposes are critically important for creating an educationally powerful culture of learning” (Chickering & Kytle, 1999, p. 116). In part to avoid competition with four-year institutions, the community college provided a transferable or technical curriculum (Chickering & Kytle, 1999; DiCroce, 1989; Zook, 1946). In order to meet the needs of its diverse student body, community colleges offer day, evening, and remedial classes (NCES, 2008a; Zook, 1946). Terminal (e.g., general education and vocational training) and semi-professional (e.g., technology and industry) programs meet, respectively, the needs of students interested in transferring to a four-year institution and those who want to enter the workforce directly after graduation (Zook, 1946).

Enrolling 11.7 million students or 40 percent of all first time students (AACC, 2009a; Laanan, 2000), community colleges educate a unique segment of American higher education. Serving a large number of low-income students, community colleges educate those who may not attend another institution due to financial constraints (Townsend, Donaldson, & Wilson, 2005; Wells, 2008). The average tuition and fees for public and private four-year institutions during the 2007 – 2008 academic year was \$5,950 and \$30,393 respectively: in-state tuition and fees at two-year public colleges were \$2063 (NCES, 2008b).

Today, community college students vary in most areas in regards to age, gender, and ethnicity vis-a-vis four-year college students. Moreover, these characteristics pose additional persistence and graduation hurdles for students in this sector. Persistence researchers found non-traditional aged students with financial obstacles, humble high school grade point averages, additional responsibilities aside from college who do not live on campus or expect to earn a degree less likely to remain enrolled or graduate than those the aforementioned criteria doesn't apply to. The previous statement effectually summarizes the situations community college students face and the challenges they encounter on the journey to attain their educational aspirations. For example, financial constraints may prevent community college students from consecutive term enrollment, modest high school performance may contribute to the need for remedial courses and prolonged enrollment, and students may fulfill family or work commitments at the expense of collegiate responsibilities. Community college students must overcome persistence barriers in order to achieve their academic goals (Astin, 1975; Astin, 1993; Tinto, 1993). Approximately 60 percent of community college students attended part-time and 42 percent pursued a non-credit option. Moreover, 17 percent of all community college students are single parents and 39 percent were the first in their families to attend college (AACC, 2009a).

The average age for a community college student as of January 2009 was 29 years old with 53 percent of all students over the age of 21 (AACC, 2009a). Consistent with their four-year college peers, more than half (58 percent) of all community college students were women (AACC, 2009a; Planty, et al., 2009). With an ethnically diverse student body, community colleges enroll half of all students of color (i.e., African American, Hispanic, and Native American) in American higher education (AACC, 2009; Laana, 2000; Townsend, Donaldson, & Wilson, 2005; Vanwagoner, et al., 2005). Community college administrators meet the academic needs of their students by recognizing how personal background impacts the educational experience. Many community colleges maintain low tuition and fees to attract and retain cost conscious students, schedule courses during the evening and weekends to accommodate working students, offer remedial courses and tutoring for academically un- or under-prepared students, as well as provide childcare and children's programs to aid parents.

With varying expectations and aspirations, community college students graduate from a degree program far less frequently than students at four-year institutions, in part due to some reports that include non-degree students in degree completion rates. Because they wish to focus on specific skill training, less than half (40 percent) of all community college students aspire to earn an associate's degree (Laanan, 2000). In addition to offering associate's and vocational degrees, community colleges provide continuing education and non-credit programs to meet the needs of students interested in specific skills. Often times, students enroll in community colleges to develop a skill or trade without intention to earn a degree or certificate. Along with students seeking an associate's degree, the community college also serves as a vehicle for self-development by offering non-career related or continuing education courses (e.g., flower arranging or photography) and one-time or short-term courses to enhance professional skills

(e.g., computer software and accounting). In January 2009 five million of the 11.7 million community college students were enrolled in non-credit programs (AACC, 2009).

Low first to second year persistence and overall graduation rates should not be surprising considering student characteristics, aspirations, and enrollment patterns. During the past two decades public community college students experienced the lowest first to second year retention rates during the 2003 – 2004 academic year at 51.3 percent, while the highest was during the 2007 – 2008 year at 53.7 percent. Contrasted with public bachelor's degree seeking students, the highest rate occurred during the 2003 – 2004 academic year with 70.0 percent and lowest of 66.4 percent during the 1995 – 1996 and 2004 – 2005 academic years. The current first to second year persistence rate at public four-year institutions is 68.0 percent. The highest completion rate within three years for all community college students since 1983 occurred in 1989 with 44.0 percent and the lowest rate of 28.9 percent during the 2007 – 2008 academic year. Conversely, the national completion rate after five years for four-year college students was highest during 1990 with 54.6 percent and lowest at 50.9 percent during 2001. The current national average of 52.5 percent falls between the two extremes (American College Testing, 2009). Approximately 20 percent of all community college students enroll in non-degree and certificate programs (Hoachlander, Sikora, Horn, & Carroll, 2003).

Financial Aid

Current financial aid policies support both need and merit based practices, aiming to increase access for students who cannot afford to attend college without financial assistance and students with academic, athletic or other talents. Shifts in financial aid policy from grants to loans and merit awards occurred at the federal, state, and institutional levels during the 1990s, often times marginalizing community college students who were less likely to accept loan aid

and failed to meet the academic requirements to secure merit awards. Increasing the maximum Pell Grant awards occurred as a result of the 2008 Reauthorization of the Higher Education Act, benefit community college students. In July 2009 President Obama recognized the need for education and financial aid policy to benefit all students, regardless of enrollment pathways, and allocated \$12 billion to the community college sector. Established to generate an additional five million community college graduates by 2020, the increase in direct spending to the sector could serve as a means of equalizing community college student budgets. Even though enrollment increased substantially during the past decade, state allocations to community colleges decreased, forcing institutions to increase class sizes to meet demand. Institutions and states may receive funds to support one of three tenants: designing programs to increase graduation rates, facility renovations, and developing on-line courses (Kellogg & Tomsho, 2009).

Financial aid policies aim to promote educational access or choice, with the federal and state government allocating funds in various forms such as grants, loans, scholarships, and work-study. Promoting access to higher education, one motive for the creation of financial aid, primarily targets “those who may not be able to attend otherwise, especially minority and poverty groups” (Boyd, 1975, p. 37). Proponents of the access debate champion need blind entrée into higher education and suggest low-income students deserve the privilege of a college education at the same rate as their more wealthy classmates (Caldwell, 1975; Curs, Singell, & Waddell, 2007). Second, the ability of financial aid to promote institutional choice assists both low and middle-income undergraduates by allocating funds directly to students (Curs, et al., 2007). Dynarski (20002) proclaimed that the availability of financial aid encouraged students who would not otherwise attend college to enroll in a community college and propelled students interested in pursuing a community college education enrolled in four-year colleges and

universities. Diversifying higher education through the inclusion of ethnic minorities and students with varying income levels as a motive of financial aid gained prominence with President Truman's War on Poverty as discussed in the 1946 text *Higher Education for American Democracy: A Report of the President's Commission on Higher Education* (Boyd, 1975; Zook, 1946). Categorical programs, another financial aid strategy, award students with—a specific vocational choice, military service by the student or parent, geographic location of residence, etc.” (Boyd, 1975, p. 40). Usually distributed at private institutions or through foundations, state government joined the merit aid game in 1993 with the introduction of Georgia's Helping Outstanding Pupils Educationally (HOPE) scholarship and grant program. Within the next decade a total of 12 states, mostly in the southern region, followed suite and created large-scale merit financial aid programs. Eligibility requirements, in some degree or combination, included high school and college grade point average and test scores with awards covering tuition, fees, and books (Dynarski, 2002).

Purpose of the Study

Financial aid policies affect community college students differently than their bachelor's degree-seeking counterparts. According to Dynarski (2002), financial aid impacts both choice and access: for example, students without immediate postsecondary education pursuits would consider community colleges and students planning to attend a community college may consider enrolling in a four-year institution. As previously stated, community college students are likely to attend part-time, have children, and be over the age of 21; however, full financial aid awards granted by the state or federal government usually depend on student enrollment status (AACC, 2009a; Townsend, et al., 2005; Wells, 2008). Community college students' part-time attendance usually reduces financial aid awards considerably, making it more difficult for students to afford

higher education. Additionally, community college students are often the single head of their households, straining their ability to sustain satisfactory academic progress, another criteria for financial aid eligibility. Attending an institution with lower tuition and fees also decreases the maximum award eligibility amount for community college students (AACC, 2009a; Townsend et al., 2005; Wells, 2008). Moreover, enrolling in non-credit programs, negatively affects financial aid awards offered to community college students as some financial aid programs mandate student enroll in degree or certificate programs (AACC, 2009a). For example, Georgia's HOPE scholarship funds were disproportionately awarded to students with higher socio-economic status and decreased student enrollment in community colleges by 5.5 percentage points (Dynarski, 2002). This combination of decreased awards results in a confluence of factors that thwart student success and call for further study.

The purpose of this study is to execute a critical literature review of studies published between 1986 and 2010 regarding the relationship between community college student persistence and financial aid. This research method will allow the author to develop generalizable conclusions and identify gaps in literature from previously conducted research about community college student persistence and financial aid. Using critical literature review as an analysis technique is—in a sense, a type of secondary analysis although it does not involve, as is more commonly the case, acquiring some other researcher's data decks or tapes and then doing one's own analyses" (Feldman, 1971, p. 95). This critical literature review will provide a generalization of the research results and conclusions upon which to consider future financial aid policy decisions and evaluations.

Significance of the Study

With the number of community college students scheduled to outpace student enrollment at four-year institutions, researchers should examine similarities and differences in student characteristics and enrollment behaviors that are the most likely to enable sound recommendations for policy and practice. The number of undergraduates increased by more than 8 million between 1970 and 2007: from 7.4 million to 15.6 million students. Enrollment at community colleges increased from 5.9 to 6.6 million between 2000 and 2007 and is predicted to rise to 7.5 million students by 2018 (Planty, et al., 2009). Murdock (1986) performed an integrative review of existing empirical studies that investigated the relationship between student persistence and financial aid and recommended future scholars replicate her study with a more focused approach using community college students due to the lack of literature available about the constituent group. Unfortunately, a disproportionate amount of published articles, dissertations, and theses use four-year college instead of community college students in the sample when discussing the connection between financial aid and persistence (Bers & Smith, 1991; Townsend, et al., 2005). Thus due to limited information available, this study seeks to carefully review and critique existing recent studies that focus specifically on community college student persistence. Such a critical review of the literature can provide an updated analysis of persistence and financial aid and can assist higher education scholars in looking for ways to deepen the value and benefits of college attendance for this sector of students.

Statement of the Problem

With billions of dollars allocated to financial aid programs at the organization, institution, state, and federal levels, stakeholders question if financial aid programs support stated goals of higher education: access and choice. The public supports funding higher education and

champions financial aid programs, particularly state-funded merit based programs (Dynarski, 2002). Mixed findings surfaced associated to the relationship between financial aid and community college student persistence (Cofer & Somers, 2001; Hppensteel, St. John, & Starkey, 1996; Metz, 2001; Murdock, 1989). In addition to investigating the relationship between financial aid and community college student persistence, the type of financial aid (e.g., loans, grants, work study, and a combination of awards) and amount of award will be explored. This study provides a most up-to-date summary and analysis of financial aid and its impact on student persistence and is unique in its focus on community college students.

Research Questions

As a critical review of the literature and detailed discussion of implications, the primary research question guiding this study is:

1. Does the literature available from 1986 to 2010 show that financial aid promotes student persistence in higher education at the community college level?

Due to the variety of articles with diverse persistence measures and financial aid considerations, the four secondary questions are:

1. Do certain forms of financial aid or combinations of financial aid increase persistence better than others?
2. Does the dollar amount of financial aid affect persistence?
3. Does the impact of financial aid on student persistence differ by gender or ethnic groups?
4. Does the timing of the aid award affect persistence?

Definitions

The following definition of terms was developed based on appearance in articles used for this critical literature review.

Academic Year: A period of time schools use to measure a quantity of study. Academic years vary from school to school and even from educational program to educational program at the same school.

Campus Based Aid Program: Financial aid programs administered by participating colleges or universities.

Dropout: One who leaves the institution and does not return for additional education at any time, or at least prior to the time the study was conducted.

Financial Aid Package: The total amount of financial aid (federal and non-federal) a student is offered by the school. The financial aid administrator at a postsecondary institution combines various forms of aid into a 'package' to help meet a student's education costs.

Financial Need: The difference between the student's cost of attendance and the family's ability to pay these costs.

Four-Year/Baccalaureate Institutions: Institutions that confer at least a baccalaureate degree in one or more programs.

Grants: Financial aid awards without a repayment condition.

Loans: Financial aid awards with a repayment condition. Two types of federal loans include Federal Direct Loan (Direct Loan) and Federal Family Education Loan (FFEL).

Merit Financial Aid: A discount to college costs contingent upon academic performance.

National Longitudinal Study (NLS): A study designed and conducted by the National Center for Education Statistics (NCES) of the US Department of Education. Participants in the study were selected when they were seniors in high school in the spring of 1972, and in a supplementary sample drawn in 1973.

Persistence/Retention: One who continues enrollment at the same (or another) institution without interruption for a period of study (which could refer to freshman or sophomore persistence or to persistence until graduation).

Stopout: One who leaves the institution for a period of time but returns to the same (or another) institution for additional study.

Two-Year College/Community College: Institution that confers at least a certificate or associate's degree or program that partially fulfills requirements for a baccalaureate degree.

Work Study: Federal Work Study provides jobs to undergraduate and graduate students, allowing them to earn money to pay education expenses.

Organization of Study

The remaining four chapters of this dissertation identify themes, define the methodology, and offer recommendations for future research and practice. Chapter two provides a review of financial aid, community college, and persistence literature. Critical literature review as a research methodology is outlined in chapter three. I will map a research agenda, a challenge to other researchers to move the academy forward, and identify gaps in the literature in chapter four. The dissertation concludes with recommendations for policy and practice at institutional and government levels to improve community college student conditions.

CHAPTER 2

LITERATURE REVIEW

Before one can understand the significance of a study about the impact of receiving financial aid on community college student persistence, one must understand the history of financial aid in the United States and the community college sector. Even though other factors including high school background (Calcagno, Crosta, Bailey, & Jenkins, 2007; Feldman, 1993; Gates & Creamer, 1984; Grimes & David, 1999), socio-economic status (Bers & Smith, 1991; Gates & Creamer, 1984), age (Calcagno et al., 2007; Felman, 1993), gender (Calcagno et al., 2007; Felman, 1993; Voohrees, 1987), ethnicity (Calcagno et al., 2007; Felman, 1993; Gates & Creamer), and individual student aspirations (Bers & Smith, 1991; Felman, 1993; Gates & Creamer, 1984; Mutter, 1992) affect community college student persistence, financial aid is worth studying due to changing policy and allocation criteria. Underserved in scholarly literature, community college students represent almost half of all undergraduate students each fall (Knapp, Kelly-Reid, & Ginder, 2009; Laanan, 2000; Townsend, Donaldson, & Wilson, 2005). The following chapter provides an overview of the history of US student financial aid, community colleges and a review of literature about the relationship between financial aid and community college student persistence. The intersection of these isolated themes impact students in myriad manners. For example, changes in financial aid policy can alter community college student enrollment patterns, resulting in shifts in persistence. One must possess a basic understanding of each topic to comprehend their relationship and impact on student achievement.

Financial Aid

The purpose of financial aid changed with the social and political climate. Primarily implemented to promote access and choice to postsecondary education “over half of all undergraduates in America receive some form of financial aid: grants and scholarships, student loans, and work-study jobs” (Wilkinson, 2005). The concept of access involves advancing higher education opportunities for students from historically under-represented groups particularly ethnic minorities and low-income populations (Alexander, 2002; Balderston, 1997; Baum, 1987; Curs, et al., 2007; Doyle, Dalaney, & Naughton, 2004; Hannah, 1996; Hatfield, 2003; Heller, 2004; Leslie & Brinkman, 1988; Wells, 2008; Zeidner, 2006). Predominantly distributed at institutional, state or federal levels, government entities allocated the bulk of student financial aid, while state government provided a considerable portion of higher education assistance through direct appropriations to institutions and student aid programs (Doyle, et al., 2004). “The concept of equal access to higher education without regard to financial need formed the core of the convictions that spurred the growth of federal, state, and institutional student financial assistance programs starting in the 1960s” (Linsley, 1997, p. 5). Institutional choice targets students from varying socioeconomic backgrounds, including middle and upper income undergraduates, and supports student ‘upward mobility’ within the academy: students who initially decided to forego college may consider attending a community college and students with preliminary intentions to attend a community college may elect education at a four-year college or university (Baum, 1987; Boyd, 1975; Curs, et al., 2007; Dynarski, 2002).

Individual institutions and state and federal government, the chief suppliers of financial aid awards, provided 83 percent of all financial aid distributed during the 2008 – 2009 academic year (College Board, 2009). The least understood and most flexible, institutional aid allocates

funds based on college or university need or interest by awarding student talents or unique ability. In most cases institutional aid practices mimic those at the state level instead of providing an alternative or offsetting the efforts (Doyle, et al., 2004; Sommers, 1995).

Institutions rarely offer more need-based awards in states with strong merit programs. If the state focused on merit-based aid, the institution would follow suit instead of providing more need-based aid to craft balanced financial aid practices for students.

Government aid, offered at the state and federal levels, promotes both access and choice. State governments provide subsidies to public and private not-for-profit institutions through budget allocations for public institutions and tax exemption for both sectors (Boyd, 1975). These efforts support access as government support offsets tuition and fees charged to students. At the individual student level states sponsor financial aid programs, including merit based scholarships with awards varying from full tuition and fees to lesser proportions of education expenses based on academic achievement (Creech, 1998; Doyle, et al., 2004; Dynarski, 2002). Critics of the merit-based programs contend students who could afford to attend college without the subsidy receive the award at higher rates than those with fewer financial resources.

The federal government's role in higher education generates debate. Some stakeholders consider financial aid an expensive entitlement program and others support using allocations to increase economic upward mobility through higher education. Supporters contend that federal financial aid helps level the playing field for students without financial means while opponents think students should fund their education with little federal assistance. Historically, a low tuition/low aid model guided higher education, specifically at the community college level. With rising tuition costs a high tuition/high aid theory emerged even though the federal government never fully funded higher education legislation and financial aid budgets under the low

tuition/low aid arrangement. Disbursed in several forms, the federal government supports higher education at the institutional and student levels. Select institutions participate in the Title IV program, allowing students to receive federal aid in the form of grants, fellowships, loans, and college work-study with the institution as the payment center (Alexander, 2002; Caldwell, 1975; Doyle, et al., 2004; Jackson & Weathersby, 1975).

The higher education policy process —occurs within the limits of a slowly evolving political culture, it is built on and related to existing policy; and it draws from existing policy models” (Hannah, 1996, p. 499). The remainder of this section presents a historical overview of US financial aid policy highlighting milestones at state and federal levels beginning with the early twentieth century and focusing on the largest programs.

Early Years: 1918 - 1969

Early financial aid programs targeted military personnel, educating students to advance the United State’s standing on the world stage and address national and international interests. Considered temporary programs, the Vocational Rehabilitation Act of 1918 and National Defense Act of 1920 (later renamed Reserve Officers Training Corps or ROTC in 1925) were passed to provide education and training for US military personnel. The Vocational Rehabilitation Act of 1918 provided vocational rehabilitation training to honorably discharged WWI veterans and stipends for those unable to secure employment. An early federal scholarship program, ROTC, provided military training and education while another Depression Era program, Works Progress Administration, allowed students to work while enrolled in college. The federal and state government allocated funds to individual institutions to support grants and work-study efforts. As the forerunner to Federal Supplemental Educational Opportunity Grants (FSEOGs), these government funded awards provided financial resources for students based on

need in the form of grants and work-study at the institutional level (Baum, 1987; Linsley, 1997; United State Department of Veteran Affairs, 2009; Wilkinson, 2005). –Run by New Deal agencies – the Federal Emergency Relief Administration and later the National Youth Administration – the program was aiding about one in eight college students by the late 1930s as well as needy high school students” (Wilkinson, 2005, p. 47). The goals of these programs stemmed from the notion of training America’s workforce and increasing economic and social development (Wilkinson, 2005).

President Franklin Delano Roosevelt established the New Deal initiatives in 1933 as a means of jumpstarting the American economy after the Great Depression through the use of social programs. Two programs supporting higher education included the Student War Loans and National Youth Administration. The Student War Loans program lent upper class students money to support their educational endeavors if they agreed to work in the war effort after graduation. Established in 1935 and discontinued in 1943, the National Youth Administration supported on campus employment for students based on financial need (Zook, 1946).

Enacted in July 1944, the Servicemen’s Readjustment Act (G. I. Bill of Rights) bestowed funds to veterans for tuition and expenses and became the first major federal financial aid program (Hatfield, 2003; Wilkinson, 2005). Beginning with veterans from World War II, the legislation expanded to include military personnel from other wars and times of service (Baum, 1987; Linsley, 1997; Thelin, 2004; Wilkinson, 2005). Extending beyond education benefits, the G.I. Bill provided unemployment compensation and inexpensive mortgage interest rates for military men and women after as little as three months of service (Wilkinson, 2005). Working their way through college, federal elected officials including members of Congress and President Roosevelt, opposed many financial aid proposals. After initially agreeing with Congress,

wartime President Roosevelt supported the bill as a compromise to reduce the draft age to 18 years of age (Gladieux & Hauptman, 1995; Wilkinson, 2005).

With an emphasis on postsecondary education, the 1956 Eisenhower Commission on Education Beyond High School discussed the commitment to higher education, expansion of educational opportunity, and financial aid. Combined with an emphasis on national security and the government's commitment to higher education, the commission focused on areas of science, mathematics, and engineering to address the Soviet Union's strides with technology evidenced by the 1958 Sputnik satellite launch. The National Defense Student Loan (NDSL) program provided loans to students majoring in math, science and languages and offered debt cancellation for teachers (Baum, 1987; Gladieux & Hauptman, 1995; Hatfield, 2003; Linsley, 1997; Saunders, 1982; Wilkinson, 2005). Even though these early financial aid programs increased the number of funding options available, members of Congress wanted to advance select government programs with an educated workforce.

Kennedy and Johnson Administrations: 1961 – 1969

Deeming education and civil rights domestic issues, President John F. Kennedy committed to advancing educational opportunity to previously underserved groups: he wanted to increase access and job training for under-represented populations (Baum, 1987; Gladieux & Hauptman, 1995; Wilkinson, 2005). His attempt to change financial aid policy as president failed in 1962 because many representatives in Congress considered student aid programs a breach of the constitution as a separation of church and state. Fatefully, he was never able to fulfill his commitment to higher education and disadvantaged residents due to his untimely death (Caldwell, 1975; Wilkinson, 2005). Following in Kennedy's footsteps of civil rights for ethnic minorities and citizens from low socio-economic backgrounds, President Lyndon Johnson forged

a war on poverty as part of his domestic policy agenda (Baum, 1987; Gladieux & Hauptman, 1995; Hearn, 1993; Wilkinson, 2005). Initiated by Kennedy and signed by Johnson, the Economic Opportunity Act of 1964, for the first time provided “students access to higher education and choice of college based on academic achievement regardless of their ability to pay for their education” (Linsley, 1997, p. 8) through the creation of the College Work Study program and the Supplemental Educational Opportunity Grant (SEOG). The first phase of the equalization process, the Economic Opportunity Act of 1964, provided a foundation for the Higher Education Act (HEA), which continues to affect American Higher Education today through its reauthorizations and amendments. During his message to Congress on March 16, 1964, President Johnson declared a national goal of full educational opportunity. A condensed version of the Higher Education Act of 1965, this speech outlined his plans for increased access through financial aid and showcased his commitment to disenfranchised Americans (Saunders, 1982).

Considered a method to equalize education opportunity, the Higher Education Act of 1965 allocated funds, through colleges and universities, to qualified students with exceptional financial need (Baum, 1987; Curs, et al., 2007; Gladieux & Hauptman, 1995; Heller, 2004; Linsley, 1997; McPherson & Schapiro, 1991; Thelin, 2004; St. John, Paulsen, & Carter, 2005). As part of Johnson’s war on poverty, the HEA of 1965 also intended to increase access to under-represented ethnic minorities. The program consolidated other existing educational programs, such as work-study, the GI Bill, the National Defense Education Act, Educational Opportunity Grant, and the National Education Facilities Act of 1963, under one umbrella and federal agency. Congress included a reauthorization process scheduled to occur every four to six years to evaluate legislation in the original HEA (Curs, et al., 2007); however, this process lacks inherent

precepts for ‘systematic housecleaning’ to reduce the policy and program contradictions, inefficiencies, and illogic accumulated in the years since the Great Society era” (Hearn, 1993, p. 96). Unfortunate for community college students, the Higher Education Act of 1965 made little provisions for this higher education option; however, later changes embraced this population (Linsley, 1997).

Concerns surfaced about the financial aid’s purchasing power, loan repayment contingent on student profession, and applying an economic model to higher education (Boyd, 1975; Doyle, et al., 2004; Hannah, 1996). Policy makers worried about the ability of students with federal awards to cover the remaining costs of college attendance, stakeholders wondered if students would be able to pursue their education until graduation without a full subsidy or providing other avenues for higher education funding (Doyle, et al., 2004). Financial aid allocations allowed students to show their support for particular institutions through enrollment, creating a supply and demand structure in the academy (Hannah, 1996). Students interested in short programs, less expensive options for the first two years of a baccalaureate degree, attending college close to home, or technical degrees used the funds to attend community colleges. Contrary to some predictions that colleges may close as students chose institutions that met their individual needs, the community college sector expanded as it met the needs of students seeking higher education with a flexible schedule in their communities.

Recent Developments

Financial aid policy evolved based on government priorities and societal needs and expectations. Provisions in the original Higher Education Act focused on traditional aged four-year college students and made few accommodations for students pursuing a then, unconventional

educational path. As legislatures recognized the myriad paths to postsecondary education, policies shifted to benefit part-time and adult students.

Nixon, Ford, and Carter Administrations: 1964 - 1981

With bipartisan support for the entitlement of higher education, the 1972 Amendment to the Higher Education Act, shifted financial aid from merit based to need based awards (Caldwell, 1975; Hannah, 1996; Heller, 2004). In addition to enacting two landmark programs, State Student Incentive Grants Program (SSIG) and the Basic Educational Opportunity Grants (BEOG), Congress revised the term ‘postsecondary education’ with ‘higher education’ to embrace training after high school, various patterns of attendance, and institutional options (Boyd, 1975; Gladieux & Hauptman, 1995; Hannah, 1996). These programs signified federal support for higher education by altering definitions and accommodating part-time, community and technical college students.

The principal objective of the State Student Incentive Grants Program (SSIG) was to supply states with matching federal funds and encourage them to create and implement direct student aid policies mirroring the federal government’s need based programs (Alexander, 2002; Baum, 1987; Heller, 2004). SSIG provided the springboard for state grant programs by requiring states to match at least 50 percent of federal funds provided (Linsley, 1997). In 1969, nineteen states appropriated just under \$200 million for these programs; by 1974, thirty-six states allocated \$423 million to them” (Linsley, 1997, p. 10). Less than 10 years later, every state and Washington, DC established at least one need-based grant financial aid program, modeling the federal shift from merit awards (Choy, 2004; Heller, 2004). The federal SSIG program increased financial resources available to students as states created programs in order to receive funds matched by the federal government. As with other need-based programs, the SSIG attracted

students interested in attending community colleges as these students often delayed or disregarded their higher education pursuits due to financial hardship.

Initially proposed by the Nixon administration after Congress refused to revoke campus-based financial aid programs, the Basic Educational Opportunity Grant (BEOG), replaced ~~three~~ existing federal student aid programs administered through the colleges: Educational Opportunity Grants, National Defense Student Loans, and Work-Study” (Gladieux & Hauptman, 1995, p. 17). The BEOG expanded choice by permitting accredited colleges and universities to disburse funds directly to eligible students (Curs, et al., 2007; Thelin, 2004). Eliminating approximately 15 percent of community college students, the award criteria required students to possess a high school diploma (or equivalent), enroll in an eligible institution, and matriculate with the intent to earn a degree or certificate (Curs, et al., 2007; Hannah, 1996; Romano & Millard, 2006). The maximum award of \$1,400 during the first award cycle could not exceed more than half the cost of attendance, the allocation increased to 60 percent of attendance in 1980, and the award cap was eliminated during the 1992 reauthorization (Curs, et al., 2007; Hannah, 1996). As Pell Grant requirements changed, allocations and number of students served rose making it the largest need based financial aid award program: in 2005, one fifth of all matriculating undergraduates were awarded \$12 billion, a threefold increase from the \$4 billion awarded in 1990 (Curs, et al., 2007). The Pell Grant program provided a funding mechanism, without repayment requirements, for price-conscious community college students.

The Pell Grant grew during the 1990s: 3 million students were awarded \$4 billion per year in 1990 and 3.8 million students were awarded \$3.8 billion in 1997 (Thelin, 2004). Almost a decade later, in 2005 one fifth of all matriculating undergraduates were awarded \$12 billion making Pell Grant the largest need based financial aid award program (Curs, et al., 2007). In

spite of these remarkable gains ‘purchasing power’ of the Pell Grant (the amount of educational expenses covered by the maximum Pell Grant) declined due to increased tuition and fee costs (Doyle, et al., 2004).

During this time, acute patterns emerged regarding community college student Pell Grant recipients. At its height, the average Pell Grant award covered 55% of expenses for students in all sectors in 1975 and only 36% at the lowest point in 1995 (Curs, et al., 2007). During the 1999 – 2000 academic year, approximately 29 percent of public four-year college students received an average award of \$2,033 and about one quarter of their counterparts attending private institutions received an average award of \$2,010. Less than 20 percent of public community college students received an average of \$1,673 Pell award that same year (Romano & Millard, 2006). In spite of these remarkable increased allocations, ‘purchasing power’ of the Pell Grant (the amount of educational expenses covered by the maximum Pell Grant) declined (Doyle, et al., 2004). Eligibility requirements and community college student enrollment patterns may have contributed to shifts in awards over time and the disparity between community and four-year college students. Today, community college students who previously earned a bachelor’s degree are not eligible for the Pell Grant. Moreover, community college students with bachelor’s degrees are likely to enroll in non-credit or non-matriculating courses. Typically, community colleges charge lower tuition than bachelor institutions, resulting in lower maximum award eligibility for community college students based on the total percentage of cost of attendance. Additionally, a greater percentage of community college students attend part-time than their four-year college colleagues, decreasing their eligibility for maximum award allotments (Romano & Millard, 2006). When compared to their four-year institution counterparts, community college students are more likely to enroll part-time, exhibit higher

financial need, live off campus, and serve as the single head of a household. If community college students apply for financial aid, part-time attendance decreases Pell Grant allocations. Moreover, community college students use financial aid awards to fund more than tuition, fees, and books as they often use the funds to supplement transportation, childcare, and off-campus living expenses. Some community college students may find completing the financial aid application process too daunting and time consuming in light of the anticipated award.

Concerns surfaced about college affordability for students from middle-income families, leading Congress to shift financial aid policy from Pell Grants to student loans with the creation of the Middle Income Student Assistance Act (Alexander, 2002; Choy, 2004; Gladieux & Hauptman, 1995; Hannah, 1996; Hearn, 1998; Linsley, 1997; Thelin, 2004). The purpose of the legislation was to serve as a compromise between members of Congress who supported need-based financial aid and those who endorsed tuition tax credits and other non-need based efforts by removing the income cap on Guaranteed Student Loans (Alexander, 2002; Linsley, 1997; Thelin, 2004). “To head them off, congressional Democrats and the Carter administration developed a counterproposal to widen eligibility for Pell Grants and open subsidized guaranteed loans to any student regardless of income or financial need” (Gladieux & Hauptman, 1995, p. 17). This act served as the impetus in the trend of moving from need based aid toward student/family-supported loans (Hearn, 1998; Zeidner, 2006). The priority to allocate financial aid in terms of tax credits and loans increased substantially, especially with the surge of private lenders, jeopardizing the resources available to community college students who often forego higher education if required to borrow to continue their educational pursuits.

As required by the original Higher Education Act of 1965, a review of the legislation must occur to either continue existing programs or make revisions to meet the changing needs of

students and the higher education landscape. The 1976 and 1996 reauthorizations occurred without fan fare or modification to financial aid processes; however, the 1980 reauthorization extended existing programs and expanded programs for students from middle and high-income backgrounds (Hannah, 1996; Hartle, 1996). The Middle Income Student Assistance Act expanded in response to increasing education expenses, making the program available to part-time and independent students (Saunders, 1982). Additionally, the Parent Loans for Undergraduate Students (PLUS) loan allowed parents to secure loans without consideration of financial need for undergraduate dependent students (Alexander, 2002; Gladieux & Hauptman, 1995). Programs to abet middle class students occurred during the 1980 reauthorization impacting fewer community college students compared to those attending four-year institutions, who may not meet income eligibility requirements to benefit from the Middle Income Student Assistance Act or receive little, or no, backing from parents. The expanded financial aid programs failed to increase access and choice for all students considering community college students rarely qualified or accepted these allocations; however, the resounding participation for middle class students helped justify the federal policy shift from grants to loans.

Reagan Administration: 1981 - 1989

The Reagan administration's higher education agenda involved successive years of decreasing allocations with an emphasis on student borrowing and disdain for grant aid (Baum, 1987; Linsley, 1997; Saunders, 1982; Zeidner, 2006). Policies enacted during the Reagan administration adversely impacted middle and low income students through the unofficial retraction of the Middle Income Student Assistance Act marked by decreased grant funding, reduced allocations to education programs overall, while the number and amounts of loans were simultaneously increased (Hearn, 2001; Gladieux & Hauptman, 1995; Hearn, 1998; Linsley,

1997; Saunders, 1982). Moreover, FY81 appropriations left a \$600 million deficit to meet policy mandates for students eligible during the 1980 – 1981 academic year and additional annual cuts of over \$1 billion followed (Saunders, 1982). Through legislation and allocation, the Reagan administration decreased support for higher education, especially for community college students, and shifted financial aid from need-based programs. Summing up the Reagan administration's stand on higher education and financial aid policy, David Stockman, Director of the Office of Management and Budget stated:

I do not accept the notion that the Federal Government has an obligation to fund generous grants to anybody that wants to go to college. It seems to me that if people want to go to college bad enough, then there is opportunity and responsibility on their part to finance their way through the best they can.” Stockman's blunt words are not yet official administration policy. But they fairly characterize the thinking behind the devastating further cuts in student aid funding that President Reagan will propose to Congress in his FY83 budget (Saunders, 1982, p. 9).

Major components of the 1986 reauthorization of the Higher Education Act included expanding the Pell Grant, Guaranteed Student Loan and college work-study programs and creating legislative formulas to define expected family contributions for Pell Grant recipients (Baum, 1987; Curs, et al., 2007). The reauthorization changed financial aid eligibility requirements allowing students attending less than half time to receive aid, increased requirements and documentation for students to claim independent status, required students to maintain a C average to receive federal financial aid, and raised the amount of funds students could borrow (Alexander, 2002; Baum, 1987). These modifications positively impacted community college students who sought financial aid without repayment conditions and attended

less than full-time. Even though students could borrow more, interest rates also increased and the government regulated disbursements at the institutional and lender levels to counteract increases in loan defaults (Hannah, 1996). The increases in authorized dollars did not translate into allocations: the shortfalls in allocations meant students did not receive sanctioned maximum awards (Baum, 1987). Expanding programs frequently utilized by community college students, Pell Grant and college work-study occurred at the legislative level with appropriations falling short of government mandates. Few students noticed increases in their financial aid awards, the true test of change, from one year to the next after the reauthorization passed.

Bush Administration: 1989 - 1993

Support for loan programs increased at the expense of need-based awards with the 1992 Reauthorization and 1998 Amendment of the Higher Education Act. The trend of loan aid outpacing grants continued with the HEA Reauthorization in 1992. Landmark changes in financial aid requirements, Pell Grant authorization and allocations, and loan programs were created with the Higher Education Act Reauthorization of 1992 (Gladieux & Hauptman, 1995). According to Hannah (1996) federal policy shifted in regards to the role of financial aid from promoting access through grants to promoting choice through award allocations that do not consider family income. The significance of this reauthorization rested in its magnitude: financial aid became accessible to 75 percent of all college students (Hannah, 1996). ~~In~~ the mid 1970s, about 76% of federal student aid was awarded in grants and 20% in loans; by the mid 1980s the proportions were reversed, with 67% going to loans and only 29% to grants” (Hannah, 1996, p. 507). At the same time, participation in the Guaranteed Student Loan program increased five-fold and college costs increased and outpaced inflation: Pell Grant allocations were flat, meaning increased dollar awards had the same purchasing power as previous

disbursements (Hannah, 1996). Modifications to the Higher Education Act favored students willing to finance their education through loans, resulting in altered attendance patterns; either not attending, stopping out, or dropping out for many community college students.

Concerned about loan defaults and the imbalance between grant and loan allocations, Congress moved to overhaul eligibility requirements and disbursement practices (Gladieux & Hauptman, 1995; Hannah, 1996; Hearn, 1998). Key changes with the 1992 Reauthorization included: reducing the average expected family contribution, expanding need based aid, increasing loan limits, and creating unsubsidized loans for students regardless of financial need. The new process to calculate need, implementing the Free Application for Federal Financial Aid (FAFSA), increased Stafford Loans limits, while offering unsubsidized loans regardless of financial need allowed students to borrow beyond ‘need’ (Balderston, 1997; Choy, 2004; Gladieux & Hauptman, 1995; Hearn, 1998). After policymakers expressed concern about federal financial aid options for independent and part-time students, Congress classified and expanded eligibility for independent adult students (Hatfield, 2003). The Student Loan Reform Act created flexible loan repayment plans with an option contingent on student income for up to 25 years (Alexander, 2002). Even though these changes to loan programs would make repayment less burdensome, community college students tend to find other means to finance their education expenses or take longer routes to graduation to avoid debt (Hannah, 1996; Hatfield, 2003). The primary changes implemented with the 1998 Higher Education Act Amendment included renaming the Guaranteed Student Loan program after Senator Robert Stafford and adding “pay as you go provisions for any new direct spending proposals” (Hannah, 1996, p. 505). The latter change adversely affected initiating or expanding need-based programs, such as the Pell Grant, which typically attract community college students.

Clinton Administration: 1993 - 2001

The Federal Family Education Loan (FFEL) program, a consolidation of previous loan programs, offered unsubsidized loans up to \$2,525 for first year students and \$5,500 for education during the second year and beyond, based on financial need (Linsley, 1997). As the largest student aid program at the time, federal student loans provided ~~more~~ more than twice as much money as all other federal aid programs combined” (Alexander, 2002, p. 668). The Stafford Loan Program (formally Guaranteed Student Loan Program) targeted middle class students by providing unsubsidized loans. Other goals and changes to the program were to support students attending more expensive institutions, providing loans for students who attended at least half time, and making it easier for middle-income students to qualify for financial aid (Alexander, 2002; Choy, 2004). Loan limits increased from a maximum of \$17,250 to \$23,000 for the extent of a student’s undergraduate education (Choy, 2004). During the 1990s, tax credit programs sponsored by the federal government emerged as another avenue to help families of college aged students pay for education expenses (Choy, 2004; Hatfield, 2003; Zeidner, 2006). The Tax Relief Act of 1997 offered two forms of tax credit for families with annual income of \$100,000 or less: the Hope Tax Credit, to support students during the first two years of study and Lifelong Learning Tax Credit, eligible to all students (including graduate students) after exhausting Hope Tax Credit options (Choy, 2004; Zeidner, 2006). Few families earning less than \$20,000 annually participated in the initiative or were able to benefit from the tax deduction for tuition and fees (Choy, 2004; Hatfield, 2003). Again, loan and tax credit programs benefit four-year college students more than those enrolled at community colleges. Community college students are less likely to accept loan awards and the cost of attendance is usually less than baccalaureate institutions resulting in decreased loan allocations. As independent students with little financial

support from their parents, community college students rarely qualify for FFELs, and financially strapped community college students rarely qualify for tax deductions.

Modest changes occurred during the 1998 Reauthorization of the Higher Education Act. The Pell Grant maximum award was increased by \$300 each year after FY1999 to \$5,800 in FY2003. Even though college costs continued to rise and outpace inflation, maximum award amounts remained unchanged during previous reauthorizations (Curs, et al., 2007). Any increase in maximum Pell Grant awards benefits community college students; however, few recipients received the maximum increase as the awards are based on the cost of attendance and community college students typically have lower expenses than four-year college students.

State Programs

State financial aid policies mirrored federal guidelines and moved from need-based to merit-based awards beginning in the early 1990s. Dynarski (2002) defined merit financial aid as “discounts to college costs contingent upon academic performance” distributed in the form of scholarships or tuition waivers” (p. 2). Rooted in the private college sector, merit financial aid was not typically awarded at public colleges and universities or state and federal government levels (Creech, 1998; Dynarski, 2002). Merit awards were usually allocated to students who would have attended college without the scholarship: need-based financial aid supports students who may not attend without assistance (Heller, 2004). This changed in the 1990s when public institutions and states increased merit awards in an effort to promote academic achievement and increase college enrollment (Cornwell, Lee, & Mustard, 2005; Heller, 2004). Politically motivated at the state level, students from middle and upper income families, those most enthralled in the political process, disproportionately benefited most from these awards (Heller, 2004). Georgia started the trend of state funded merit based financial aid programs in 1993 with

the introduction of the Helping Outstanding Pupils Educationally (HOPE) scholarship. Georgia's lottery-funded program paid tuition, mandatory fees and a book stipend for eligible residents attending college in state (Cornwell, et al., 2005; Doyle, et al., 2004; Zeidner, 2006). Within a decade after the HOPE Scholarship was established, 15 other states, mostly in the south, created similar programs (Dynarski, 2002; Heller, 2004; Zeidner, 2006). Critics contended that institutions would follow state policy and scholarships would be awarded to students who could afford college without the subsidy, particularly those from middle and upper income households (Cornwell & Mustard, 2001; Creech, 1998; Long, 2004). With a state emphasis on merit aid, colleges and universities allocated funds based on merit instead of balancing aid policies overall by granting more need based awards (Doyle, et al., 2004). "HOPE awards are disproportionately given to counties with relatively high incomes" (Cornwell & Mustard, 2001, p. 22). State funded merit based financial aid programs, like other financial aid programs implemented during this era, are more likely to benefit middle class and four-year college students. Community college students enter the academy with low grade point averages and test scores, making them ineligible for these programs. Lack of academic preparedness also decreases the likelihood that these students will secure the merit awards once enrolled in higher education.

Bush Administration: 2001 - 2009

The College Cost Reduction and Access Act of 2007 (H.R. 2669) altered Pell Grant awards and student loan policies. Pell Grant awards increased from \$490 to \$1,090 over a five-year period from a maximum of \$4,050 in 2006 to \$5,400 by 2012. More than 5.5 million students benefited from the reform which included decreasing subsidized loan interest rates, capping repayment amounts to 15 percent of borrowers' discretionary income, offering loan forgiveness after 25 years for borrowers in economic hardship; and instituting a loan forgiveness

program for public servants who worked for a decade and loan repayment for military service members, first responders, law enforcement officers, firefighters, nurses, public defenders, prosecutors, and early childhood educators (Pelosi, 2009; United States House of Representatives Education and Labor Committee, 2007). The College Cost Reduction and Access Act benefited community and four-year college students. The increases in Pell Grant awards would translate to increased allocations to individual students: community college students willing to accept loans will have lower interest rates, repayment caps, and loan forgiveness after 25 years under hardship circumstances or public service.

Principle developments of the Higher Education Act Reauthorization of 2008 altered the financial aid application process, Pell Grant program, and private student loans. Changes to the Free Application for Federal Student Aid (FAFSA) application made it user-friendly by editing the content with more understandable terms and reducing the number of questions. Pell Grant changes included increasing the authorized maximum award and allowing students to obtain the award year-round for up to 18 semesters. Banks issuing private student loans must disclose and obtain a signed certification form from borrowers outlining the terms, payoff information and information about federal student financial aid at time of application (American Council on Education, 2008; Association of American Medical Colleges, 2008). These changes made the financial aid process easier for students by alleviating some of the concerns posed with the cumbersome and extensive FAFSA form, encouraging students to enroll during the summer term by extending financial aid year-round, clear documentation of private student loan terms to make students aware of interest rates and payoff terms and availability of federal loans.

Private Loans

With idle federal loan limits, private loans for higher education materialized. The last increases in student loan limits occurred during the Reagan administration to \$23,000 over an undergraduate career. With rising tuition and fees that can exceed \$20,000 per semester, especially at private institutions, students take advantage of loans offered by lenders other than the federal government. Some private loans allow students to defer payment until after graduation like government sponsored loans, but have higher interest rates and lack the forbearance option.

Obama Administration: 2009 – Present

Instead of radically altering financial aid policy, President Obama demonstrated his commitment to higher education and the community college sector through program initiatives. Federal student loan interest rates for undergraduates decreased to approximately five percent during FY2010. Most recently in July 2009, President Barack Obama allocated \$12 billion, disbursed over a ten year period, to support community colleges. The allocation was divided to the following categories: \$9 billion for Challenge Grants to address dropout, \$500 million for on-line education, and \$2.5 billion for renovation and construction projects. Institutions can use the funds to support new initiatives, facilities, or expand training and counseling programs. Another goal of the funds is to support the economy by implementing programs in high-demand fields such as health care and energy (Diamond, 2009). In this time of economic despair, the funds may sustain or advance community college programs and services as public financial support decreases.

Financial Aid Considerations for Community College Students

Community college students differ from undergraduates at four-year institutions and these distinctions can provide hurdles in the financial aid process. Areas of concern related to community college students in regards to financial aid policy include support for non-traditional students, use of aid for vocational training and remediation, and welfare reform. Original financial aid policies focused on dependent traditional aged full-time students; however, the proportion of this type of student is declining. The number of students over the age of 25 almost doubled between 1970 and 1990: considered independent by federal government financial aid policies, these self-supporting students represent a majority of financial aid recipients (Gladieux & Hauptman, 1995). The change in nomenclature from higher education to postsecondary education to include vocational or technical programs beyond high school during the 1970s contributed to an explosion of alternative models of higher education. The rise in proprietary trade schools providing training in fields of office management, welding, truck driving, and childcare expanded with the ability to disburse federal financial aid. Students in the proprietary sector received a quarter of all Pell Grants funds by the late 1980s. More than half of the 7,500 institutions eligible to participate in the Title IV programs are proprietary. After concerns about mismanagement surfaced, the government altered rules resulting in fewer proprietary institution students receiving aid: only one sixth of them received Pell Grants in 1994 (Gladieux & Hauptman, 1995). Stakeholders were concerned about the amount of financial aid awarded to students not prepared for college work. Two cases contributed to using financial aid to pay for remediation courses.

First is the ‘ability to benefit’ provision added to the law in 1976, which allowed hundreds of thousands of non-high school graduates to qualify for Title IV aid. The

standards used to determine which students can benefit have been low and largely unregulated. . . . The second reason for the trend toward Title IV funding of remediation is simply the inadequate preparation of large numbers of high school graduates. The ongoing debate over K-12 school reform and standards underscores the fact that too many high school graduates cannot yet do college-level work. In recognition of this under-preparedness, the existing federal student aid legislation allows students taking remedial courses to receive federal aid for up to one year of coursework. (Gladieux & Hauptman, 1995, p. 27).

Welfare reform impacted community college students: prior to 1996 welfare recipients could maintain benefits (and were encouraged to do so in many states) as they pursued higher education. The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 represented a change in philosophy requiring welfare recipients to seek employment before higher education (Hatfield, 2003). If higher education provides a means of achieving the American dream, federal financial aid policies need provisions targeted toward non-traditional students from various socio-economic backgrounds seeking vocational training or remediation. Students interested in pursuing higher education should not be penalized for their desire to improve their station in life by being forced to choose between government subsidies or prolonging their degree programs due to lack of financial resources.

Summary

After more than 2 centuries of American higher education, the need for financial aid remains as evidenced by almost 75 percent of all undergraduate students receiving some sort of allocation: 61 percent of community college students at public institutions and 89 percent at private institutions pay for their education with these subsidies (Planty, et al., 2009). Dictated by

changes in the country and Congress, financial aid policy shifted as attitudes transformed from supporting academically talented students and veterans almost exclusively to increasing access to students with financial need, and currently to an increased emphasis on loans. Often slighted in financial aid policy decisions, as the number of community college students increased federal financial aid criteria changed to allow provisions for part-time enrollment, technical and vocational programs, and remedial classes. On the surface, these changes seem promising but unfortunately, the cost of college attendance continues to rise and adequate need-based financial aid may not be available to support students' educational needs.

Community College Overview

Affectionately coined democracy's college, opportunity college, or the people's college, the community college serves a diverse population of students with varying goals, objectives and commitments (Brint, 2003; DiCroce, 1989; Thelin, 2004). Departing from the elitism of higher education, the community college serves as a gateway of opportunity to the academy for the underserved and underrepresented (Vanwagoner, et al., 2005; Wallenfeldt, 1986). As higher education developed, the need for more programs as an alternative to traditional residential institutions became apparent. Community colleges provided an avenue to complete the first two years of undergraduate study close to home, open admissions policies, and flexible enrollment options (Lovell & Trough, 2004). According to Johnston (1980) the goals of the community college include:

- 1) to offer a comprehensive curriculum including transfer or college parallel courses (equivalent to lower-level undergraduate work at a traditional liberal arts college), technical-vocational programs (to teach skills leading to employment immediately upon completion) or terminal occupational courses;

- 2) to practice an open door admissions policy making the colleges accessible to all adult citizens whether or not they have finished high school;
- 3) to provide instruction in convenient locations to a commuter population who can combine part-time work with full-time study, or vice versa;
- 4) to give early school leavers and unsuccessful learners from all social groups and age categories a second chance in the educational system; and
- 5) to be responsive to the local needs of the community and provide intellectual and cultural leadership in meeting a variety of community needs. In sum, the goals of the colleges are to make higher education accessible to the mass of people (pp. 44 – 45).

DiCroce (1989), a proponent of the community college system, found the definition of educational excellence as obtaining a baccalaureate degree limiting. With its open enrollment policies and lower tuition (compared to four-year institutions), community colleges became a vehicle of access to higher education for those shunned by four-year institutions (Johnston, 1980; Wells, 2008). —With explicit policies such as open admissions, community colleges are often touted as vehicles of democratic equality — a possible means by which students can overcome their socioeconomic origins and move up the social ladder, emphasizing the social mobility purpose of education” (Wells, 2008, p. 28). Representing more than one quarter of all institutions and educating more than 30 percent of all students enrolled in postsecondary education with high proportions of non-traditional, part-time and low socioeconomic status students, community colleges are an important force in higher education (Bryant, 2001; Wells, 2008). The community college sector expanded higher education opportunity for students seeking local academic options with flexible schedules. Student accommodations extend beyond evening and weekend courses and include open admissions practices and adult learner programs.

In addition to meeting the needs of students interested in transferring to four-year institutions, community colleges offer employment ready programs that prepare graduates for the workforce.

Community colleges provide various course offerings, formats and degree programs. Course options include remediation, continuing education, distance learning, evening and weekend courses. Formerly called developmental education, remedial courses allowed students the opportunity to increase their academic aptitude, usually in the areas of Reading, English, and Mathematics, to college level expectations while enrolled (Bailey & Alfonso, 2005; Breneman & Nelson, 1980; Caporrimo, 2008; DiCroce, 1989; Laanan, 2000; Wallenfeldt, 1986). An increase of more than 20 percent from 1995, ~~elose~~ to 60 percent of the first-time community college students in the National Educational Longitudinal Study 1988 – 2000 took at least one remedial course,” (Calcagno, et al., 2007, p 778), with most students enrolled in reading and math (Voorhees, 2001). With a focus on remedial education, evidenced by the presence of faculty members and departments in the disciplines (most often Reading, Mathematics, and English), community colleges prepare students for college level work once enrolled. Trends also emerged in remediation rates among community college and four-year college students. During the 1989 – 1990 academic year 77 percent of all college undergraduates enrolled in remedial courses: broken down by institutional type, 87 percent of all community college student and 70 percent of all four-year college students enrolled in remedial courses. A decade later, during the 1999 – 2000 academic year 76 percent of all college students needed remediation: less community college and more baccalaureate degree students needed remediation with 82 percent and 71 percent respectively. Yet another decrease in the need for remediation occurred during the 2007 – 2008 academic year when 72 percent of all college students enrolled in remedial courses: still fewer community college and four-year institution students, by percent of enrollment, needed

these types of courses with 80.9 percent and 67 percent respectively (United State Department of Education – National Center for Education Statistics, 2008a). Community colleges also offer non-credit continuing education courses (Calcagno, et al., 2007; DiCroce, 1989; Laanan, 2000). Fulfilling its community service option, continuing education courses introduce these institutions to people who may not attend otherwise and generate funds as these activities are not supported by state revenue (Voorhees, 2001). The vast course offerings including website creation, conflict resolution, and flower arrangement attract local residents, including those with college degrees who take advantage of continuing education courses to prepare for a career change, personal development, or relaxation. Distance learning, a more recent phenomenon, allows students to enroll in courses with little or no in-person or on-campus interaction. Public community colleges are more likely to utilize this course option than private and public four-year institutions in order to meet the unique needs of their students, who prefer alternative educational methods that allow them to meet school as well as family and/or employment obligations concurrently. Establishing these programs and supporting their technology infrastructure can be expensive, with costs shifted to students through increased tuition and fees for distance education courses (Barefoot, 2004; Voorhees, 2001). ~~Most~~ Most distance education offerings at community colleges are in the form of courses and not degree programs; only 13 percent of those community colleges offering distance education courses had established degree programs by 1997 – 98” (Voorhees, 2001, p. 485). Other popular course formats, evening and weekend options, allow students to attend courses after traditional hours (Bers, 1986; Voorhees, 2001). This format is popular with working students. Some community colleges offer entire degree programs with all courses available on evenings or weekends. In an effort to meet student needs, community colleges

initiated these notable practices that have since been replicated, on a smaller scale, at four-year institutions.

Historical Perspective

The history of community colleges began more than a century ago in 1901 with the establishment of Joliet Junior College in Joliet, IL (Harbeson, 1949; Levine, 1986; Lovell & Trough, 2002). Designed to meet local educational and economic needs, the community college offered short-term training and education models of higher education. Expanding quickly, the community college sector increased from 85 institutions serving 4,500 students in the early 1920s to 456 institutions with 149,854 students less than 30 years later. The increases in enrollment continue with community colleges currently educating almost half of all undergraduate students each fall (Laanan, 2000; Levine, 1986). The origin and expansion of the community college sector developed as a result of student and societal demands.

Enrollment growth

Early community colleges began, as an extension of high schools, occupying the same campus, sometimes even the same floor separated by wings. Usually serving less than 200 students, the primary goal was to provide the first two years of undergraduate education so that pupils then had the ability to ultimately earn their bachelor's degrees from a four-year institution after two additional years of study (Harbeson, 1949; Johnston, 1980; Levine, 1986). Community colleges originated to fulfill the needs of students interested in pursuing higher education. Additional demands for higher education occurred after World War I and students wanted to attend college near home instead of relocating to the state four-year institutions, usually housed in rural areas: community colleges grew by more than five percent following the war (Harbeson, 1949; Levine, 1986). In addition to the close proximity to home, community colleges became an

attractive educational option for veterans wanting to take advantage of federal programs for higher education. Established to offer a seamless transition between high school and higher education, the community college evolved to serve adult learners interested in entering the academy.

Enrollment increases continued throughout the second half of the twentieth century, often times outpacing its four-year college counterparts. The number of full-time equivalent community college students increased 400 percent between 1960 and 1975, while four-year institutions documented an increase of 130 percent full-time equivalent students during the same period (Sulock, 1982). In addition to the surge in enrollment, two landmarks occurred during this period: the passage of the Servicemen's Readjustment Act (G.I. Bill of Rights) in July 1944 and the Truman Commission's plan presented in its report *Higher Education for Democracy* in 1947.

The Servicemen's Readjustment Act (G.I. Bill of Rights) passed in July 1944, provided educational and living benefits for uniformed duty military personnel after successfully completing their tours. The passage of this Act contributed significantly to the increase in adult education with soldiers returning from war seeking training for industry. More than 2.2 million veterans, 60,000 women and 70,000 African Americans, took advantage of the G.I Bill to attend college, diversifying the academy. In addition to increases in the number of credit and degree-seeking students, community colleges developed continuing education programs to meet the need of citizens interested in expanding their educational options without a regimented program of study. Students could learn a skill or develop an interest for personal advancement or entrepreneurship. Initially, the G.I. Bill supported credit and non-credit programs of study,

allowing veterans to take advantage of continuing education programs (Floyd, Haley, Eddy, & Antczak, 2009).

As a means of access to higher education, the community college with its open admissions policies, serves students initially denied entry into four-year institutions and educates students from its local geographic region (DiCroce, 1989; Lovell & Trouth, 2004; O'Connell, 1968). A large proportion of community colleges students would not enter the academy if such institutions ceased to exist: the community college made higher education accessible to the masses (Johnston, 1980). However, according to Wells (2008) community colleges exhibited high average rates of persistence for 'low-capital' students, those with low test scores and low socio-economic backgrounds. Even an accommodating system of open admissions and flexible scheduling cannot guarantee degree completion. The need for public community colleges to define their mission and communicate it to students is muddled as students with varying educational expectations enter institutions without understanding requirements, degrees offered, financial responsibilities, and time commitment. Private for-profit institutions cater their programs to working students by offering flexible course formats including on-line education in popular degree programs needed in the local community such as education and business. The popularity of on-line education continues to grow with on-line degree programs currently representing ten percent of all higher education: students can earn their entire degree without coming to campus (Barefoot, 2004).

Student Characteristics

Since its inception more than 100 years ago, community college enrollment expanded exponentially to currently educating approximately half of all undergraduates each fall (Knapp, et al., 2009; Laanan, 2000). Experiencing significant growth during the 1950s, community

college enrollment more than doubled from approximately 160,000 to 400,000 students. The next decade saw a fivefold increase in enrollment reaching approximately two million students (Thelin, 2004). The same factors that attract students to community colleges pose challenges to persistence and graduation rates as presented in traditional theoretical models (Astin, 1975; Pascarella, 2005; St. John, et al., 2005).

According to St. John, et al. (2005) “students' college choices are constrained by their social circumstances” (p. 548). For example, students from lower socio-economic backgrounds may choose less expensive institutions in their region or less academically prepared students may apply to less rigorous colleges or universities. Fitting this description, community college students are also likely to be first generation college students (Bailey & Alfonso 2005; Dougherty, 1991; Vanwagoner, et al., 2005; Wells, 2008), less prepared academically (Bailey & Alfonso, 2005; Brint, 2003), attend part-time (McCormick, Geis, & Vergun, 1995) and more likely to come from low socio-economic backgrounds (St. John, et al., 2005). More often than not, community college students consider these institutions their only avenue to higher education. During the 1999 – 2000 academic year, approximately half of community college students who received the Pell Grant had incomes of less than \$15,000 per year (Romano & Millard, 2006). Factors such as academic preparedness, enrollment status, and family income may contribute to students electing to attend community colleges.

Attrition Factors

Adult students, those over 25 years of age, tend to enroll in community colleges at high rates and are more likely to attend part-time (Johnston, 1980; Knapp, et al., 2009; McCormick, et al., 1995; O'Connell, 1968; Wallenfeldt, 1986). In addition to their academic priorities these students also balance employment, child rearing, and overcoming academic limitations.

Additionally, among all college students, attending part-time is highest for first year students at 42 percent and declines with each additional year (McCormick, et al., 1995). Unfortunately, attending part time adversely affects persistence as it prolongs the educational process and often discourages students leading to higher drop out rate.

SES/Employment Status

Considering students from low socio-economic (SES) backgrounds are more likely to attend less prestigious institutions, many students in this category enroll in community colleges at higher proportions than they do at four-year institutions (Bailey & Alfonso 2005; Dougherty, 1991; Laanan, 2000; Voorhees, 2001). Economic considerations are often more highly prioritized than academic rigor for these price conscious students. Not necessarily connected to socio-economic status, community college students are also more likely to work, often times blue collar jobs, and receive financial aid while pursuing their academic credential (Caporrimo, 2008; Planty, et al., 2009; Romano & Millard, 2006). According to the American Association of Community Colleges (AACC), 27 percent of full-time community college students are employed full-time and half of them are employed part-time. More part-time students work with 50 percent employed full-time and 33 percent employed part-time (American Association of Community Colleges, 2009a). More than 60 percent of all full-time, first time community college students in 2007 received some form of institutional, state, or federal financial assistance with an average award of \$2094. Fewer (by percent) public community college students received financial aid than their private not-for-profit and private for-profit counterparts. Public community college students also received the least average award amount at \$2094, followed by private for-profit students with \$3250 and private not-for-profit students at \$3641 (Planty, et al., 2009). Thirty-one percent of all community college students receive the Pell Grant (American

Association of Community Colleges, 2009a). Most financial aid awards criteria include total cost of attendance with reduced disbursements allotted to students attending less expensive institutions. Even with low tuition and fees, community college students struggle to meet their financial obligations.

Gender

Approximately 60 percent of all community college students in 2007 were women and increased by almost 709 percent at private not-for-profit community colleges (Bryant, 2001; Johnston, 1980; Knapp, et al., 2009; Planty, et al., 2009). Most of the female students are parents and the single head of their household (Caporrimo, 2008). Female community college students juggle multiple roles, including but not limited to, raising children, divorce, and financial hardships that may impede academic success. These students often enroll in college to advance her financial footing without support from family or friends. Many organizations including Talbots Clothing, the Association of American Indian Affairs, Executive Women International, and Royal Neighbors of America understand the plight of female students, especially those over age 25, and offer scholarships with criteria based on life experience and financial need. In addition to funding education expenses, these organizations allow award recipients to use funds for childcare, transportation, and living expenses.

Expectations/Aspirations

One may assume students enroll in college to pursue a degree; however, this is not always the case with community college students. Community colleges attract students interested in learning a skill or language, exploring or advancing their career, or personal development. Approximately one quarter of community college students enroll in non-credit courses or have at least a bachelor's degree. In a recent study, less than 40 percent of first-time

full-time freshmen attending 75 public and private community colleges aspired to earn an associate's degree (Laanan, 2000). Even though students may not earn a degree or certificate, they often accomplish personal goals while enrolled (Bailey & Alfonso 2005). Of the students not anticipating to earn a credential at the community college, many attend to acquire computer and technical training, improve job skills/retooling, or pursue personal interests (Bryant, 2001). Many students can achieve their desired outcomes after completing a few courses and without earning a degree or certificate.

Race/Ethnicity

Regarding race, about 64 percent of all undergraduates are white, but community colleges educate almost half of all African American, Hispanic and Native American students nationally (Bailey & Alfonso 2005; Dougherty, 1991; Laanan, 2000; Nora, 1987; Pease-prettyOn Top, 2003; Vanwagoner, et al., 2005; Voorhees, 2001; Wallenfeldt, 1986). This figure illustrates an over representation of ethnic minority students at community colleges when contrasted with those at four-year institutions and signifies an increase from previous years with about 20 percent in 1976 and 31.8 percent in 1997 (Bailey & Alfonso 2005; Voorhees, 2001). Hispanic students comprised the largest ethnic minority group of community college students at 14.9 percent, followed by African Americans at 13.5 percent, Asian/Pacific Islanders at 6.2 percent and Native Americans/Alaskan Natives at 1.2 percent. The proportions remain relatively consistent throughout the public, private not-for-profit and private for-profit sectors (Bryant, 2001; Knapp, et al., 2009).

Connecting the Dots

Student financial aid, community colleges and the effect of the two topics on student persistence remains an area of interest for scholars. Societal and policy changes impact student

attendance patterns, graduation rates, and ability to finance their education. Early federal financial aid programs served to level the playing field in higher education by awarding grants that did not require repayment to students who were historically excluded from the academy. Financial aid policy shifted to support students pursuing science and mathematics degrees as a means of preparing them to work in the national defense industry. Even though federal financial aid programs targeted towards these populations still exist, the bulk of funds are currently allocated in the form of loans. In its infancy community colleges offered a liberal arts curriculum at local high schools for students interested in transferring to four-year institutions. Community colleges later offered vocational and technical programs to prepare students for employment immediately after graduation and recently introduced innovative delivery methods such as distance education and weekend programs. A majority of community college students encounter hurdles foreign to their four-year institution counterparts such as requiring remedial courses, financial hardship, and family responsibility, all of which adversely impact student persistence and graduation. The transformation of the financial aid and community college systems directly effects students who are more likely to need financial assistance but less likely to accept loan aid.

With a rich history spanning more than a century, community colleges transformed from local establishments associated with high schools to institutions offering associate's and vocational degrees in various formats that continue to attract growing numbers of contemporary students. This enrollment trend suggests that students favor this educational model, as a means to meet various life demands while pursuing an academic credential or increasing their knowledge base.

Community College Student Persistence

Even though community college students represent almost half of all first time college students, less than one tenth of scholarly articles published explore this population and still fewer investigate the relationship between financial aid and student persistence (Townsend, et al., 2005). Varying study characteristics and conflicting results make implementing research into practice difficult at best. National samples provide broad strokes about community college students without the ability to address regional or interpersonal characteristics. Institutional samples may yield fruitful results for the individual college; however, findings may or may not translate to other student populations based on region or institutional priorities. Furthermore, most studies implore a quantitative approach and may miss other factors impacting persistence not recorded on standard numerical measures.

Fourteen of the fifty-five studies published between 1986 and 2010 addressing student persistence and/or graduation rates as a function of financial aid used community college students as the sample population. Scholars used samples from national datasets and individual institutions: the number of subjects ranged from 547 to 10,883; persistence measured within year (i.e., from one term to the next) to six years; and financial aid measures included receiving aid or not receiving financial aid, type of aid received (e.g., grants, loans, work study, and scholarships), and federal and state awards (Clark, 2003; Makuakane-Drechsel & Hagedor, 2000; Nora, 1990). Even though contradictory, themes related to receiving aid, type of aid, and student characteristics emerged.

Depending on the author, receiving financial aid, versus not qualifying or accepting funds, made a positive, negative, or no impact in community college student persistence (Clark, 2003; Cross, 1990; Dowd & Coury, 2006; Hetherington, 1995; Hippensteel, St. John, & Starkey,

1996; Kelley, 1999; Makuakane-Drechsel, & Hagedorn, 2000; Nora, 1990; Spencer, 1993; St. John, Kirshstein, & Noell, 1991). When compared to students without financial aid awards, financial aid recipients remained enrolled longer and were more likely to graduate (Cross, 1990; Makuakane-Drechsel, & Hagedorn, 2000; Nora, 1990; Spencer, 1993; St. John, et al., 1991). Makuakane-Drechsel, and Hagedorn (2000) and Spencer (1993) reported financial aid increased a student's likelihood of remaining enrolled by 50 percent. Moreover, persistence was lowest for students who did not apply for or receive financial aid (Cross, 2002; Spencer, 1993). Hetherington (1995) found receiving financial aid decreased the likelihood of community college student persistence; however, other scholars (Clark, 2003; Dowd & Coury, 2006; Hippensteel, et al., 1996; Kelley, 1999) found receiving financial aid made no difference in community college student persistence and graduation rates.

Varying results emerged related to the amount and type of aid students received relative to persistence and graduation rates (Cofer & Somers, 2000; Clark, 2003; Cross, 2002; Dowd & Coury, 2006; Kelley, 1999; Metz, 2001; Nora, 1990; Spencer, 1993; St. John, et al., 1991; St. John & Starkey, 1994). Students who received more financial aid funds enrolled in more credit hours, persisted for more terms, and were more likely to earn a credential than students who received less financial assistance (Cross, 2002; Kelley, 1999; Nora, 1990). None of the studies found students with high levels of financial aid to persist for fewer terms than those with lower levels of assistance. Conflicting results emerged related to the type of aid received: grants, loans and work study were found to have positive, negative, and neutral affects on community college student persistence and graduation. On the one hand Cofer & Somers (2000), Spencer (1993), Nora (1990), and St. John, et al. (1991) found receiving higher financial awards in any form (i.e., loan, grant, and work study) positively impacted student retention and graduation rates. When

accounting for individual financial aid methods, loans (Metz, 2001) and grants (Clark, 2003; St. John, et al., 1991; Spencer, 1993) were found to positively impact community college student persistence and graduation rates. Other authors came to different conclusions and found grants (Dowd & Coury, 2006; St. John & Starkey, 1994), loans (Cofer & Somers, 2000; Dowd & Coury, 2006), and work study (Clark, 2003) had a negative correlation to student retention. Finally, other scholars found grants (Metz, 2001) to make no difference in continued enrollment or graduation. Overall, researchers offered conflicting messages related to mixed financial aid awards: receiving loans and grants or grants combined with work-study had a positive impact on student persistence (St. John, et al., 1991).

Select scholars introduced student characteristics including enrollment status, dependency, gender, ethnicity, and age in the financial aid and persistence discussion. Hetherington (1995) found “other things being equal, the odds of not persisting for part-time students who do not receive aid are 1.43 to 1” (p. 85). Dependent students with loans were more likely to persist, and borrowing negatively impacted independent student persistence (Dowd & Coury, 2006). Spencer (1993) found gender and age to not significantly affect financial aid recipients’ persistence rates (p. 65). Additionally, nonminority students were more likely to persist in contrast to their minority classmates (Spencer, 1993). The results of these studies suggest the impact of financial aid on community college student persistence varies and may depend on student attributes.

Conclusion

The community college students’ academic outlet may seem bleak after reviewing the literature. Many financial aid policies and practices (e.g., basing award disbursements on enrollment status) are more suitable for four-year college students who prioritize their academic

responsibilities over other commitments, unlike community college students who manage non-academic responsibilities in addition to coursework. Financial aid, along with other factors, affect persistence; however, these students continue to defy the odds and strive in the community college environment.

CHAPTER 3

METHODS

Introduction

The purpose of this chapter is to explain the critical literature review process, a research method utilizing previous works to draw conclusions about a subject, for this study about the relationship between financial aid and community college student persistence. The process involves several tasks, many of which mirror those used during the integrative review process: 1) select the topic(s), questions or hypotheses for the review; 2) consult previous reviews or studies on the same topic or similar topics; 3) locate the research studies to review; 4) represent the characteristics of the selected studies and their findings (i.e., identify themes); and 5) report the review (Feldman, 1971). An overview of the process and specific details performed for this review will be followed by limitations of the critical literature review process.

Previous Studies/Background

An infrequently used research method (Levit, 1968), the critical literature review allows the researcher to synthesize knowledge and findings from previously conducted studies during a specific period of time and topical area (Feldman, 1971; Lindvall, 1959; Critical Literature Review Techniques, 2006). The critical literature review method is a form of secondary analysis used to reconceptualize ~~data~~ in the light of an alternative conceptual scheme – a procedure which may result in new interpretations of the data” (Levit, 1968, p. 155). Similar to the integrative review process, the critical literature review is a qualitative, instead of quantitative, method used to make inferences about a subject based on existing studies. —A good integration,

at the same time that it shows how much is known in an area, also shows how little is known. It sums up, but does not end. In this sense, it is only a beginning” (Feldman, 1971, p. 100).

Examples of the critical literature review method include an analysis of the defining and assessing quality (Tan, 1986); mentoring undergraduate students (Jacobi, 1991); internationalizing Australian higher education (Harman, 2005); the purpose, value, and structure of the practicum experience (Ryan, Toohey, & Hughes, 1996), and using critical discourse analysis as a research method (Rogers, Malancharuvil-Berkes, Mosley, Hui, & Joseph, 2005). The sample size varies depending on the research question, sample parameters (e.g., studies conducted within a specific time period or all studies unveiled about a subject), and number of studies available with an “N” ranging from the teens to thousands. For example, the number of studies included in the critical literature reviews cited above ranged from 46 to 492 (Harman, 2005; Jacobi, 1991).

Murdock (1986) authored a notable higher education integrative review dissertation, the motivation for this study, exploring the relationship between student persistence and financial aid. Even though she examined issues for both two and four-year institutions, she presented specific results about community colleges and stated “the average two-year student receiving financial aid would have a graduation likelihood greater than 57.5 percent of the two-year nonrecipient group” (Murdock, 1986, p. 182). Noting the significant impact financial aid made on community college student graduation rates and the number of students served in this sector, yet lacking numerous studies, Murdock recommended further research focus on community college students and urged scholars to consider utilizing the integrative review method.

In recent years, a few researchers attempted to examine the presence of community college students in scholarly publications. For example, Townsend, et al. (2005) investigated the

appearance of community college studies between 1990 and 2003 in five prominent higher education journals; *Journal of College Student Development*, *Journal of Higher Education*, *NASPA Journal*, *Research in Higher Education*, and *The Review of Higher Education*, and identified 187 articles referencing community college(s), two-year college(s) or transfers out of 2,321 total articles. In another study, Townsend, et al. (2005) reported eight percent of all articles published between 1990 and 2003 focused on community college students.

The critical literature review approach is appropriate to investigate the relationship between community college student persistence and financial aid because the researcher can draw conclusions about students based on decades of data from various sources including multiple institutions, states, and in some case, federal data. Furthermore, accessing state and federal data is a difficult undertaking and often not approved. Several state agencies may be responsible for different aspects of higher education or may refuse to release data, making it difficult to develop consistent and/or attainable data. Researchers who gain permission to access National Center for Education Statistics restricted-use/subject data must complete a rigorous application process and adhere to stringent standards including, but not limited to, developing and maintaining a security plan, storing data on a secure computer in a locked location, protecting students' confidential information, and undergoing unannounced on-site inspections (Institute of Education Sciences – National Center for Education Statistics, 2007).

For all the reasons cited above, relatively few empirical studies about financial aid for community college students exist; it is difficult to make long-range comparisons using more traditional research methods with smaller samples (e.g., single institutions or state systems). However, the critical literature review process allows researchers to compare studies or group ~~in~~ independent and dependent variables of the studies at hand, by establishing a common metric.

for noting results, and by standardizing and comparing results” (Feldman, 1971, p. 91). Critical literature reviews allow researchers to evaluate findings to offer a comprehensive analysis of research conducted in an academic discipline. Researchers use the findings merged from individual studies to paint the vast landscape of a particular subject, either from the inception of published articles or scholarly reports during a specific time period. Explicitly, the critical literature review process expands cumulative knowledge by assessing previously conducted studies.

Research Design

An integration can be called upon to do many of the things that ‘primary’ research does: testing hypotheses; lending (or not lending) support to extant propositions; offering new information and generalizations; generating theoretical issues to be explored; and suggesting future research (Feldman, 1971, p. 95).

The critical literature review is a qualitative means of examining studies and aggregating findings to decipher relationships about a given topic. This deductive process uses articles as ‘observations’ to draw conclusions (Levit, 1968). The process involves systematically pooling original data from studies to conduct a cross study analysis to form generalizations, critique, and unveil gaps in research about said subject (Feldman, 1971; Levit, 1968). The critical literature review method allows researchers draw conclusions about a subject using multiple studies that lack uniform methodology, as is the case with persistence and community college literature (Feldman, 1971; Levit, 1968; Lindvall, 1959). Strengths of the critical literature review method include its ease of replication; the ability to include studies with strong and weak statistical methods; the capacity to control for studies’ bias and flaws; and the capability to simultaneously inspect the connection among studies’ methods, subjects, and findings.

Critical Literature Review Process

Even though scholars use secondary research to conduct critical literature reviews, these studies need not be experimental” (Levit, 1968, p. 154) or include multivariate analysis. The critical literature review process involves the following five tasks: 1) select the topic(s), questions, or hypotheses for the review; 2) consult previous reviews or studies on the same topic or similar topics; 3) locate the research studies to review; 4) represent the characteristics of the selected studies and their findings (i.e., identify themes and gaps in scholarship); and 5) report the review (Feldman, 1971).

Select the Topic and Research Questions for the Review

Selecting the research questions or hypotheses, the first task, involves determining the focus for the study and developing the specific hypotheses while paying close attention to its impact on theory, policy or practice. The topic selected for this critical literature review is the relationship between receipt of financial aid and community college student retention. The independent variables, financial aid (or lack thereof) and forms of financial aid, are reported factors impacting student persistence, the dependent variable. This study is guided by one primary and four secondary research questions. The primary research question is:

1. Does published literature available from 1986 to 2010 show that receipt of financial aid promotes student persistence in higher education at the community college level?

Due to the variety of articles with diverse persistence measures and financial aid considerations, the four secondary questions are:

1. Do certain forms of financial aid or combinations of financial aid forms increase persistence better than others?
2. Does the dollar amount of financial aid affect persistence?

3. Does the impact of financial aid on student persistence differ by gender or ethnic groups?
4. Does the timing of the aid award affect persistence?

Consult Previous Reviews on the Same or Similar Topics

“No scientific theory can be adequately understood or evaluated in isolation” (Levit, 1968, p. 164): consulting previous reviews on the same or similar topics requires the social scientist to explore past literature about the subject in order to guide the current study. This task allows the investigator to refine specific research questions, anticipate obstacles with the study or the integrative review process, and consider alternatives for the study in question. This critical literature review is based on Tullisse Murdock’s (1986) dissertation, *The Effect of Financial Aid on Persistence in American Higher Education*. Murdock (1986) used the integrative review statistical method to investigate the impact of student financial aid on student persistence and implications for financial aid policies. Due to the limited reports available addressing community college student persistence as a function of financial aid received and fewer studies including the necessary statistical methods to perform a direct replication of Murdock’s (1986) study, conducting an integrative review proved fruitless. However, Murdock’s (1986) dissertation provided the inspiration and blueprint for this study.

Locate the Research Studies to Review

The researcher attempts to locate all existing studies related to the topic during the review stage by using at least the following sources: published reports, books, dissertations, government reports, papers presented at professional meetings, and works in progress (Creswell, 2008). This process can be the most difficult and frustrating, as investigators cannot ascertain their level of success in finding all available studies. Scholars should initially commence a broad search and narrow the scope of the investigation process as she discovers more studies and narrows the

scope of the research study. This step may include using search engines or databases outside of the academic discipline and adding fields during subsequent searches to narrow the topic and limit sources to the most applicable articles. Once all of the studies about the topic are located, the researcher must determine which studies to include in the critical literature review. Even though reviewers may be tempted to exclude studies based on methodological shortcomings, this act may decrease their sample to a handful of studies (Feldman, 1971; Levit, 1968).

In spite of the fact that community colleges serve almost half of all US undergraduates, few scholarly studies have explored the effects of financial aid on community college student persistence. For example, a search with the more generic terms for financial aid and retention yielded more than 100 articles, but when the additional phrase two-year or community college was added, the list of studies was reduced to 29. This discovery illustrates the interest in the connection between persistence and financial aid in postsecondary education. However, the revised search supports the absence of community college students in scholarly literature with a 3:1 ratio of studies including community college versus four-year college students. The number of studies decreases from 29 to 8 after filtering documents using community college subjects and relating persistence as a function of financial aid. The limited data available pertaining to community college students makes locating research studies to review difficult and reinforces Murdock's (1986) earlier call for additional study.

The selection process begins with intensive exploration to locate any possible study to include in the integrated review followed by eliminating studies based on review criteria. Feldman (1971) suggested researchers adopt a substantive approach to locating articles by casting a broad net and using reference lists to identify additional studies. This method usually reveals sources not available in academic indexes or library catalogs. —The difficulty involved in

this selection of studies, of course, is that the parameters of the universe are not known, and thus the representativeness of the sample or chunk cannot be determined” (Feldman, 1971, p. 88).

The first step in the sample selection process included reviewing articles discussing financial aid and community college student persistence published since 1986 via Educational Resources Information Center (ERIC), Dissertation Abstracts, Journal Storage (JSTOR), Business Source Complete, Project Muse, Psycinfo, and Wiley Interscience databases using student financial aid, school holding power, two year college, and student attrition key words yielded 29 studies. The key word search provided a sample that failed to meet the exact research criteria: some studies discussed persistence and/or financial aid but not the intersection of both concepts; failed to include community college students; focused on academic achievement as a form of persistence; or used on-line, international, or transfer students in the sample. Additionally, other excluded studies investigated employment, financial aid as a functional area, or persistence in a specific course or area of study. The strength or weakness of the statistical methods employed or research design were not considered when selecting studies for the sample: other factors, aside from research design, can threaten internal or external validity and poorly and adequately designed studies are more than likely to balance out the results of the integrative review (Feldman, 1971; Levit, 1968). The original 29 studies identified were reduced to 11 articles after eliminating studies that failed to meet the exact specifications (i.e., the relationship between community college student persistence and financial aid) needed to perform a concise critical literature review analysis. Articles were purged for one of two reasons: detailed examination revealed the article did not investigate direct relationships between persistence and financial aid or tangential references to community college students were made instead of using community college students as subjects. Three additional articles were secured by reviewing the reference

lists of studies unearthed during the electronic search process bringing the total sample to 14 studies (Appendix A).

Represent the Characteristics of the Studies and Their Findings

Representing the characteristics of the studies and their findings, also known as coding, allows researchers to identify themes and develop a matrix based on the attributes of each study in the sample (Feldman, 1971). This process benefits researchers as they categorize the studies and provides a trail for the reader to follow how the reviewer synthesized the studies for analysis. The matrix can serve as a mechanism to expose themes of the studies, treatment of variables discussed in chapter two, and primary data needed to perform the critical literature review. The goal of this step is to “devise ways of meaningfully comparing diverse studies” (Feldman, 1971, p. 89). Using a common measure of association, coding allows the researcher to record pertinent information, such as year of publication, statistical methods, subjects, findings, and other notes. The matrix includes the following 13 features for each study (Appendix B):

1. Author(s). The name of the author(s) are listed.
2. Publication Year. The year the study was published is documented.
3. Publication Source. The types of publication included in the sample include journal articles (J), reports (R), and dissertations (D).
4. Population/Sample Source. The name of the institution or agency providing the raw data for the study (e.g., ABC Community College Students or National Center for Education Statistics).
5. Year(s) of Data. The year(s) tracked in the study.
6. Persistence Specifications. The persistence time-span measured in the study such as quarters, semesters, or years. This category also includes the specific length of time

- measured (i.e., eight semesters). If graduation was considered a measure of persistence, the number of years studied were documented (i.e., G-2 years, G-3 years).
7. Type of Financial Aid. The specific type of financial aid explored in the study is recorded (e.g., Guaranteed Student Loans). If studies considered any form of financial aid without distinguishing specific types of awards, the donation of FA was used.
 8. Degree of Control. The degree of control identifies one of three ways subjects were assigned to the control and experiment groups: matched, random, and none. If the matched method was employed, the researcher compared financial aid recipients and non-recipients based on other commonalities such as age, gender and high school demographics. A random degree of control would mean participants were selected by random selection. If the researcher did not use a specific means to assign participants, the study's degree of control would be listed as none.
 9. Treatment of Transfers and Stopouts. If transfers or stopouts are included as persisters in the study, the denotation of (T) and (S) were used and if students who transferred or stopped out were eliminated from the sample, the action was signified with (T-NI) and (S-NI) meaning transfers not included and stopouts not included.
 10. Enrollment Status. Three measures of enrollment status included full-time (FT), part-time (PT) and not reported (NR). Some studies may include both full and part time students.
 11. N. The number of participants in each study.

12. Special Notes. Notes about results, implications, distinguishing information about the location (e.g., region of country) or participants (e.g., age, gender, or ethnicity) are included in this category.

Report the Review

Finally, reporting the review allows researchers to use the information compiled to identify themes and gaps in the cannon, how different groups (e.g., race, gender, socio-economic status, etc.) respond to presence or absence of financial aid, map a research agenda, and provide recommendations for practice to improve community college student persistence and graduation rates. Just as important as highlighting common themes, critiquing the discipline and mapping a research agenda to move the academy forward are valuable components of reporting the review (Feldman, 1971; Levit, 1968). The report should also include the process used to conduct the review, a roadmap for the replication process (Feldman, 1971). The critique process is not limited to study results but should evaluate research design elements such as data collection, sample selection, and methods (Critical Literature Review Techniques, 2006). This stage also includes summarizing the study and sharing distinguishing aspects to help people interested in replicating the review. Some pertinent characteristics to communicate include factors from other reviews, a synopsis of the sample, and challenges the reviewer overcame to complete the study.

Limitations of the Study

As with any statistical method, critical literature review has limits which involve the population studied, researcher bias, the sample selection process, studies sampled, and analysis. The most prominent limitation of this study involves the sample: focusing on community college student limits the findings to students attending these institutions and may not be applicable to four-year college or graduate students. Furthermore, *knowing* if the researcher found every

available study about the subject is a limit as one can never know if additional studies exist and should not let this concern arrest the study. The research question affects the number of articles available to include in the sample. The researcher may allow her views about the subject to guide the research and conclusions. Another potential bias includes selecting the criteria to study. Including or omitting certain variables or characteristics based on personal prejudices instead of literature limits the study's quality and generalizability. Researchers with potential conflicts of interest or certain connections to the topic (e.g., employed by organization linked to the study or its results) can also limit the results by presenting results to benefit an association or agency. Any critical literature review is as good as the studies in the sample. The outcomes presented in the critical literature review will be flawed if the authors of the sampled documents miscalculate the results or only report statistically significant findings (i.e., fail to report statistically insignificant findings) (Critical Literature Review Techniques, 2006; Feldman, 1971; Lindvall, 1959). "The integrator must make do with what he is presented (not having had a hand in the original researches), which often is not enough" (Feldman, 1971, p. 93). With this in mind, the researcher must report the results as presented, and be careful to not make inferences about what the author intended to report or results from other studies. Authors of critical literature reviews may over-simplify the results instead of segmenting themes or identifying gaps in the literature (Feldman, 1971). Researchers should critically examine the available data and report accurate findings (e.g., results and limitations) in a clear and concise fashion. Finally, the publishing industry is responsible for one of the limits: journal reviewers publish studies with statistically significant results more often than those with inconclusive or statistically insignificant results (Glass, 1970).

CHAPTER 4

RESULTS

This chapter contains a summary of the findings from the 14 articles published since 1986 linking community college student persistence to financial aid, answers to the research questions, authors' recommendations to map a research agenda, study limitations, and practical improvements for institutional and government leaders. Each study approached the topic from a unique perspective and some offer conflicting findings. I aimed to synthesize the results by connecting common themes to drive a research agenda, a plan or focus to pursue scholarly knowledge in a specific field, and offer recommendations for policy and practice. Answers to the research questions presented in Chapter One and limitations introduced in the articles represent challenges encountered during the exploration process. This chapter concludes with proposals that challenge higher education administrators and policy makers to enhance community college student persistence relative to financial aid regulations and procedures.

Summary of Findings

A summary of the articles reviewed reveals mixed findings on the effect of financial aid on community college student persistence. While some studies reported a positive effect, others reported a negative effect: a summary of findings is shown in Appendix C. The mixed findings may be due to community college students' myriad of issues, roles, and needs that impact persistence in addition to financial aid. The authors used varying definitions of community college student persistence (e.g., term-to-term, year-to-year, or over multiple years) and financial

aid awards (e.g., receiving financial aid, award type, and disbursement amount) to develop their numerous findings. Some authors reported financial aid was positively and negatively correlated with community college student persistence. What may seem as a contradiction provided more detail into the effect of financial aid because the positive or negative findings were about specific segments of the persistence/financial aid equation (e.g., student type, award type, persistence measure, etc.). Nine researchers reported a positive relationship between community college student persistence or graduation and financial aid (Clark, 2003; Cofer & Somers, 2001; Cross, 2002; Kelley, 1999; Makuakane-Drechsel & Hagedor, 2000; Metz, 2001; Nora, 1990; Spencer, 1993; St. John, et al., 1991). Receiving financial aid (Spencer, 1993; St. John, et al., 1991) and larger financial aid awards (Cross, 2002; Kelley, 1999; Nora, 1990; Spencer, 1993) positively impacted student persistence and graduation rates. Additionally, ethnic minority students (Nora, 1990; Spencer, 1993) and those enrolled in liberal arts and vocational-technical programs (Makuakane-Drechsel & Hagedor, 2000) were more likely to continue their education if they received financial aid awards. The type of financial aid and combination of awards increased the likelihood of community college student persistence and graduation. Grants (Clark, 2003; Cofer & Somers, 2001; Nora, 1990; Spencer, 1993; St. John, Kirshtein, & Noell, 1991) and work-study (Cofer & Somers, 2001; Metz, 2001; Nora, 1990) positively influenced persistence. Receiving loans (Cofer & Somers, 2001; Metz, 2001; St. John, et al., 1991) and borrowing more than \$7000 (Cofer & Somers, 2001; Hippensteel, et al., 1996) contributed to continued enrollment. Nora (1990) also found borrowing to positively impact Hispanic student persistence and graduation rates. Receiving multiple forms of financial aid (e.g., grants, loans, and work-study) increased the likelihood of persistence for all students (Nora, 1990; Spencer, 1993; St. John, et al., 1991) and Hispanic students (Nora, 1990). Contrary to the previous findings, other authors found

financial aid to adversely impact community college student persistence and graduation rates (Cofer & Somers, 2001; Dowd & Coury, 2006; Hetherington, 1995; Hippensteel, et al., 1996). Hetherington (1995) found part-time financial aid recipients were less likely to persist term-to-term and year-to-year compared to students who did not receive financial aid. Student lenders were less likely to persist than students without debt (Cofer & Somers, 2001; Dowd & Coury, 2006; Hippensteel, et al., 1996). Dowd and Coury (2006) and Hippensteel, et al. (1996) found receiving a combination of financial aid awards negatively influenced persistence. Finally, for some students financial aid was found to have no relationship to community college student persistence and graduation (Clark, 2003; Cross, 2002; Dowd & Coury, 2006; Hetherington, 1995; Kelley, 1999; Metz, 2001; St. John & Starkey, 1994; Spencer, 1993): receiving financial aid did not positively or negatively influence persistence (Clark, 2003). Other researchers came to the same conclusions based on the following student characteristics: part-time enrollment (Cross, 2002; Hetherington, 1995), gender, age, and dependency status (Spencer, 1993). Clark (2003) and Dowd and Coury (2006) found no relationship between persistence or graduation rates relative to receiving loans, work-study, and combination aid packages.

Research Questions

As previously stated, reviewing the results of scholarly works about community college student persistence published since 1986 yielded mixed findings. In some cases, financial aid was found to support enrollment; in other studies, it was found to hinder continued enrollment, and in other studies, receipt of financial aid was found to make no impact on community college student persistence and graduation rates. The diverse studies and findings made answering the research questions difficult: researchers used varying student characteristics that helped me gain insight into the subject but did not necessarily apply to the secondary research questions.

Moreover, some studies included information explored in this study but did not relate to financial aid allocations. For example, most of the studies reported persistence information by gender and ethnicity but few of them did so as a function of financial aid.

Primary Research Question

1. Does published literature available from 1986 to 2010 show that receipt of financial aid promotes student persistence in higher education at the community college level?

Yes, overall findings indicate that financial aid promotes student persistence in higher education at the community college level. Specifically, receiving financial aid, larger financial aid awards, and multiple forms of financial aid were positively associated with student persistence and graduation (Cross, 2002; Kelley, 1999; Nora, 1990; Spencer, 1993; St. John, et al., 1991).

However, four studies revealed that financial aid impeded retention and graduation and five studies found that financial aid does not influence persistence.

Secondary Research Questions

1. Do certain forms of financial aid or combinations of financial aid increase persistence better than others?

Unfortunately, none of the studies of community college students compared persistence rates based on a specific type of financial aid. Researchers who analyzed persistence rates by financial aid type compared students with the award to those who did not receive the specific type of award (e.g., student borrowers were compared to students who did not receive loans).

2. Does the dollar amount of financial aid affect persistence?

Yes, the dollar amount of financial aid affects persistence. Five studies reported that amounts of any type of financial aid and grants, loans, work-study, and combination awards positively impacted student persistence (Cofer & Somers, 2001; Cross, 2002; Hippensteel, et al., 1996;

Kelley, 1999; Nora, 1990). However, Cofer and Somers (2001) and Dowd and Coury (2006) found the amount of loans negatively impacted student persistence. The results of both of the studies indicated the likelihood of persistence decreased as student debt increased.

3. Does the impact of financial aid on student persistence differ by gender or ethnic groups?

With the exception of Nora (1990) and Spencer (1993), few studies disaggregated the data and offered results based on gender or ethnic groups, making it difficult to formulate a solid conclusion based on research conducted since 1986. These results were based on the select studies reporting persistence as a function of financial aid allocations. Nora (1990), who studied Hispanic students, indicated higher financial aid awards increased the likelihood of Hispanic student persistence and graduation rates: loans, grants, and work-study also positively impacted this population. Spencer (1993) found no relationship between persistence and male and female students who received financial aid and ethnic minority financial aid recipients were more likely to persist compared to their non-minority classmates.

4. Does the timing of the aid award affect persistence?

None of the studies compared persistence rates based on timing of financial aid awards; therefore, this question cannot be answered.

Recommended Research Agenda

Researchers often conclude studies with recommendations for future scholarship. Inspired by difficulties encountered during the research process, results, or changes to the educational and social landscape, these suggestions are guides to advance scholarship in a field. Developing a research agenda includes analyzing research methods and past studies to formulate areas of exploration to move a discipline forward (Critical literature review techniques, 2006). With only 14 studies published since 1986, the field is open for further exploration with topics

including student aspirations, type of financial aid received, pre-enrollment characteristics, and enrollment status (i.e., full or part-time).

Methodological Approaches

Two researchers recommended adopting the qualitative approach to research may yield new insights into community college student persistence based on financial aid allocations or lack of available resources. Each of the 14 studies about community college student persistence used quantitative methods to answer the research question(s). However, Clark (2003) and Cross (2002) identified the need to use qualitative means to explore community college student persistence. These students exhibit different enrollment patterns and interpersonal characteristics, which may not be best measured with a numerical value when compared to their four-year college counterparts (Clark, 2003; Cross, 2002).

Qualitative data might produce additional insights into why students choose not to return for the second consecutive semester. Although time consuming, the use of a survey with open ended questions or individual student interviews might produce additional non-quantifiable evidence of obstacles and influences on retention, such as student intent and aspirations, perceptions about institutional quality, and feelings of belonging to the college community (Clark, 2003, p. 71)

For example, community college students often balance full and part-time employment, family responsibilities, and come to college with academic challenges, making continued enrollment and graduation difficult as each of these characteristics were found to adversely affect persistence (Astin, 1975; Astin, 1977; Tinto, 1998). Researchers could identify and document the impact of all persistence barriers by using qualitative research methods.

Institution Type

Two studies (Cross, 2002; Makuakane-Drechsel & Hagedorn, 2000) used specific types of institutions, tribal colleges and Hawaiian institutions respectively, to study community college persistence as a function of financial aid. Both authors recommended future research in the area to advance knowledge about students in this sector. Cross (2002) made a specific recommendation to track students throughout the higher education pipeline to map enrollment patterns and degree completion beyond the community college experience. Studying students at minority serving institutions could also provide insight into the experiences of ethnic minority students attending traditional community colleges. Furthermore, exploring multiple tribal or other minority serving institutions in one study could yield larger sample sizes and lend itself to easier generalization.

Financial Aid Type and Amount

Studies reviewed showed that the type and amount of financial aid impacts student persistence in varying ways. Scholars recommended this subject as an area of future research (Clark, 2003; Dowd & Coury, 2006; Hetherington, 1995; Kelley, 1999; Mentz, 2001; St. John, et al., 1991; Spencer, 1993). The inconclusive results about receiving financial may never be resolved; however, future research in this area is needed. It ~~is~~ necessary to incorporate all types of financial aid, including but not limited to private and institutional scholarships, private loans, and third party tuition payment plans” (Mentz, 2001, p. 29 – 30) in the long-term research agenda. In addition to receiving financial aid, the type of award deserves further discussion. Clark (2003) and St. John, et al. (1991) suggested future research explore the connection between grants, including amount, and community college student persistence, thus broadening the scope of studies. With the increase in loan aid received, studying this award type proves

fruitful especially in light of the pending gainful employment legislation that will impact for-profit providers of associate's degrees. The imminent regulations will base institutions' eligibility to awards Title IV financial aid on the student loan default rates (Cofer & Somers, 2001; Dowd & Coury, 2006; Kelley, 1999; St. John, et al., 1991; United States Department of Education, 2010). Cofer and Somers (2001) offered another benefit of studying the impact of loans on student persistence with "for those not-so-motivated two-year college students, the increase and availability debt has become another hurdle to completing postsecondary education" (p. 804). Many community college students leave the institution without adequate means to repay debts incurred throughout their educational experiences. "Reliance on debt to obtain a college degree adds to the growing controversy on college affordability and the discussion by some as to the economic benefits of a college degree" (Mentz, 2001, p. 27). This caused Congress to explore the connection between anticipated income and the ability to repay student loans.

Loan indebtedness continues to be a focus of many within the financial aid community, as students struggle to balance academic, personal, and financial constraints in their pursuit of a college degree. Reliance on debt to obtain a college degree adds to the growing controversy on college affordability and the discussion by some as to the economic benefits of a college degree (Mentz, 2001, p. 27)

Studying the impact of loans on persistence, especially for students attending for-profit community colleges, could halt or alter this bill (United States Department of Education, 2010).

Federal work-study and grants should also be discussed in isolation and as a proportion of financial aid packages (Dowd & Coury, 2006; Mentz, 2001). Mentz (2001) contended exploring the connection between work-study and student retention is two-fold, as it would provide insight

into financial aid research and the ability to apply Astin's (1993) student involvement theory to community college students. The combination of financial assistance and connection to the institution through on-campus employment may alter attendance patterns. Furthermore, intuitively one may assume grant aid would be the most effective means of financial aid as loan adverse community college students delay educational gratification to avoid debt. However, considering the conflicting data available, this may not be the case and scholars can investigate the issue to unearth the underlying causes of varying persistence rates in the presence of grants. Finally, St. John, et al. (1991) recommended studying financial aid award timing (i.e., first, second, or third years) as little research appears in this area. Most studies use fall term financial aid data to measure the impact of awards but community college students exercise fluid enrollment patterns and are likely to register for their first course during the spring or summer terms. With limited funds available, best utilizing financial aid awards to achieve the largest enrollment, persistence, and graduation outcomes can impact policy decisions and maximize fiscal responsibility.

Enrollment Status

Cross (2002) and Hetherington (1995) recommended further research related to student enrollment status (e.g., full-time, part-time, and transfer). With part-time students comprising almost 40 percent of first-time financial aid recipients in his study, Hetherington (1995) expressed concerns about their ability to persist without financial subsidies. As documented in his study, part-time students were less likely to persist from term to term in spite of financial aid awards. He also mentioned the importance of timing of awards as he found the likelihood of part-time community college students persisting from term to term increased the longer they remained enrolled (i.e., third term students were more likely to enroll for the fourth term than

second term students were to enroll in the third term). Research in this area could help policy makers alter allocation methods and possibly providing more aid during earlier, instead of later years or terms, of the education process.

Multiple-institution enrollment is on the rise in higher education, particularly at the community college level, as students select institutions based on classes offered (e.g., courses during a specific term, time of day, or on-line) (Cross, 2002; St. John & Starkey, 1994). Community college students are more likely to juggle other commitments, including work and family, leaving little flexibility to take courses necessary for graduation or to achieve personal aspirations at a single institution. Instead of completing a degree or desired requirements in a linear fashion at one institution, community college students may enroll in two or three colleges and achieve their goals based on the time of day classes are offered or completing their objectives entirely on-line. This practice may unfavorably impact financial aid awards. For example a student who enrolls full-time (i.e., 12 or more credit hours) at one institution is eligible for her entire financial aid award and the same student who enrolls in at least 12 credits at multiple colleges will receive several prorated financial aid allocations. The combination of prorated awards may not equal the full financial aid award available at institution _a or she may secure several loans from different lenders, including private sources, instead of one federal subsidized loan with a low interest rate.

Ethnicity

Kelley (1999) and Nora (1990) recommended future researchers investigate community college students of color. Offering generalizations about students of color may be inaccurate as the sample size in most studies using ethnic minorities are too small, with the exception of those focusing on minority serving institutions (Clark, 2003). Even with oversampling in national

datasets, ethnic minorities represent a small fraction of the students studied. Considering almost half of the sector includes non-white students, available research gives a misleading picture of community college students (American Association of Community Colleges, 2009a).

Furthermore, determining if differences exist among African American, Latino, Asian, and white students would be valuable to policy makers and may be applicable to ethnic minorities throughout higher education.

Limitations to Current Research

In order to provide meaningful and insightful recommendations for future research, one must understand the limits exposed in the 14 studies connecting community college student persistence and financial aid. Understanding study limits helps frame future questions of inquiry and appreciation for the results presented. Areas of concern include data collection, population and sample, student characteristics, and statistical methods.

Community college students, with varying aspirations, often exhibit different enrollment patterns than four-year college students (Cofer & Somers, 2001; Cross, 2002; Hetherington, 1995; Kelley, 1999). Measuring them with the same standards, researchers may miss critical aspects of their enrollment patterns and other factors affecting persistence and/or financial aid allocations. Studies indicate community college students met their educational objectives, even if it did not include earning a degree or certificate (Cofer & Somers, 2001; Cross, 2002; Kelley, 1999). Using graduation as a, or the only, success measure skews results and imposes researchers' success standards on the subjects. Other success measures could include enrollment in connected courses (i.e., in the same discipline) or obtaining a new position or promotion based in the field of study.

Another set of limitations involve the data used and the impact of student characteristics on available data and data collection (Dowd & Coury, 2006; Kelley, 1999; Mentz, 2001; St. John, et al., 1991; St. John & Starkey, 1994; Spencer, 1993). Benefits and challenges occur when sampling from national data sets or individual institutions. Generalization suffers in both cases as results from institution specific studies only directly apply to the students in question and findings from national data sets oversample students from certain geographic regions with more community college students (i.e., California and Florida) and undersample ethnic minorities (Dowd & Coury, 2006; Mentz, 2001; Spencer, 1993). Again, aspiration can become a limit in studying community college students: translating the myriad of possible educational goals into a numerical measure proves challenging at best. This is followed by attempting to compare these variables with more concrete measures such as financial aid awards and number of terms enrolled (St. John, et al., 1991). The nature of community college student enrollment also impacts sampling. Applying for financial aid and registering for classes after the beginning of the term adversely affects financial aid allocations, especially the Pell Grant, and retention. Students who apply to college after the deadline fall behind academically when they enroll after the first week of class. Submitting late financial aid applications increase students' likelihood of receiving loans instead of Pell Grants, as these funds are usually disbursed to those who complete the FAFSA by the priority deadline. Moreover, institutions rarely reserve awards for students who complete late applications, eliminating these students from internal funds. Some community college students are omitted from the sample due to withdrawing during the first three weeks of class or enrolling during the spring term (Kelley, 1999; St. John & Starkey, 1994). Even though state and non-governmental sponsors disburse financial aid awards after the

third week cut-off, community college students rarely apply, qualify for, or receive these awards (St. John & Starkey, 1994).

Researches must realize the challenges associated with tracking students between institutions, especially if they enroll in private education or attend institutions beyond state borders (St. John & Starkey, 1994). Without a national tracking program or permission to follow individual students throughout their college careers, the process is virtually impossible. Monitoring students could be an expensive and time consuming undertaking as many students attend college for varying reasons (e.g., earn a credential or master a skill) or take more than five years to complete an associate's degree. Using national data available through the National Center for Education Statistics may result in misleading findings because students in geographic regions with large number of community college students (i.e., California and Florida) are over-sampled and the appearance of ethnic minorities is misleading because they are weighted to reflect their appearance in the academy on a national level.

The way researchers address community college student enrollment behaviors may also contribute to study limitations (Cross, 2002; Hetherington, 1995). Part-time students who attend multiple institutions are difficult to track and may be labeled as dropouts, even though still enrolled or persist until graduation. Part-time students are less likely to enroll for consecutive terms, even if they return to the same institution. Furthermore, national standards and financial aid criteria use 150 percent (i.e., three years for community college degrees) of the degree completion deadline as success measures even though this exceeds the enrollment timeline for many students in this sector. This practice is difficult to chart and leads to misleading conclusions, often not reported by the researcher (Hetherington, 1995). One of the articles sampled a system of institutions and accounted for transfers within public institutions

(Makuakane-Drechsel & Hagedorn, 2000). Most researchers fail to capture transfers with studies based at single institutions or using national datasets. Additionally, students who attend multiple institutions exercise sporadic enrollment patterns, often times skipping terms or enrolling at two institutions concurrently. Documenting students attending multiple institutions provides another hurdle (Cross, 2002).

Cross (2002), Makuakane-Drechsel and Hagedorn (2000), and Metz (2001) considered the overabundance of quantitative methods used to explore this subject a limitation. Each of the aforementioned authors recommended a qualitative approach exploring the relationship between community college student persistence and financial aid. They also recognized this approach may be time consuming and require cultural sensitivity as subjects may be more likely to answer the questions honestly if able to write the answers instead of talking to someone. Moreover, the students may be apprehensive about reporting financial or family information, especially in a group setting, as it may jeopardize other benefits. However, the benefits of qualitative research may prove valuable by unearthing insights not measurable through rigid quantitative means.

Recommendations for Practice

A routine manner to conclude scholarly works, recommendations for policy and practice challenge stakeholders to implement novel programs, services, or policies to improve conditions in a particular area. Authors may supplement recommendations for future research with implications for practice. Less than half of the fourteen authors studied (Clark, 2003; Cross, 2002; Hetherington, 1995; Kelley, 1999; Makuakane-Drechsel & Hagedorn, 2000; Metz, 2001; Nora, 1990) offered recommendations for practical application including charges for college administrators and policy makers.

Federal programs

Six authors (Cofer & Somers, 2000; Cross, 2002; Hetherington, 1995; Hippensteel, et al., 1996; Nora, 1990; Spencer, 1993) proposed recommendations for the federal government. Beginning in the 1990s Congress authorized Pell Grant awards without allocating the appropriate funds (Cross, 2002). Increasing appropriations to match legislation would increase the financial aid outlook for all undergraduates, including community college students. In addition to making more aid available overall, matching appropriations to legislation would increase the likelihood of community college students receiving a higher proportion of Pell Grant funds in their financial aid awards. Students exhibiting financial need with current financial aid awards, including a combination of Pell Grants and loans, could witness increases in Pell funds and reductions in loan awards. Increases in Pell Grant allocations could reduce or eliminate loan burdens for cost conscious community college students who usually qualify for need-based financial aid awards.

Along the lines of financial aid allocations, Spencer (1993) recommended the federal government review reducing annual subsidized and unsubsidized loan limits by increasing the maximum level of subsidized loans to benefit both community and four-year college students. Dependent first year students can currently receive up to \$3,500 subsidized and an additional \$2,000 unsubsidized loan and independent first year students are eligible for the same amount in subsidized loans and an additional \$6,500 in unsubsidized loans. The subsidized amount may cover tuition and fees at public community colleges but not much more, such as books and transportation. Furthermore, since the funds are based on full-time enrollment, community college students who attend part-time are awarded a fraction of the amount. Offering subsidized loans to students who often take more than two years to earn a degree could be an encouraging

factor to remain enrolled. Accumulating debt and interest may dissuade students from borrowing to support their education and further delay the educational process.

Community college administrators should document students' aspirations to determine if they met their goals upon departure (Cofer & Somers, 2000). Several authors reported students' aspirations contributed to the length of enrollment (Clark, 2003; Dowd & Coury, 2006; Kelley, 1999). Adding questions about educational intent on the application could help community college personnel track student success and financial needs. For example, if a student indicated he or she wanted to become proficient in website development, counselors could direct students to the appropriate courses and/or encourage them to pursue a degree or certificate. Coupling educational aspirations with career or personal goals could help college personnel target educational experiences for each student. Students may consider pursuing long term educational goals after receiving guidance and understanding how their objectives could soar through continued education. Staff should balance the conversation with challenge and support (Sanford, 1967): challenge students to pursue a degree or certificate if the additional education meshes with their rationale for entering the institution and support students' intent to enroll in a select number of courses to meet professional or personal objectives. For example, if community college personnel knew a student registered for the two courses they wanted to take and successfully completed these efforts, the college staff could consider the student successful. On the other hand, counselors could present degree or certificate programs meeting students' objectives and encourage them to pursue a few more courses to increase their professional and economic standing. In this vein, financial aid counselors should explain the financial aid allocation process in general terms and based on specific student characteristics. For instance, counselors could explain the concept of interest and the amount of money owed at various

intervals if students take longer to graduate. Another option includes providing sample budgets based on financial aid allocations while students are enrolled and after graduation, which include loan repayment expenses. This could encourage students to borrow less, or exactly what they need to complete their education, and emphasize or remind them about repayment requirements, including estimated monthly payments.

Altering financial aid programs to include more need-based awards, less loan aid, and increasing Pell Grant awards at the rate of inflation was mentioned in five studies (Cofer & Somers, 2000; Hetherington, 1995; Hippensteel, et al., 1996; Nora, 1990; Spencer, 1993). Hetherington (1995), Hippensteel, et al. (1996), and Nora (1990) advocated for additional need-based awards to support students with financial challenges. Considering many community college students base enrollment on their financial condition and often times refuse loan aid, increasing the availability of need-aid could alter short and long term persistence patterns. Moreover, access to need-based aid in the form of grants (i.e., fewer loans) can contribute to student academic success as discussed by Cofer and Somers (2000) and Spencer (1993). Community college students often attend college part-time while working: the additional financial resources may serve as an incentive to enroll for more hours each term and work less. Increasing Pell Grant allocations to match inflation could help maintain its purchasing power (Spencer, 1993). Even though the dollar amount of Pell Grant allocations increased over the past five decades, the percentage of tuition and fees covered by the awards decreased. In other words, the inclusion of loan aid in financial aid packages increased as the purchasing power of the Pell Grant decreased. Increasing Pell Grant awards with the rate of inflation could contribute to reduced loan and work-study allocations and shrink or eliminate student debt and employment while attending college.

Institutional Initiatives

Assessing student aspirations can help them meet their desired goals and measure institutional effectiveness based on students' expectations or change institutional policy to expect administrators to encourage students to remain enrolled until they earn a credential and achieve goals measured by federal and state funding agencies. Clark (2003) and Dowd and Coury (2006) reported the struggles community college students face as they attempt to navigate the higher education pipeline. College administrators could also provide more support services with students who express lower ranking aspirations, including taking a class or two, as these students were found to persist for fewer terms than students who intended to earn a degree or certificate (Clark, 2003). "Low income and first generation students may face significant barriers to accessing the information needed to make an informed decision about borrowing and may have greater difficulties than other students in completing required documentation" (Dowd & Coury, 2006, p. 55 – 56). Community college managers should implement diverse communication tools to convey information to students in an easy to understand format. Who disseminates information may be as important as how the statements are delivered. Hiring alumni, especially in the financial aid office could be helpful. Former students may not have the background for full-time professional staff positions but could serve as part-time or clerical staff and provide testimonies for students about the real life benefits and consequences of financial aid. These alumni would need adequate training as to not violate federal regulations in order to serve as an asset, instead of liability, to the college. Former students employed by the institution could also encourage current students to continue their education. These alumni might serve as informal and formal role models of community college student success. The formal role model process could be implemented through mentoring programs where successful former students could

share their stories with incoming and current students (Austin, 2006; Karp, Hughes, & O'Gara, 2010; Terrion & Leonard, 2007). The mentoring program could include discussions about the economic benefits of higher education and loan management, partnerships with agencies on or near campus to employ students (with or without work-study), and utilize public services available to maintain a lifestyle while attending college.

Financial Aid Allocation Processes

Kelly (1999) recommended using the finite financial aid dollars to fund more students instead of offering fewer students more substantial financial aid packages. Implementing this proposal at the institutional and federal levels serves both purposes of financial aid access and choice. Increasing the number of students eligible to receive financial aid could encourage more students to enter higher education and increase each student's enrollment options. Students may pursue higher education instead of considering the academy an intangible option or select an institution for reasons other than price.

Conclusion

Even though the authors included in this study reported varying findings, the information collected benefits higher education and the community college sector. One of the most valuable lessons learned from this undertaking is the need to expand the research agenda and implications to improve conditions for community college students. A research agenda, based on previous studies and current trends, attempts to advance an area of scholarship and increase insights in a particular field. The lack of available studies pertaining to community college student persistence and financial aid allow future scholars the opportunity to develop creative and innovative articles without the fear of duplication. Aggressive researchers may pursue challenging topics or methodological approaches, including documenting students who attend

multiple institutions, connecting achievement and financial aid by aspiration, and charting students for multiple years, including after withdrawal. Instead of considering the limited research available about community college students a challenge, scholars can focus on the population and become experts in the field with immense prospects. Many of these recommendations benefit undergraduates, regardless of institution affiliation. Some recommendations may be more difficult to accomplish than others but each has merit and may advance the condition of community college students.

CHAPTER 5

RECOMMENDATIONS FOR RESEARCH AND PRACTICE

The purpose of this chapter is twofold: 1) to map a research agenda that will advance the study of community college student persistence as a function of financial aid allocations and processes, and 2) to offer recommendations for future practice, including specific programmatic and policy changes, to increase community college student persistence as a function of financial aid. A research agenda provides a plan or focus to pursue scholarly knowledge in a specific field. The forthcoming research scheme was developed based on recommendations and limitations offered in previous studies addressing the topic and expanding those suggestions to fulfill voids in the limited scholarly works available in this area. The lack of available scholarship serves as a challenge and asset in mapping the research agenda. Due to the few recommendations available for analysis, authors may present innovative themes and base recommendations on current trends and literature. The goal of these recommendations is to improve conditions for community college student persistence relative to financial aid allocations with little consideration given to cost or functionality. However, there remains room for recommendations that include, by shifting responsibilities or adjusting missions, without creating a financial burden.

Advancing the Research Agenda

The forthcoming research scheme, based on recommendations and limitations offered in previous studies addressing the topic and the evolving academic and national climate, was

developed to expand the field by filling voids in the limited scholarly works available in this area. Future research needs to focus on financial aid funding processes, institutional type, community college student characteristics, and domestic economic demands. Each of these research areas helps fill the void in theoretical or practical knowledge needed to advance community college student persistence.

A research agenda, based on previous studies and current trends, attempts to advance an area of scholarship and broaden insight within a particular field. The lack of available studies pertaining to community college student persistence and financial aid allows future scholars the opportunity to develop creative and innovative articles without the fear of duplication. Current conditions including student debt, lender regulation, institutional accountability, and economic recovery set the backdrop for a myriad of studies. Assertive researchers may pursue challenging topics or methodological approaches including documenting students who attend multiple institutions, connecting achievement and financial aid by aspiration, and charting students for multiple years, including after withdrawal. Instead of considering the limited research available regarding community college students a challenge, it is an opportunity for the assertive, ambitious scholar to make an impact in a field with immense prospects.

Drafting the research agenda includes refining success measures from the archaic model of persistence to quantifiers that more accurately reflect the community college student experience. These students often delay enrollment due to financial hardships, pursue higher education to obtain a specific skill-set or job training, and prioritize other commitments such as family and work over their academic responsibilities (American Association of Community Colleges, 2009a; Caporrimo, 2008; St. John, et al., 2005). All of the studies in the critical literature review reported success by number of terms enrolled or graduation; however, a more

appropriate means of defining community college student success may include consecutive term enrollment, number of terms enrolled within a two or three year period, or completing a specific number of courses in a particular field of study. These criteria allow researchers to report student success based on their aspirations that may not include earning a degree or certificate, as many community college students seek higher education to fulfill a short-term objective or interest (Bailey & Alfonso, 2005; Bryant, 2001; Laanan, 2000).

Unlike four-year college students, community college students may not aspire to earn a degree or certificate, making aspirations a paramount area of persistence research (Clark, 2003; Cofer & Somers, 2000; Cross, 2002; Mentz, 2001; St. John & Stakey, 1994). These students often enroll to fulfill other objectives such as re-training or personal development (Makuakane-Drechsel & Hagedorn, 2000). Degree completion, therefore, may not be a valid measure of retention at community colleges where fewer than 10 percent of students earn an associate's degree or certificate (Conklin, 1993). Derived from Metz's (2001) study, connecting aspirations to persistence is difficult to measure using quantitative means and researchers who intend to pursue this route should measure students' achievements based on their intentions. "Even though students may be meeting individual goals and career success, no tracking system is in place to identify these goals and whether they are being achieved" (Clark, 2003, p. 21). Using continued enrollment or graduation as a success measure may fall short of student aspirations; measuring persistence without knowing aspirations is a disservice to students who completed their educational objectives on their terms. Aspirations are directly correlated to persistence as students who desire to earn a degree or credential exhibit higher rates of persistence and graduation (Clark, 2003; Cofer & Somers, 2000; St. John & Starkey, 1994, p. 208).

Examining various areas of the financial aid funding process and trends could benefit community college student persistence. None of the studies cited in this critical literature review compared persistence based on the type of aid received. Studies investigating the relationship between the timing of financial aid allocations, comparing when students apply for aid to persistence, with an increased focus on the type of aid awarded (i.e., grants, loans, or work study) prove fruitful. If specific types of financial aid (e.g., loans, grants, work-study, merit, or need-based) were mentioned, students with loans or grants were compared to those without financial assistance instead of comparing the two groups. Articles about this topic could help determine the best avenue to disburse funds. Studying merit and need-based aid may be most beneficial at the state level as many state financial aid programs award funds on a meritorious basis. The results may propel state legislatures to impose need-based components to current programs or develop need-based initiatives. The expansion of private loans was not considered in articles included in this study. As a relatively recent practice during the past decade, the impact of private loans would be a valuable addition. Private loans typically have high interest rates lacking forbearance and deferment options, and students with these types of loans are more likely to default and experience long-term financial hardships (Barefoot, 2004). Regulating the private loan industry may help all students, not just those attending community colleges, as students would not be burdened by accumulating debt while pursuing their education (either for retooling or earning a degree or credential).

Comparing and contrasting financial aid trends, enrollment patterns, and persistence for students by institution type (i.e., private, public, and minority serving institutions) could benefit students in all community colleges (Cross, 2002; Hippensteel, et al., 1996). The authors of two studies, Cross (2002) and Makuakane-Drechsel and Hagedorn (2000), investigated students at

particular types of community colleges (e.g., tribal colleges and Hawaiian institutions). Instead of limiting studies to financial aid and persistence trends at these institutions, researchers should explore if similar financial aid packages impact students differently based on institution type (e.g., technical, public, private, or for-profit) to help administrators at public and private colleges develop policies to support all students. Taking Cross (2002) and Makuakane-Drechsel and Hagedorn's (2000) recommendations a step further, reviewing enrollment based on financial aid awards at minority serving institutions, including tribal institutions, may benefit students at community and baccalaureate colleges. Ethnic minority community college student persistence rates as a function of financial aid may mirror the experience of four-year college students more than their non-minority classmates.

Investigating the impact of financial aid on success in on-line courses or degree programs is worth additional study. In 2006, approximately 15 percent of college students enrolled in at least one on-line course and more students utilize this course delivery option each year (Cejda, 2010; Pope, 2006). With reports of three-quarters of students withdrawing from on-line courses, educators and policy makers debate student success and meeting educational objectives in this format, especially for academically challenged community college students (Cejda, 2010; Cox, 2005; Dagger & Wade, 2004). Due to the recent rapid growth of on-line education, researchers have yet to discuss the role financial aid plays in persistence for students enrolled in these types of courses and/or programs.

Noting how student characteristics (e.g., aspirations, academic preparedness, and interpersonal connections) impact persistence as a function of financial aid is worth studying. Student aspirations were a prominent theme in community college student literature; however, none of the authors included this criteria in their studies. As previously stated, community

college students may or may not come to college with the intent to earn a degree. Studying enrollment and graduation patterns of financial aid recipients may lead to a better understanding of the connection between financial aid assisting students to achieve personal goals. Researchers should develop longitudinal studies based on students' aspirations or include secondary research questions about goals to compare student outcomes to individual projections. With the large number of community college students needing remedial education, one may wonder if persistence patterns for this student population vary by the presence of financial aid as much as from the amount of aid received. Future researchers could also investigate the relationship between loan default rates and students in remedial education, especially reading. If students cannot comprehend financial aid or loan documents, they may not realize their financial responsibility or consequences of missing payments. Community college students are likely to live off campus with family members, maintain strong ties to their local environments, and are less likely to get involved with on-campus activities, all of which adversely impact retention. Studying the persistence levels of financial aid recipients and non-recipients based on interpersonal relationships (e.g., family, students, and faculty members) or Astin's (1993) student input-environment-output model are other avenues to pursue.

Using financial aid to increase student persistence, and eventually strengthening the domestic economy, is another relevant area for future study; to be derived from analysis of historical financial aid programs and America's current economic crisis. This line of research supports upward mobility gained through higher education as many community college students attend college for career advancement, not necessarily a degree or certificate, as explained by Kelley (1999) and Metz (2001). Early financial aid programs, such as the National Defense Study Loan program, provided funds to students who pursued degrees advancing national

interest and the economy (Baum, 1987; Gladieux, et al., 1995; Hatfield, 2003; Linsley, 1997; Saunders, 1982; Wilkinson, 2005). Education, mathematics, and engineering majors received funds with the condition that they agreed to work in these fields after graduation. With more than 3 million job vacancies, researchers should develop 5 and 10 year forecasts to project which disciplines would benefit from these types of financial aid awards. The benefits of studying these types of programs may increase student persistence and provide economic stimulus.

Two of the research questions remained unanswered, creating additional questions for future study. Comparing persistence based on various forms of financial aid is valuable to determine which award method positively impacts continued enrollment. The current study compared students with or without financial aid but not students with different types of awards. The results of this study could be used to most effectively allocate resources. The second unanswered topic, the impact of the timing of financial aid on student persistence needs further study. Determining the most effective time to distribute resources may impact persistence and set a tone for fiscal responsibility by channeling funds to the students when it's deemed most conducive to continued enrollment.

Sample research questions might include:

- Do community college students who apply for financial aid before June 1 and intend to enroll in the fall term persist for more terms within the award year than those who apply within one month of enrollment?
- Do community college students who receive financial aid disbursements remain enrolled for the entire term and subsequent terms based on when they receive aid (i.e., up to 10 days before the beginning of the term or up to 3 weeks after the term started)?

- Does the type of financial aid allocation (e.g., grants, loans, work study, or mixed) impact community college student persistence?
- Do community college students who qualify for need-based aid persist longer than those with merit awards or a combination of the two?
- Do community college students with private loans remain enrolled longer than those with federal loans?
- Do the enrollment patterns for community college students with comparable financial aid packages differ significantly from one institution type (i.e., private or public) to another?
- Do tribal community college students who receive the Pell Grant remain enrolled longer than students at neighboring community colleges?
- Do community college students who intend to achieve a goal other than graduation and receive financial aid enroll in more courses than community college students with similar aspirations who do not receive financial aid?
- Do community college financial aid recipients enrolled in remedial courses persist for more terms than remedial students without financial aid and/or students enrolled in college level courses?
- Do community college financial aid recipients who live off campus persist longer than financial aid recipients who live on campus?
- Do community college students who choose a major based on financial aid awards persist for more terms than student who choose a degree program for other reasons?
- Do certain forms of financial aid or combinations of financial aid increase community college student persistence more than others?
- Does the timing of the aid award affect community college student persistence?

Challenges to Mapping the Research Agenda

Three major hurdles to implementing any of the areas of research include time, money, and data collection. Qualitative and longitudinal research methods are usually more costly than short term quantitative studies. Following students for multiple years requires continued follow up with multiple methods (e.g., calls, US mail, and financial incentives). Often times, researchers remove subjects from the study if they were unable to collect answers during each point in the study. Pursuing qualitative methods requires in-person or open ended surveys and additional analysis time. Subjects may be leery about sharing personal information in person and refuse to participate in a focus group discussion. Qualitative instruments are often more time consuming to complete than quantitative forms, which may lead to incomplete surveys or students refusing to participate.

Another challenge includes current data collection methods. Few states track student attendance between private and public institutions, a limitation in all persistence studies. Furthermore, specific state agencies or governing boards responsible for collecting data rarely release it for outside analysis. Accessing federal data is possible if researchers meet the rigid provisions imposed by the National Center for Education Statistics. Making meaningful assertions with available public use data is difficult as the records are reported in superficial methods not adequate for rigorous analysis. Even though the aforementioned research questions can be accomplished, scholars may find accessing data or conducting the studies constricting due to financial constraints, time, or access to data.

Recommendations for Practice

As previously stated, half of the fourteen articles published since 1984 about community college student persistence relative to financial aid included recommendations for practice. Even

though the authors provided insightful and meaningful recommendations, I offer other charges to improve the conditions of community college student persistence and graduation rates as a function of financial aid. The following recommendations are based on results from recent studies.

Institutional Initiatives

As the number of part-time and independent community college students increases, policies and services need to expand as a result to meet their needs. With almost 40 percent of new financial aid recipients attending part-time, Hertherington (1995) supported the recommendation to tailor financial aid programs to students who enroll less than full-time. Currently, part-time students receive a proportion of financial aid allocations based on the number of registered credit hours and dependency status. These students often times schedule classes around work and family commitments and are unable to maintain a full load. Furthermore, community college students possess independent student characteristics but may or may not meet the specific requirements to don this classification as defined by the US Department of Education (United States Department of Education – Federal Student Aid, 2010). Offering information sessions during the evenings or weekends may be compatible with a lot of these students' schedules. The purpose of financial aid information sessions includes encouraging students to apply for aid and arming them with more knowledge about the funds and programs available. Often times community college students think financial aid is beyond their reach and fail to complete an application. Encouraging students to complete the application is the first stage in the financial aid process since students who fail to apply for aid never receive a disbursement.

In addition to providing more information to students, community college policy makers may wish to embrace more research and adopt a stronger data-driven approach to program and service development. Clark (2003) and Kelley (1999) recommended expanding institutional reports beyond enrollment and persistence data to include individual student successes to showcase the ‘aspiration effect’ (i.e., fulfilling ones personal or educational aspirations which may or may not include consecutive enrollment or graduation). Community college students may not subscribe to some traditional notions of higher education such as enrolling uninterrupted until they earn a credential. Even though these benchmarks may be easy to measure, they often fall short of documenting the success of pupils who meet their academic goals and objectives without earning a degree. Once institutional research personnel collect the data, community college administrators should have the information to enhance current programs and services or develop new initiatives. Measuring and reporting student success based on personal circumstance instead of government or institutional achievement provides institutions necessary information to more effectively meet their students’ needs.

College administrators may also wish to collect and analyze more individual institutional statistics (i.e., remedial course completion, consecutive term enrollment, or early admission and financial aid applications received). In addition to meeting federal, state, and accreditation regulations and mandates, the data would assist to chronicle the entire community college narrative. Community college administrators need ~~to~~ relay information that best reflects the successes and challenges to institutional effectiveness, including degree completion rates. Institutional data must be developed, unless the institution becomes subject to de facto governance from those outside academe” (Metz, 2001, p. 29). In addition to reporting mandated information (i.e., IPEDS), institutional research personnel should develop a research agenda

based on legislative and public concerns. This approach to data collection and analysis would prove useful in the age of increased accountability concerns. College administrators could use data collected to improve programs based on legislative and public expectations or opt for promotional strategies that emphasize internal achievement. Taking this theoretical approach a step further, research divisions should disseminate the results within the institution to help applicable faculty create programs based on student needs and experiences. Moreover, community college leaders could share this information with federal and state legislators to inform policy and regulation (Boulard, 2009; Ewell, 1985; Jackson-Elmore, 2005).

When considering community college student demographics such as age and diversity of employment backgrounds, Makuakane-Drechsel and Hagedorn (2000) and Nora (1990) discussed the importance of making students feel welcome to campus. Community college officials should consider developing supportive and nurturing programs targeted toward non-traditional students to help constituents get acclimated to the college environment. Adult students who often return to or enter college several years after their last formal educational experience may be apprehensive about the college experience and need additional services to connect them to the institution. Even though not directly related to financial aid allocations, this topic could be presented along with other retention enhancing elements needed for student success. Sample discussion topics could include the financial aid application process, student debt, and budgeting. The results of which could very well include financial literacy and connection to the institution, faculty, and staff members.

Financial Aid Programs

Based on recommendations from authors included in this critical review, institution officials should develop internal financial aid programs and policies, not to supersede state or

federal regulation and mandates, but to increase student persistence and financial literacy. Even though Hetherington (1995), Nora (1990), and St. John, et al. (1994) referenced changing financial aid programs to address community college student needs, they failed to offer specific recommendations to meet this charge. An example of an innovative institutional financial aid program includes reserving funds for students who enroll at the end of the registration period. Community college students are likely to make enrollment decisions close to the start of the next term or during late registration (Cross, 2002). The same student who delays her enrollment decision may be likely to complete financial aid applications late. The timing of their enrollment decision and submitting financial aid documents adversely affects their ability to qualify for financial aid, even with evident financial need. Late financial aid applications contribute to increased loan allocations in students' financial aid packages as grant funds are disbursed to students to meet the deadline. Instead of solely targeting campus-based resources to merit-based programs, community college administrators should reserve funds for need-based awards, especially for students who enroll immediately before the term begins or within the first week of school. These enrollment patterns exclude community college students from Pell Grant awards with more strict deadlines, making loans the only available option. Providing funding for financially needy students allows them to enroll, connects them to the institution, and could increase overall persistence. Late enrollment is a regular occurrence in the community college sector, and students may not understand academic and financial aid implications for this behavior.

In addition to altering financial aid policies, community college administrators need to develop an easy to understand, student-focused financial aid advising program as mentioned by Nora (1990). First generation or academically under-prepared community college students find

financial aid applications and documents, especially loan forms, difficult to understand.

Confusion and uncertainty may contribute to students submitting documents after the deadline, failing to complete the application, or escalating default rates. Additionally, ~~the~~ college needs to assess its current methods of notifying students about financial aid opportunities. Perhaps a more proactive approach in notifying students about filing deadlines for additional aid needs to be undertaken” (Hetherington, 1995, p. 106). Students may overlook supplemental documents or requests for information due to lack of knowledge about the financial application aid process.

Community college officials should educate students about available options to finance their education endeavors other than receiving federal or state aid. In addition to providing information about federal programs that often include loans, community college financial aid offices should provide information about scholarships and funds available through non-governmental or institutional sources (Cross, 2002). Many organizations offer scholarships for non-traditional and female students, a large proportion of the community college population, including Talbots Women’s Scholarship Fund, Adult Students in Scholastic Transition from Executive Women International, Datatel Scholars Foundation Returning Student Scholarship, AARP Foundation Women’s Scholarship Program, and Coca Cola First Generation Scholarships (AARP Foundation, 2010; Coca Cola Company, 2010; College Scholarships. Org, 2010; Detatel, Inc., 2010; Executive Women International, 2010; Talbots, 2010). Encouraging students to fund their education with a combination of efforts including scholarships and work programs may increase student commitment to the institution, personal morale, and self-esteem, all of which have been found to increase student retention and graduation rates (Astin, 1977; Tinto, 1998).

Furthermore, community college administrators should not limit financial aid discussions to current students. Instead, these educators should develop outreach initiatives to address

Nora's (1990) discussion about the importance of explaining the financial aid process to prospective students and their families. The term prospective may include students who intend to enroll within the next term or year and secondary education students. —The college's student services and financial aid departments need to tackle the difficult task of helping students' help themselves" (Cross, 2002, p. 130) by presenting them with tools to make the best financial decision. In many cases, enrolling in the community college is a family affair, impacting the family unit's short-term economic condition. In addition to providing information about financial aid, explaining the long-term benefits of higher education should be included in these types of outreach programs. The goals of these programs include providing students with accurate and timely information, arming students with the resources to meet deadlines, and maximizing financial aid allocations.

Increased Financial Aid Documentation

Considering varying demographic characteristics that impact community college student persistence, including financial aid, policy makers should consider using financial aid practices to address or supplement these issues. Several researchers advocated for changes to financial aid policy and procedures (Cofer & Somers, 2000; Hetherington, 1995; Hippensteel, et al., 1996; Nora, 1990). For example, financial aid administrators at the community college level may wish to develop working teams of professionals to examine current policies on dependency status, and determine if changes should be requested (United States Department of Education – Federal Student Aid, 2004). Many community college students come from challenging backgrounds and may qualify for independent student status even though their initial financial aid application may initially reflect dependent status. For instance, a 19 year-old student is automatically considered dependent, but the same 19 year-old student who is estranged from her parents due to physical

abuse can receive an independent classification, changing her financial aid eligibility. The Higher Education Reauthorization Act of 2008 assisted with some well-needed modifications to the FAFSA form, and while this is a start, financial aid professionals may wish to examine additional changes that may be helpful to community college students.

Clark (2003), Cofer and Somers (2000), Kelley (1999), Metz (2001), and St. John, et al. (1991) championed for diversified financial aid awards, including multiple types of awards (e.g., grants, loans, work-study) in student packages. College administrators should also review the financial aid packaging process to accommodate price-conscious students adverse to loan debt who may decide to forgo higher education due to financial hurdles (Clark, 2003). Forging relationships with financial aid partners to develop innovative funding opportunities for students, including but not limited to, scholarships, paid internships, shadowing programs, or child care may contribute to additional terms enrolled. Relieving students' financial stresses does not necessarily need to be in the form of monetary resources, even though helpful. Providing child care services, through a day care center on campus or securing funding to supplement students' child care expenses, may increase their commitment to the institution, encourage them to enroll for subsequent terms, or expand their former aspirations of a course or two to earning a degree. —It is necessary to incorporate all types of financial aid, including but not limited to, private and institutional scholarships, private loans, and third party tuition payment plans” (Clark, 2003, p. 70). Developing and implementing packages including mixed allocations (i.e., grants, loans, work study, and scholarships) by prioritizing Pell Grant awards, introducing work-study, and awarding loans in the least amount as a last resort may increase student commitment and connection to the institution (Metz, 2001; St. John, et al., 1991). Possible benefits of the combination approach include: allowing students seek financial aid options other than loan debt,

building work history through work-study financial aid, and less truancy with students working on campus instead of commuting from off campus work sites. Moreover, the mixed method approach could maximize the overall financial aid allocation as loans were found to be most effective when coupled with other forms of financial aid (St. John, et al., 1991). Campus officials may also wish to consider awarding fewer loans during the first or second term, waiting until the third or fourth terms, especially for students who express an intent to earn a degree or certificate. Degree seeking students were likely to enroll for more terms than students with different aspirations and need additional financial resources to continue their education. Dowd and Coury (2006) found loans to have the largest impact in later years of the educational experience and increasing allocation amounts for later in community college students' education experience and support continued enrollment and graduation. Institutions may wish to adopt a "fund more with less" approach to financial aid. Instead of providing large aid packages to a limited number of students, college officials should offer smaller awards for more students and encourage and assist them to find other methods of financial support outside of traditional federal financial aid avenues (McPherson & Shapiro, 1998).

Federal Initiatives

Even though Congress reauthorizes or amends the Higher Education Act about every five years, major financial aid reform rarely occurs, though some would argue substantial changes occurred during the 2008 reauthorization. Programs split or merge, maximum and minimum awards increase incrementally, and interest rates adjust but few programmatic transformations surface. Until recently, Congress altered award minimum and maximum amounts and streamlined programs during the reauthorization or amendment process; however, as mentioned above, substantial changes occurred during the 2008 reauthorization including a simplified Free

Application for Federal Student Aid (FAFSA); students can receive the Pell Grant year-round for up to 18 semesters; and private lenders must provide information about federal student loans and disclose the terms and payoff information to borrowers at the time of application (American Council on Education, 2008; Association of American Medical Colleges, 2008). Innovation at the federal level may encourage state and institutional transformation as these levels mimic national strategies (Curs, et al., 2007).

The government may also want to consider the use of data collected through the National Center for Education Statistics (i.e., National Educational Longitudinal Study, Postsecondary Education Descriptive Analysis Reports, High School and Beyond, and National Postsecondary Student Aid Study) to further review the longitudinal effects of financial aid on community college student persistence. Cofer and Somers (2001) and Nora (1990) found that community college students benefit less from HEA programs than their four-year college counterparts: from eligibility requirements favoring enrollment in colleges and universities to focusing on loans. Requirements expanded to include all postsecondary education options but the current emphasis on loans adversely impacts community college students who seek other methods to finance their education. Studying the changes in consecutive enrollment and graduation rates over time for financial aid recipients can help Congress base future reauthorizations and legislation on historical data.

As a result of the mixed results presented in chapter four, more analysis should occur to determine if financial aid policy changes hindered or elevated community college student enrollment and graduation rates. Instead of blanket requirements, the DOE should tailor financial aid programs by sector. For example, currently the maximum award increases after the second year leaving little opportunity for community college students to receive additional

annual allocations due to the length of time it may take for these students to reach sophomore status. Researchers proposed funds awarded in later years of the education experience positively impacted retention and graduation rates more than those issued during initial terms. The government should consider increasing funding levels for students in the community and technical college sector during the third term of enrollment to equalize program efforts for all undergraduates. I recommend revising the allocation process to include a provision for community college students: all college students are eligible for the same award maximum during the first year; however, the second year maximum award for community college students could exceed that of four-year college students, and third year eligibility equalizes for students enrolled in either a community or four-year college.

The amount of financial aid awards are not the only factor impacting community college student persistence and graduation rates. In addition to reviewing the financial aid minimum and maximum awards, policy makers should review the impact of disbursement schedules. Instead of disbursing all funds, including overages, at the beginning of each term, the government should consider dispensing financial aid in equal increments throughout the term. The alternative financial aid disbursement process would apply only to awards exceeding mandatory tuition and fees. In this case the overage would be distributed in half or thirds, with students receiving grant allocations before loans. This approach could help students budget their resources over the course of a semester and reduce possible loan debt for students who withdraw mid-term. Student borrowers who withdraw would be responsible for less debt if the loans were not disbursed and all students with unsubsidized loans would receive later loan origination dates and incur less interest.

Other federal financial aid options include increasing Pell Grant appropriations to keep pace with inflation and create debt forgiveness programs. Spencer (1993) discussed these options to address community college students' increased loan debt. As stated in chapter two, the Pell Grant's purchasing power decreases each year due to increased costs of higher education and inflation. Even if individual Pell Grant allocations remain constant, the proportion of expenses met decreases as tuition and fees increase. Congress allocated \$15.6 billion to increase the maximum Pell Grant award by \$500 annually until 2012 in the American Recovery and Reinvestment Act (ARRA) (National Women's Law Center, 2009). To have strong impact on community college students, national policy makers may wish to retain or increase the maximum award after 2012 and consider implementing a cost of living condition, similar to provision included in Social Security regulations (Social Security Online, 2010). This would allow award maximums to increase with changes in the economy and keep pace with rising costs of higher education. Increased purchasing power may contribute to continued enrollment as students anticipate consistent financial obligations from one year to the next.

The US Department of Education should collaborate with the Department of Labor to use financial aid as a tool to advance the domestic workforce and stimulate overall economic gains. With an almost double-digit unemployment rate, American has more than 14 million job seekers (United States Department of Labor, 2010). The connection between financial aid and joblessness is two-fold: vacancies go unfilled due to a lack of qualified applicants and the emphasis on re-employment instead of re-tooling. As a large portion of community college students seek higher education for career advancement, these types of financial aid programs could benefit the American economy and students as Kelley (1999) argued. There are more than three million vacant positions (National Public Radio, 2010; United States Department of Labor,

2010), particularly in math and science fields, awaiting qualified applicants (e.g., candidates with community, technical, and four-year college degrees). If these positions were filled, the unemployment rate would reduce by more than three percent (National Public Radio, 2010; United States Department of Labor, 2010). Reverting to previous financial aid programs, similar to SSIG, to provide funds to students pursuing specific majors deemed valuable to the US economy could fund student attendance and increase the country's economic outlook. The federal government could also revise unemployment benefits packaging to extend financial resources to those pursuing higher education. Even though the Department of Labor offers job search assistance, unemployment benefits focus on returning people to the workforce with current skills instead of advancing their station in the job market through higher education. Furthermore, to continue eligibility, recipients must report work and accepted or denied job offers but not training or college applications completed (United States Department of Labor, 2010).

Challenges to Fulfilling Recommendations for Practice

As previously stated, these recommendations were offered without considering financial or human resources. With that said, many of the aforementioned recommendations pose challenges with implementation. Some, like increasing Pell Grant allocations to match inflation, require additional financial resources and others, inquiring about student aspirations during the enrollment process, involve transforming processes. Examples of changes in human resources include retraining college administrators to adapt current higher education policies, especially financial aid procedures, and creating programs and services to meet the diverse needs and aspirations exhibited by community college students. Congress could reinforce legislation with appropriation and implement the recommendations offered in this text to impact the purchasing

power of financial aid. Increases in financial aid maximum allocations may allow the funds to cover the same or larger percentages of tuition and fees. Funding higher education on the front end, especially for positions needing applicants, is one of the best returns on investment available. If students, especially if formerly unemployed, attend college and assume the position of a formerly vacated job, increases production or services in a particular company, and become another tax payer. If students received loans, the funds would have a two-fold benefit with the interest repaid and additional federal and state tax revenue.

Conclusion

With the limited research available about community college students (approximately 10 percent of all refereed publications focus on community college students), more authors should tackle the population and provide recommendations to improve practice (Townsend, et al., 2005). The mixed research results about the relationship between community college student persistence and receiving financial aid makes continued investigation more imperative to help expand the knowledge base (Murdock, 1986; Peng & Feters, 1978; Snyder & Klein, 1969; Williams, 1977).

Many of these recommendations benefit community college students as well as all undergraduates, regardless of institution affiliation. The aforementioned recommendations for research and practice present a twofold benefit to community college students and the US economy. Altering institutional and federal processes and studying students with varying aspirations and different institutions may support continued enrollment and graduation rates. If successful, an increase in the number of skilled applicants could translate to new hires and additional tax revenue. Some recommendations may be more difficult to accomplish than others

but each has merit and may advance the condition of college students, especially those enrolled in community colleges.

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APPENDIX A

Studies Used for Review

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Appendix B
Study Characteristics

Author(s)	Publication Year	Publication Source	Year(s) Of Data	Persistence Specifications	Type of Financial Aid	Degree of Control	Treatment of Transfers and Stopouts	Enrollment Status	N	Special Notes
Carlos Remereious Clark	2003	D	May 1, 1995 to April 30, 1996	Within-year	Grants, loans, work study	None	T-NI, S-NI	FT, PT	2,565	
James Cofer & Patricia Somers	2000	J	1996 academic year	1 semester (fall to spring)	Grants and scholarships, loans, work study	None	T-NI, S-NI	FT, PT	7,507	
James Cofer & Patricia Somers	2001	J	1993	1 semester (fall to spring)	Grants, scholarships, loans, work study	None	T-NI, S-NI	FT, PT	5,006	
Kyle Patterson Cross	2002	D	Fall 1987 - Spring 1997	G-3+ (semesters)	FA	Matched	T-NI, S-I	FT, PT	1,135	Tribal college on Indian reservation
Alicia C. Dowd & Tarek Coury	2006	J	Fall 1990 – Spring 1994	4 years, G-2, G-3, G-4	Federal loans, state and federal grants, work study	None	T-NI, S-NI	FT, PT	694	694 represented 1,010,543 students

Author(s)	Publication Year	Publication Source	Year(s) Of Data	Persistence Specifications	Type of Financial Aid	Degree of Control	Treatment of Transfers and Stopouts	Enrollment Status	N	Special Notes
Kathleen B. Hetherington	1995	D	1993 - 1994	Within-term (Fall 1993), term-to-term (Spring 1994), year-to-year (Fall 1994)	Federal Pell Grant, Federal Perkins Loan, Federal Work-Study, Federal Supplemental Educational Opportunity Grant, Federal Stafford Loan	Matched	T-NI, S-I^	FT, PT	3,244	
Daryl G. Hippensteel, Edward P. St. John, & Johnny B. Starkey	1996	J	1986 – 1987 academic year	Semester	Grants, Loans	None	T-NI, S-NI	FT, PT	2,786	Non-traditional (over age 23) community college students
W. Jean Kelley	1999	D	1994 – 1995 to 1997 – 1998 academic years	4 years, G-2, G-3, G-4	Grants, loans, work study, scholarship	Matched	T-NI, S-I^	FT, PT	739	
Teresa Makuakane-Drechsel & Linda Serra Hagedorn	2000	J	Fall 1991 – Spring 1996 (10 semesters)	Semesters, G2+	FA	None	T-I, S-I	FT, PT	547	

Author(s)	Publication Year	Publication Source	Year(s) Of Data	Persistence Specifications	Type of Financial Aid	Degree of Control	Treatment of Transfers and Stopouts	Enrollment Status	N	Special Notes
George W. Metz	2001	J	Fall 1993 – spring 2000	G7	Work study, loans, Pell Grant	None	T-NI, S-NI	FT, PT	760	
Amaury Nora	1990	J	Fall 1982 – Summer 1985	Semesters, G3	Loan, grant, work study	None	T-NI, S-NI	FT, PT	883	
Bernadette Spencer	1993	D	Fall 1988 – Summer 1992 (4 academic years)	semesters	Pell Grant, Supplemental Education Opportunity Grant, Work Study, Stafford Student Loan, Michigan Educational Opportunity Grant, Adult Part Time Grant, Michigan College Work Study, Tuition Incentive Program	Matched	T-NI, S-I	FT, PT	1,141	
Edward P. St. John, Rita J. Kirshstein, & Jay Noell	1991	J	Spring 1980 to Spring 1986	Year to year	Grants, loans, work study	None	T-NI, S-I	FT, PT	3,755	

Author(s)	Publication Year	Publication Source	Year(s) Of Data	Persistence Specifications	Type of Financial Aid	Degree of Control	Treatment of Transfers and Stopouts	Enrollment Status	N	Special Notes
Edward P. St. John & Johnny B. Starkey	1994	J	Fall 1986 – Spring 1987	Within year persistence	Grants, loans, work study	None	T-I, S-NI	FT, PT	1,827	

APPENDIX C

Review Findings

Variable	Author	Positive Relationship
		Comments
Any Financial Aid	Cross (2002)	Students who receive larger amounts of financial aid were more likely to persist than students who receive less financial aid funds Full-time non-Three Affiliated Tribe students with high financial aid awards were more likely to graduate than their classmates with less financial aid
	Kelley (1999)	Students who receive larger financial aid awards were more likely to persist than students who receive less financial aid allocations
	Makuakane-Drechsel & Hagedorn (2000)	Liberal arts students who received financial aid were more likely to graduate than non-recipients Vocational-technical students who received financial aid were more likely to graduate than non-recipients
	Nora (1990)	Hispanic students with higher levels financial aid were more likely to persist and earn a degree than students without the allocations
	Spencer (1993)	Financial aid recipients were more likely to persist than non-recipients
	Spencer (1993)	Ethnic minority financial aid recipients were more likely to persist compared to non-minority financial aid recipients
	St. John, Kirshstein, & Noell (1991)	Receiving financial aid increased student persistence
Grants	Clark (2003)	Grants increased the likelihood of student persistence
	Cofer & Somers (2000)	Grants increased the likelihood of student persistence
	Cofer & Somers (2001)	In 1993 and 1996 persistence increased for every \$1000 in grant aid
	Nora (1990)	Grants positively impacted Hispanic student persistence and graduation

Variable	Author	Comments
Grants cont.	Spencer (1993) St. John, Kirshstein, & Noell (1991)	Grant recipients were more likely to persist than non-recipients Grants increased the likelihood of student persistence
Loans	Cofer & Somers (2000) Cofer & Somers (2001) Hippensteel, St. John, & Starkey (1996) Metz (2001) Nora (1990) St. John, Kirshstein, & Noell (1991)	Loans increased the likelihood of student persistence In 1993 and 1996 persistence increased for every \$1000 in student loans In 1996 students with more than \$7000 in loans were more likely to persist than students without debt Student lenders with more than \$7000 in loans are more likely to persist than students without debt Receiving loans increased the likelihood of graduation Loans positively impacted Hispanic student persistence and graduation Loans increased the likelihood of student persistence from year one to year two
Work Study	Cofer & Somers (2000) Cofer & Somers (2001) Metz (2001) Nora (1990)	Work-study increased the likelihood of student persistence In 1996 persistence increased for every \$1000 in work-study funds Work study increased the likelihood of graduation Work study positively impacted Hispanic student persistence and graduation
Combination of Aid	Nora (1990) Spencer (1993) Spencer (1993) St. John, Kirshstein, & Noell (1991)	Combination awards (grants, loans, and work study) positively impacted Hispanic student persistence and graduation Students who received grants and work study were more likely to persist than non-recipients Students with a combination of financial aid awards (e.g., grants, work study, and loans) were more likely to persist than grant-only recipients A combination of financial aid awards (e.g., grants, loans, and work study) increased the likelihood of student persistence

No Relationship		
Variable	Author	Comments
Any Financial Aid	Clark (2003)	Financial aid is not correlated to persistence
	Cross (2002)	There is not relationship between the number of terms part-time students receive financial aid and persistence
	Hetherington (1995)	There was no relationship between financial aid awardees and non-recipients (full and part time students) and within-term persistence
	Kelley (1999)	There was no relationship between the type of aid received (e.g., loans, work study, grants, and scholarships) and persistence
	Spencer (1993)	There was no relationship between persistence and financial aid received by male and female students
	Spencer (1993)	Age (e.g., 18 – 23, 23 – 27, 28 – 32, and over age 32) did not impact financial aid recipient persistence
	Spencer (1993)	Dependency status did not impact financial aid recipient persistence
Grants	Dowd & Coury (2006)	Grants do not impact persistence
	Metz (2001)	Receiving Pell Grants had no correlation to graduation
	St. John & Starkey (1994)	Grants were negatively associated with student persistence
Loans	Clark (2003)	Loans did not impact persistence
	Dowd & Coury (2006)	Loans received during the first year do not impact graduation
Work Study	Clark (2003)	Work study did not impact persistence
	Dowd & Coury (2006)	Work study does not impact persistence
Combination of Aid	Clark (2003)	A combination of grant and work study did not impact persistence
		A combination of grants, loans, and work study did not impact persistence
		A combination of grant and loans did not impact persistence
		A combination of loans and work study did not impact persistence
	Dowd & Coury (2006)	A combination of grants, work study, and loans does not impact graduation

Negative Relationship		
Variable	Author	Comments
Any Financial Aid	Hetherington (1995)	Part-time financial aid recipients are less likely to persist (term to term and year to year) than those who receive financial aid
Grants		
Loans	Cofer & Somers (2001)	In 1993 persistence decreased for students with more than \$7,000 in loans compared to students without debt In 1996 persistence decreased for students with less than \$3000 in loans compared to students without debt
	Dowd & Coury (2006)	Loans are negatively associated with persistence Changes of \$500 and \$1000 in loans decreases the likelihood of persistence
	Hippensteel, St. John, & Starkey (1996)	Student lenders were less likely to persist than those without debt
Work Study		
Combination of Aid	Dowd & Coury (2006)	A combination of grants, loans and work study were found to be negatively impact persistence
	Hippensteel, St. John, & Starkey (1996)	Combinations of grants, loans, and work study had a negative influence on persistence