CLEARING THE PATH: DELIVERING FINANCIAL AID TO COMMUNITY COLLEGE STUDENTS

A Dissertation in
Higher Education
by

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Abstract

Low- and middle-income students at public, two-year institutions too often do not apply for college financial aid (Advisory Committee on Student Financial Assistance, 2008; Kantrowitz, 2009a, 2011). This research first examines national data to identify what the risk factors are for not applying and compares those risk factors for students at public, two-year institutions to students at public, four-year institutions. Using this national data as a reference point the study then uses a single case study approach at one public, two-year institution to explore: 1) the policies and practices within the institutional environment that influence application rates, and 2) the factors in the extra-institutional environment that impact the institution’s financial aid environment. The national data show that for public, two-year college students speaking to a counselor about financial aid is the most critical factor in whether or not they apply. It also suggests that part-time students, Asian students and males are at higher risk than other student groups for not applying for financial aid. The case study suggests that there are important environmental factors at public, two-year colleges inhibiting application rates that national level data are not reporting. Some of those environmental factors include that: 1) the open access mission that allows late enrollment is not compatible with federal financial aid deadlines, and 2) the movement towards simplification in the financial aid application process at the national level has led to complications at the local level that potentially threaten those most in need of financial aid.
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CHAPTER I: Introduction
Rationale

Community colleges are the primary institutions that provide the open access portal to higher education. A recent study found that these open-access institutions (along with open-access four-year public institutions) provided the largest gains in higher education graduation rates over the past ten years (Doyle, 2010). Doyle (2010) advocates that states should focus more financial aid to continue this increase in graduation rates. However, students at public, two-year institutions have the lowest rates of applying for financial aid of any of the degree granting sectors of higher education.

Originally founded in 1901 the first public, two-year college, Joliet Junior College, provided students the first two-years of a four year degree without the students having to leave their own community (“History of Joliet Junior College,” 2010). Over the first half of the 20th century, promoting the transfer function was the primary mission of most of the two-year colleges (Dougherty, 2001; Townsend, 2001). This vision of the two-year college promotes the idea of this institution with its open access mission as democratizing higher education, allowing students who lack sufficient access to a four-year college education a pathway to a bachelor's degree. After World War II, the Truman Commission Report (1948) redefined this democratization pushing for terminal vocational programs with liberal education embedded within them to be offered alongside the academic transfer degrees. Along with this change the Truman Commission popularized the term ‘community college’ (Phillippe & Patton, 1999; Vaughan, 1983).

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1 The terms "two-year, public institution" and "community college" are used interchangeably throughout this paper.
Two-year, public institutions provide access to a large percentage of students and underrepresented groups in postsecondary education. Public, two-year college students have the second lowest levels of household income in higher education, second only to for-profit colleges (Baum & Payea, 2011; United States Senate Health, Education, Labor and Pensions Committee, 2012). In fact, 44% of low-income students (defined as those with an annual family income below $25,000) attend a community college as their first higher education institution out of high school (The National Center for Public Policy and Higher Education, 2011).

In an analysis of trends in community college costs, Baum, Little and Payea (2011) find that the average tuition and fees for community colleges is the lowest of any sector of higher education. However, the tuition and fees constitute only 20% of the total costs incurred by a community college student for her education, total costs which average to almost $15,000 according to Baum, Little, and Payea (2011). One can see the importance of this when comparing undergraduate budgets across sectors. Public, two-year students' average tuition and fees in the 2012 school year were 36% of the public, four-year, in-state students'. Yet the average total undergraduate budget for public, two-year students was 70% of the average total for public, four-year students (Baum & Ma, 2012). Baum and Ma (2012) go on to document that costs for community college students have outpaced increases in median family income, making a post-secondary education less financially accessible, i.e. less affordable.

The literature shows that affordability is an important factor in why many minority and low-income students either do not enroll in or once enrolled do not complete college (Heller, 2001; Perna, 2002). Supporting the idea that need-based financial aid increases the affordability
of college, researchers have established a link between need-based financial aid and persistence in college (Bettinger, 2004; Bettinger, 2010; DesJardins, Ahlburg, & McCall, 2002; Dowd, 2004; E. St. John, Andrieu, Oescher, & Starkey, 1994).

Making a postsecondary education affordable is precisely the role federal college financial aid was originally designed to address in the 1965 Higher Education Act. "It is the purpose of this part, to assist in making available the benefits of postsecondary education to eligible students ... in institutions of higher education." (“Higher Education Act of 1965,” p.1)

The passage of the Higher Education Act of 1965 (HEA) ushered in federal funding for direct student aid targeted at financial need. Although all students regardless of the type of institution of higher education they attend are hypothetically eligible for federal financial aid, over time federal assistance has disproportionately gone to students attending four-year colleges and universities and this is in part because community college students do not apply for financial aid at the same rate as other students.

In order to apply for federal student aid, students must fill out a financial form, the Free Application for Federal Student Aid (FAFSA), put out by the U.S. Department of Education. The FAFSA collects household financial data from the student. A student’s level of need is then computed based on a calculation of how much her family can afford to contribute (her 'expected family contribution' or EFC) subtracted from the costs of attendance (COA) of the school she has chosen to attend. The COA covers the total budget for the student's expenses, including tuition, fees, books, room, board, books, supplies, transportation and other expenses. It is through this form that the federal government and most state governments and institutions
of higher education allocate need-based financial aid. Yet studies have shown that many low-income students who would qualify for need-based aid fail to fill out the FAFSA (Advisory Committee on Student Financial Assistance, 2008; Kantrowitz, 2009a, 2011).

In order to address their financial need many of these students pursue other financing options -- like working off-campus for a significant number of hours each week or pursuing their education part-time -- that decrease their chances for successfully meeting their academic goals (Frankle Cochrane & Hernandez-Gravelle, 2007; Goldrick-Rab, 2007; King, 2002; Pascarella & Terenzini, 2005). In 2007, according to the American Association of Community College’s (AACC) (2012) calculations 21% of full-time and 40% of part-time community college students worked full-time, in addition to attending college. Another 59% of full-time and 47% of part-time students from this sector worked part-time (American Association of Community Colleges, 2012a).

The quantitative research work done to date on FAFSA application rates has been descriptive in nature (Advisory Committee on Student Financial Assistance, 2008; Kantrowitz, 2009a, 2009b; King, 2002, 2004) rather than inferential. When comparing by the type of institution attended, rates of filling out the FAFSA to qualify for need-based aid are lowest at public, two-year colleges, as seen in Table 1, below. Within the public sector, two-year colleges' rates of application are almost 20% points lower than their four-year counterparts. When compared to other two-year colleges, public college rates of application are almost 35% points lower than private non-profit colleges and 45% less than for-profit colleges.
Table 1. Percentage of All Students Completing the FAFSA By Level and Control of Institution

<table>
<thead>
<tr>
<th>Institution Type</th>
<th>2007-2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>52%</td>
</tr>
<tr>
<td>Public four-year</td>
<td>63%</td>
</tr>
<tr>
<td>Public two-year</td>
<td>44%</td>
</tr>
<tr>
<td>Public &lt; two-year</td>
<td>49%</td>
</tr>
<tr>
<td>Non-profit</td>
<td>72%</td>
</tr>
<tr>
<td>Non-profit four-year</td>
<td>72%</td>
</tr>
<tr>
<td>Non-profit two-year</td>
<td>78%</td>
</tr>
<tr>
<td>Non-profit &lt; two-year</td>
<td>82%</td>
</tr>
<tr>
<td>For-profit</td>
<td>95%</td>
</tr>
<tr>
<td>For-profit four-year</td>
<td>97%</td>
</tr>
<tr>
<td>For-profit two-year</td>
<td>99%</td>
</tr>
<tr>
<td>For-profit &lt; two-year</td>
<td>88%</td>
</tr>
</tbody>
</table>

Adapted from "FAFSA Completion Rates by Level and Control of Institution" by M. Kantrowitz, 2009, retrieved from [http://www.finaid.org/educators/20091014fafsacompletion.pdf](http://www.finaid.org/educators/20091014fafsacompletion.pdf)

Since the public, two-year college students are more likely to be from low-income families they often experience significant levels of unmet financial need that need-based aid could fill. Unless low-income students with substantial financial need receive financial aid, their chances of attending college, completing their education and successfully reaching their educational goals are substantially reduced (Advisory Committee on Student Financial Assistance, 2001; Heller, 1997, 2003a; Pascarella & Terenzini, 2005). St. John (1990) found that financial aid played a more significant role in whether students enroll in college than tuition prices. Financial aid plays a very important role for low-income students who are less likely to enroll, persist and succeed in college without it.
Traditionally, being the open access portal to American higher education has meant that the public two-year colleges attempt to remove any barriers to enrolling. However, the community college sector has begun to look beyond the idea of open access as solely an issue of enrollment, expanding to include the idea of student retention and success (DiMaria, 2007; Dowd, 2007; JBL Associates Inc, 2010). Open access is no longer the ultimate goal. The ultimate goal has shifted to embrace students' successful completion of the relevant certificate or degree because it is the completion of the credential that is most likely to ensure the individual is able to take advantage of the benefits of a postsecondary education (Adelman, 2006a; Baum, Ma, & Payea, 2010; Titus, 2009). High levels of unmet student financial need discourage college enrollment as well as decrease retention and success rates once in college (Advisory Committee on Student Financial Assistance, 2006; Bresciani & Carson, 2002; Heller, 1997; Long & Riley, 2007; Long, 2008; L. Perna, 2006).

In order to remove the financial barriers to enrollment, retention and success, public two-year colleges have kept their tuition rates much lower than other sectors of higher education. However, as a sector they have been relatively unsuccessful in helping students get access to need-based aid, leaving many community college students with substantial amounts of unmet financial need. In contrast students in private, non-profit and for-profit, two-year schools have much higher rates of FAFSA completion (Advisory Committee on Student Financial Assistance, 2008; Kantrowitz, 2009a, 2009b; King, 2004). What are the underlying differences between these sectors that have led to such different rates in how many of their students fill out the FAFSA? Is there anything the public two-year colleges can do to increase the rates at which their students fill out the FAFSA?
Conceptual Framework

I based the research for this study on the conceptual framework, depicted in Graph 1, that integrates and adapts a combination of theories of college student change models and a modified rational choice model to analyze how student attributes, access to information on financial aid and the institutional policy environment might impact student outcomes. The student outcome of interest within the framework is the decision to fill out the federal financial aid form, FAFSA. My research work will analyze the components shown in Graph 1 and their relationship to a student's decision to apply or not to apply for financial aid by completing the FAFSA.

The framework draws from two bodies of literature, modifying and combining student involvement theory as it relates to student persistence and rationale choice theory as it pertains to school choice. The structure of the framework -- with its student inputs, financial aid system environment, and outcomes -- models Astin's (1970a, 1970b) inputs, environment and outcome (I-E-O) structure but uses some of the same changes Tinto's (1988) model of institutional departure made to the Astin model.
Like Astin's involvement theory regarding students and their arrival at college, my model suggests that students arrive to the financial aid system with particular attributes (inputs) that impact the nature of the student's interaction with the college's institutional environment and that the interactions allowed by the environment determines student outcomes. Research in financial aid like Heller (1997), Cunningham & Santiago (2008), and Trent, Lee, & Owens-Nicholson (2006), provide evidence that financial aid behavior can be predicted in part by socio-
economic factors (student inputs). Here I am assuming that financial-aid related behavior is impacted by what Perna (2006), calls the individual's "situated context."

Tinto's model of student persistence adapted Astin's theory making it more dynamic to allow the researcher to investigate the influences and changes that lead to student persistence (Metz, 2004). Like Tinto's adaptation, my model also provides a dynamic interaction within the environmental element of Astin's theory to explain how students come to make a decision regarding whether or not they will fill out the FAFSA. Using this conceptual model, for example, I can analyze the sources of information student use to negotiate the financial aid application process and the impact using the different sources has on whether or not the student applies for financial aid. I define the environment based upon which sector of higher education the student attends.

Both Astin and Tinto's work reflect on the changes that happen to students based upon their experiences during college whereas this study analyzes the financial aid decision that a student makes based upon her experiences with the financial aid process prior to attending college. Her engagement with the institution regarding this decision takes place primarily through the counseling that happens during the application and enrollment experience.

The decision of interest in this research (whether to fill out the FAFSA) can be further informed by using economic theories. As such, also underlying the conceptual framework is a modified version of the Rational Action Theory (RAT) that holds that consumers are rational actors who make choices that give them maximum utility. RAT relies heavily on the rational
consumer having perfect information and valuing costs and benefits in a uniform, predictable pattern. This framework modifies maximum utility understanding that 'rational' consumers may weigh costs and benefits differently, and that they often do not have perfect information. This means that the student makes a decision on whether to fill out the FAFSA based upon value preferences that take into account her perceived costs, benefits, and probability of success, and that actors are assumed to have imperfect information as well as differences in their valuation of preferences.

The school choice literature has used a modified version of RAT to explain why the perceived costs, benefits and probability of success may be different for defined groups of [parents' of] students (Ball, 2003; Bosetti, 2004; Goldring & Hausman, 1999; Goldthorpe, 2010; Hatcher, 1998). These authors find that using a pure RAT model will not fully explain the choices in schooling parents' elect for their children, because given the same information and options different parents will make different choices. A modified RAT model, however, provides a better predictive model by taking into account socio-economic factors. The literature focuses primarily upon differences in income-class and the family social capital and depicts how and why these factors inform the values preferences and therefore the school choices made by families. This modification mirrors findings in the financial aid literature that shows that those from different socio-economic groups differ in the value they allocate to different types of financial aid. For example, Heller (1997) finds a different consumer response to loans versus grants based on socio-economic groupings. St. John (1994) finds differing
responses to price and Cunningham and Santiago (2008) find different preferences regarding borrowing.

Through the usage of the pre-college inputs, the conceptual framework I propose to use takes into account these same factors to determine if they make an impact on the value preferences of the students as they make a decision on filling out the FAFSA. The framework, for example, allows the research to ask if students from different income groups are likely to make different decisions regarding filling out the FAFSA and why they might not fill it out.

Over the next three sections, I will review each of the three aspects of the I-E-O framework used to explain how I have conceptualized the framework in the research design.

**Pre-college inputs.**

![Pre-College Inputs Diagram]

The pre-college inputs -- parents' and family characteristics and student characteristics -- use some of the pre-entry attributes of Tinto’s model and the inputs Astin describes as "the talents, skills, aspirations, and other potentials for growth and learning that the new student
brings with him to college." I chose the inputs used in this study based upon literature that suggests these inputs have a relationship to outcomes like the financial aid decision. A student's socio-demographic characteristics -- including age, sex, race/ethnicity, income-level, dependency status, enrollment timing, high school education, parental education, status in college and attendance pattern -- have well established links in sociology, economic and financial aid literature to educational outcomes (Ball, 2003; Baum & Flores, 2011; Bosetti, 2004; Goldrick-Rab & Pfeffer, 2009; Goldring & Hausman, 1999; Goldthorpe, 2010; Hatcher, 1998; Hearn, 1984; Heller, 1997; Kane, 1994; Pascarella & Terenzini, 2005) and so have been included in the framework for this study under the categories of "student characteristics" and "parents' and family characteristics."

Financial aid system environment.

The processes I analyzed in this conceptual framework lie within the 'financial aid system of information' that encompasses the transactional processes through which students receive their information about financial aid for postsecondary education. The system of information element is critical to the contextual framework as it analyzes the completeness of information the student receives, a fundamental aspect of the modified RAT underlying the design of this study. The financial aid system environment also uses Perna's (2006) multilevel conceptual model that situates the student's financial aid decision-making within a nested set of contexts.

Ideally, this conceptual framework calls for the researcher to analyze the information students receive regarding financial aid and applying for that aid. In the design of this study, however, the limitations of data availability required that the sources of information are used as
an indirect indicator for the information itself with the quality of that information inferred from the outcome that indicates the student perception of the benefits of applying for financial aid.

The environment the student encounters when deciding whether to apply for financial aid is multi-layered. At the macro-level, the federal regulations shape the financial aid system of policies and procedures within which the states, extramural information sources and institutional financial aid systems operate. Each state has its own financial aid environment.
(Cheslock & Hughes, 2011) that further defines the framework within which the extrainstitutional sources operate and the individual higher education institutions define their financial aid policies, procedures and practices.

The student’s “extramural information experience” is comprised of the information provided by sources outside the institution of higher education the student uses to understand the financial aid system. These sources can be either formal (like a high school counselor) or informal (like a friend or family member) in nature. This differentiation reflects the literature on social and human capital in which researchers have shown that there are links between the expertise of students’ sources of information and the decisions they make to invest in their own human capital. The greater a student’s social capital (e.g. the more expertise the sources of information she relies upon have) the greater will be her human capital (e.g. she will be more likely to be able to successfully attend college) (Coleman, 1988; Goldrick-Rab & Pfeffer, 2009; Goldring & Hausman, 1999).

At the institutional level, the institutional policies, procedures and practices facilitate or hinder the students’ choice to apply for financial aid. This institutional setting is the nexus between the pre-college and extramural information gathering, and where the students will confirm or reassess their financial aid precollege perceptions. It is the key component of the model because it is the setting that may have the greatest opportunity for redesign and change for the institution itself.
Outcomes.

As depicted in the conceptual framework the inputs and environment lead to two outcomes. The first outcome is the student's knowledge about the financial aid system and her perception of how efficacious her involvement in that system would be. The second outcome is produced by the student's knowledge and perception and is the outcome of interest in this research: the decision of whether or not to fill out the FAFSA. The underlying assumption in the framework is that the student is a rationale actor with individual values shaped first by the inputs she brings with her to the financial aid process who then receives imperfect information on the financial aid process that then shapes her perception and knowledge and leads to her decision of whether or not to apply for financial aid by filling out the FAFSA.

Research Questions

I will address three sets of questions in this dissertation each of which analyzes the relationship between parts of the conceptual framework. The first set of questions looks at the relationship between the inputs, the financial aid environment and the outcome in the model and whether parts of that relationship differ by type of postsecondary institution the student
attends. The second set of questions explores the correlation between the inputs, extrainstitutional information environment of the student and the outcomes in the model. I analyzed the first and second set of questions using a national-level quantitative dataset. The third set of questions examines the factors within a public, two-year institutional environment that impact the financial aid outcomes. This final set of questions will be analyzed using quantitative and qualitative data gathered in a single case study.

The descriptive questions look at the interrelationship between inputs and outcomes in the model:

1. How do financial aid information sources and FAFSA outcomes differ by socio-demographic characteristics?
2. How do financial aid information sources and FAFSA outcomes differ by postsecondary institution-type?
3. How do perceptions of non-applicants about reasons for not filling out the FAFSA differ by socio-demographic characteristics? Do public, two-year non-applicants differ in their perceptions about financial aid from non-applicants in other sectors?
4. How do perceptions of non-applicants about reasons for not filling out the FAFSA differ by financial aid information sources used? Do public, two-year non-applicants differ from non-applicants in other sectors?

Using a national level dataset, the first question analyzes the interrelationship between socio-demographic factors (inputs), the sources of information students utilize to inform
themselves about the financial aid process (environment) and students’ decision to apply for FAFSA (outcome). The socio-demographic factors included are gender, race, dependency status, student type, mothers' education, income-level, other college-going household members' and attendance pattern. For the second question, this analysis is done across institution types (i.e. four-year public, four-year private non-profit, two-year public, and two-year for-profit), substituting institution type for socio-demographic characteristics.

The third question analyzes the interrelationship between the socio-demographic characteristics (inputs), and reasons non-applicants give for not filling out the FAFSA (outcome). I focus on the results for public, two-year college students comparing them to public, four-year students for context. The fourth question analyzes the interrelationship between the sources of information students used to understand the financial aid process (environment) and reasons non-applicants give for not filling out the FAFSA (outcome).

The predictive questions explore the correlation between the socio-demographic factors (inputs) and sources of financial aid information (environment) on one hand and the decision to apply for financial aid and the student's perception of the benefits of completing the financial aid process (outcomes) on the other hand:

1. Do socio-demographic characteristics help predict whether a two-year, public college student will complete the financial aid process?
2. Can the sources of information utilized to learn about the financial aid process help predict whether a two-year, public college student will complete the financial aid process?

3. Do socio-demographic characteristics help predict how a non-applicant will perceive the benefits of completing the financial aid process? Do the socio-demographic characteristics that help predict how a non-applicant will perceive the benefits of completing the financial aid process differ for two-year, public college students?

4. Can the sources of information utilized to learn about the financial aid process predict how a non-applicant will perceive the benefits of completing the financial aid process? Do the sources of information that help predict how a non-applicant will perceive the benefits of completing the financial aid process differ for two-year, public college students?

The second set of questions focus on how well socio-demographic characteristics (inputs) and sources of financial aid information (environment) can predict financial aid outcomes. I am interested both in how well they predict for students overall and then specifically for community college students, comparing them to students in the public, four-year sector for context.

My research questions in the case study section focus upon the institution of higher education information experience and how it is shaped to impact the outcome of interest -- whether or not students fill out the FAFSA.
1. What are the underlying financial aid related policies, procedures and practices of the case study institution? How do these factors and the extra-institutional environment shape the institutional financial aid environment?

2. How does the financial aid environment at the case study institution impact the financial aid outcomes?

For this third set of questions, I have collected and analyzed qualitative and quantitative data from a public, two-year college using a single case study approach. This final set of questions analyzes the mechanisms within the institutional environment that may be leading to different rates of financial aid applications for public, two-year institutions. A qualitative approach, informed by the quantitative data, provides the most appropriate method to analyze these questions since qualitative data best explore complex phenomena about which there is little known (Krathwohl, 2009; Yin, 2009, 2012). ‘Complex’ and ‘little known’ both describe our understanding of the institutional financial aid environment.

Quantitative data collected in the single case study includes information on rate of financial aid applications at the institution and information gathered in a survey of incoming, first semester students. I collected the qualitative data within the case study through document review and interviews with staff and administrators at the case study institution. The interviews focused on financial aid policies, procedures and practices at the institution. The interviews elicited staff and administrator perceptions of what the barriers are to students filling out the FAFSA, as well as the insights into institution level policies and programs that best facilitate financial aid applications. In the interviews, I also asked interviewees to share their thoughts on
whether policies and practices common at other types of higher education institutions but not
evident at their own institution might be transferable.

The next chapter reviews the community college and financial aid literature relevant to
this study and concludes with a brief discussion of what this research contributes.
CHAPTER 2: Literature Review
The academic literature on public funding of higher education through financial aid covers myriad topics in the areas of public policy, history, sociology, and education. In order to understand the academic foundation upon which I based the research in this paper, I divided the literature review into three areas of scholarship. The first area examines the common history of the current day community college sector and public financial aid for higher education. The second body of literature examined covers with the roles of the community college sector and financial aid in providing social mobility, access and diversity to higher education. These first two sections help to create the background and context to understand the importance of the relationship of financial aid to community college students. The third area of scholarship explores the community college sector’s low rates of financial aid applications.

The common history of today’s community college and public financial aid.

The intellectual visions for the growth of the community college sector in the latter half of the 20th century and the advent of financial aid for higher education students find an important part of their roots in The Truman Commission Report (1948). In his letter of appointment of Commission Members, President Truman (1946) wrote: “Among the more specific questions with which I hope the Commission will concern itself are: ways and means of expanding educational opportunities for all able young people…” (The U.S. President’s Commission on Higher Education, np.). The Chairman of the Commission, George F. Zook, chaired the first national level meeting of two-year college leaders in 1920 and then helped to lead the subsequent creation of the American Association of Junior Colleges (AAJC) one year
later (Vaughan, 2000). He was serving as President Roosevelt’s Commissioner on Education, the highest education level position in the federal government at the time. He was a strong advocate for the role that two-year colleges could play in the education sector for over a quarter century when he became the Commission’s Chairman (Phillippe & Patton, 1999; Vaughan, 1983). Other members of the Commission, Fred J. Kelly and Henry A. Dixon, had also played roles within the two-year college sector and were proven advocates.

In the first volume of its report, the Truman Commission (The U.S. President’s Commission on Higher Education, 1948) laid out its lofty goals for education that included educating for: 1) the fuller realization of democracy, 2) greater international understanding and cooperation, and, 3) the skills and knowledge to solve social problems and administer public affairs. The second volume of the Truman Commission Report then identified problems specific to the education sector. At the heart of the analysis of the Truman Commission (1948) was the issue of access to higher education. It opened with a preface that said:

America has long boasted of its educational system and too many of our citizens have tacitly assumed that the ladder of opportunity for education was equally accessible to all children and youth. Even those who, for financial or other reasons, found that they could not continue in school or college tended to feel that it was their own lack rather than the failure of our education system (v. 2, p. 1).

The second volume of the Truman Commission Report (1948) went on to argue that there existed a number of barriers to educational access backing the claim with extensive data
regarding which students attend college categorized by various demographic characteristics. The barriers to student access to higher education identified in the report included financial barriers, as well as geographic, religious, racial, gender and nonveteran status barriers. One of the more radical recommendations of the Truman Commission Report (1948) was that the first two years of college should be provided for free to everyone at public institutions.

The Truman Commission Report (1948) came out in a context in which the higher education sector was starting to undergo an unforeseen shift. The 1944 G.I. Bill provided unprecedented educational benefits to veterans returning from World War II, creating an unexpected and dramatic influx of students to the higher education sector. The G.I. Bill was in part a public policy response to concerns that returning soldiers could not be adequately absorbed into the labor market (Brint & Karabel, 1989; Olson, 1974), with the result that the higher education sector was seeing a sharp increase in the number of students as well as a very different type of student than the 18-year old high school graduate that the sector was used to serving. These two policy climate factors, the 1944 G.I. Bill and the Truman Commission Report, combined to help create a significant shift in the public’s perception of who could and should attend college (Hutcheson, 2007).

Vaughan (1983) called the Truman Commission Report “The Community College Manifesto” because it was the first public declaration of the substantial role the two-year college sector could play in higher education. The Truman Commission provided a strong, nationally prominent voice for the idea that the base of higher education had to be broadened and that two-year colleges should be a critical part of that broadening. It also advocated for
vocational training, integrated with a liberal education, to become part of the higher education sector, again seeing the community college as the sector to deliver this type of programming.

The third volume of the Truman Commission Report’s (1948) contained numerous recommendations including the push to greatly expand the number of young people who continued on to the first two years of college, with particular attention paid to those it had identified in the first volume as facing significant barriers to higher education. This recommendation was directly linked to the Truman Commission’s suggested expansion of the two-year college sector. The role that the Truman Commission anticipated the two year sector playing was most simply reflected in the Truman Commission’s call for the name ‘junior colleges’ to be abandoned for the more appropriate ‘community colleges,’ as it was “the institution designed to serve chiefly local community education needs… Its dominant feature is its intimate relations to the life of the community it serves” (v. III, p. 5). The Truman Commission Report laid out a vision of community colleges that is striking in its many similarities to the current network of community colleges spreading across most states (Quigley & Bailey, 2003).

Unfortunately, no federal legislation was directly spawned from the Truman Commission Report. However, it did generate immediate and prolonged discussions at the national level while state legislatures built the community college network envisioned by the Truman Commission. Harlow (1953) documented the prolific amount of published discussion about the Truman Commission Report. Criticism of the plan came from many sides. Hutchins
argued that two year colleges were disruptive of the educational system and would only duplicate the high school experience. He also strongly objected to the notion that government should provide schooling at the post-secondary level free of charge because he believed neither that education was the panacea to solve the issue of social and economic class barriers the Commission claimed nor that vocational training should happen in school; he felt that educational training should take place on the job. As for the Truman Commission's goal to remove the variously identified demographic barriers (financial, geographic, racial and gender) to higher education and thereby open access and diversify the pool of students, Hutchins said:

Since American institutions of higher education are already so diversified that neither the faculty nor the students can talk with one another except about the weather, politics, and last Saturday's game, the Commission's advice is a little like telling a drowning man that he can improve his position by drinking a great deal of water (1952, p. 87).

Other's also strongly supported Hutchins appraisal that education could not be looked to as the panacea that would bring about a greater realization of the American Dream, providing equal opportunity for all while strengthening the democracy through educating citizens to be better humans (Farrell, 1952; Gannon, 1948). Instead, these critics claimed that discrimination was minimal in the current system and expanding participation as advocated by the Truman Commission would only serve to engender a rise in mediocrity in the higher education sector. Gannon, President of Fordham University, went so far as to say:
The fraud in the present campaign for educational inflation consists in spreading our national culture perilously thin and calling it 'democracy in education.' It consists in swelling the number of incompetents in American colleges and calling it 'equality of opportunity' (1948, np).

In another criticism, Harlow (1953) summarized a critique put forward by Seymour Harris. Mr. Harris believed that the economic incentive for increased educational attainment would significantly decline with increased participation in higher education, since the labor market would not be able to supply the jobs for so many credentialed people.

Despite its critics at the time, the vision of the Truman Commission Report continues to have resonance today. At the time of its publication those within the two year college sector hailed the Truman Commission Report. Over the ensuing decades the report was used as a touchstone for those interested in increasing access to higher education for a diverse population. As we will see in the next section of this chapter, the community college sector saw major growth after the publication of the Truman Commission Report and echoes of the report can be heard in both the Bush and Obama administrations’ calls for renewed support of the community college sector.

Meanwhile, in the area of financial barriers, the recommendations of the Truman Commission Report that the first two years of college should be free never took root. It was not until almost 20 years later, with the passage of the 1965 Higher Education Act (HEA), that the first federal legislation funded broad-base support aimed at erasing the financial barriers as
envisioned by the Truman Commission (Gilbert & Heller, 2010). The HEA was the product of a slow progression in federal legislation. Prior to HEA, in 1958, the passage of the National Defense Education Act (NDEA) began to take the U.S. federal government into a new realm of funding of higher education (Parsons, 1997). Parsons (1997) contends that before this 1958 legislation, federal funding for higher education had seen education as peripheral to the policy that such aid was meant to address. So, for example, the G.I. Bill that funded millions of people to attend higher education was targeted at rewarding soldiers and easing them back into the post-war economy, not at supporting higher education as a sector. NDEA, created and passed in the shadow of the USSR’s launching of Sputnik, was to address the concerns that U.S. higher education had fallen behind the Soviet Union in producing engineers and scientists making higher education, for the first time, central to the federal legislation (Cervantes, Creuse, McMillion, McQueen, Short, Steiner, & Webster, 2005; Mumper, 1996; Parsons, 1997). In addition, Mumper (1996) discusses the significance of the NDEA’s preamble, which provides, that, for the first time in legislation, a vision of equal educational opportunity as being a goal of national interest, a vision that directly harkens back to the Truman Commission Report.

According to Parsons (1997) while the two draft NDEA bills presented by each of the Democratic and Republican delegations in Congress included student scholarships, this was ultimately dropped from the final legislation so that the only financial aid provided for undergraduates in the 1958 legislation was through loans. At this time, higher education was
still seen as a private good and not appropriate for public investment. That all changed with the passage of the Higher Education Act of 1965.

The Higher Education Act of 1965 (HEA) was passed as part of Lyndon Johnson’s War on Poverty (Cervantes et al., 2005; McGuinness Jr., 1981). One of his priorities was expanding educational opportunities for all Americans (Cervantes, Creusere, McMillon, McQueen, Short, Steiner, Webster, 2005) and HEA was envisioned as doing just that for postsecondary education (Cervantes et al., 2005; McGuinness Jr., 1981; Parsons, 1997). HEA marked the first time that federal legislation used education as a tool to achieve social equality (Parsons, 1997) as envisioned in the Truman Commission Report. HEA marked the first legislation passed that provided the higher education sector with general aid, seeking to address the cost of college as a barrier for students and was a direct outcome of President Johnson’s conviction that education was a public good. Specifically, Johnson believed that students who did not go on to college due to financial barriers represented a loss of human capital (Cervantes, et. al., 2005; Parsons, 1997).

Originally passed in 1965, HEA has since undergone nine revisions. Title IV of HEA, considered the heart of the legislation (Cervantes et al., 2005; Parsons, 1997), provides federal financial aid directly to students in the form of grants, loans, and work-study. These financial aid programs originally focused on low-income Americans in order to foster the use of the higher education system to equalize social inequalities within society (Cervantes et al., 2005; Parsons, 1997; Price, 2004). This public policy of equality and access for low income students
driving federal financial aid policy reached its pinnacle with the 1972 reauthorization of HEA, which created the Pell grant program (known at the time as the Basic Educational Opportunity Grant), a grant program that provided direct assistance to low income students (Cervantes et al., 2005; Green, 2005).

Over time, however, the focus of financial aid programs at both the federal and state level has shifted to provide more funding that impacts the middle- and upper-income students (Cervantes et al., 2005; Green, 2005; Heller, 2001, 2008b) at the expense of programs target specifically for low-income families. Over the same time period researchers have found that higher education as a pathway for social mobility has been increasingly less accessible for low-income students (Astin & Oseguera, 2004; Carnevale & Rose, 2003; Ellwood & Kane, 2000). The next section of this chapter will review the issues of social mobility, access to and diversity in higher education along with the roles the community college sector and financial aid have played in these issues. The following section of this chapter will look at the current discussions in the literature around the low rates of financial aid applications and, in particular, in the community college sector.

**Social mobility, access and diversity in higher education: the roles of the community college sector and financial aid.**

Over the first half of the 20th century, promoting the transfer function was the primary mission of most public, two-year colleges (Dougherty, 2001; Townsend, 2001). Over the latter half of the 20th century, however, community colleges evolved to take on myriad roles,
including vocational, developmental and community education (Cohen & Brawer, 2008). Also during the second half of the 20th century, in addition to expanding from a transfer institution (i.e. “junior college”) to a comprehensive college (i.e. “community college”) the open access mission has been at the core of the public, two-year college sector development (Shannon & Smith, 2006). As seen in the previous discussion of the history of the current day community college, the genesis of this mission can be traced to the Truman Commission Report (The U.S. President’s Commission on Higher Education, 1948) and the funding of the G.I. Bill. Both these factors set the groundwork to opening up higher education making it more accessible to a broadly expanded group of people (Brint & Karabel, 1989; Cain, 1999; Olson, 1974).

At the end of World War II, the public, two-year college sector was a relatively small proportion of the higher education sector and received little attention. The Truman Commission provided the push to widen the base of higher education and the public, two-year college sector responded. In 1947, there were only 328 public, two-year colleges in the country. During the 1950s, there was a 23% growth in the number of community colleges (Cohen & Brawer, 2008). During the next two decades the sector increased rapidly, expanding at the rate of one community college opening per week at one point (Phillippe & Patton, 1999). Today there are 1,132 community colleges according to the American Association of Community Colleges (2012). The bulk of all this growth coming from the creation of the comprehensive community college (Cohen & Brawer, 2008) with the open access mission envisioned by the Truman Commission.
The “open access mission” has meant that community college student demographics differ dramatically from those of traditional four-year universities. Reviewing the literature one finds that community college students are more likely than their four-year counterparts to be underrepresented minorities, females, and of lower socio-economic status (SES) (Brint & Karabel, 1989; Cohen & Brawer, 2008; Pascarella & Terenzini, 2005; Wellman, 2002). This conclusion is proven out by the fact that community colleges serve 44% of all undergraduate students, 54% of all Native American undergraduates, 51% of all undergraduate Latino students, 45% of all undergraduate Asian and Pacific Islander students and 44% of all Black undergraduate students (American Association of Community Colleges, 2012a). In addition, 42% of all community college students are the first generation in their family to attend college, a much higher rate than other sectors of four-year college students (American Association of Community Colleges, 2012a).

This all said growth in the community college sector and the make-up of the student body has not been without its critics. As seen in the previous section of this chapter, when the Truman Commission first proposed the transformation of higher education to increase the percentage of Americans receiving postsecondary education there was heavy pushback from an elitist perspective. These “elitists” believed that some in our American society were not ‘college material’ and public funding should not be used on an academic, postsecondary education for those who just do not have what it takes. These critics neither saw postsecondary education as a tool for social mobility nor believed that everyone should have access to higher education. This perspective, that higher education should not be made
accessible to a broader base, did not win the policy debate as can be seen in both the growth of
the community college sector and its student body.

This does not mean, however, that the community college sector has been universally
recognized as the vehicle for social mobility and access. Much of the modern debate
surrounding whether or not community colleges provide social mobility centers around the
inclusion of the vocational education element introduced primarily since the Truman
Commission and whether this has helped or hindered the academic transfer programs. Over
the second half of the 20th century, the transfer role of community colleges seems to have
diminished. For example, Pascarella and Terenzini (2005) found that students with aspirations to
obtain a baccalaureate degree who began their higher education career at a community college
were significantly less likely ultimately to obtain that degree than their counterparts who began
at a four year institution. It is apparent since the composition of the student body at
community colleges is comprised of such a heavy mix of underrepresented minorities and low
SES, the sector is in a position to facilitate social mobility. However, if community colleges are
truly to be a democratizing force in the higher education sector helping underrepresented
groups to be more successful at all levels of postsecondary education, the community colleges
need to have an effective transfer function.

In looking at this issue, there has been much debate in the literature over whether
community colleges play the role of democratizing higher education or whether they help to
further stratify both education and society (Brint & Karabel, 1989; Cohen & Brawer, 2008;
Amongst the many different functions the modern community college serves in the arena of higher education it is the transfer function juxtaposed with the community colleges’ vocational training role that figures most prominently in this discussion of whether or not the institution serves to democratize or to stratify post-secondary education.

Those who would criticize the community college sector as diverting students from completing a baccalaureate degree cite the decline in transfers over the last half of the 20th century (Brint & Karabel, 1989; Dougherty, 2001; Townsend, 2001). In 1960, Burton Clark’s argued in his article on “the cooling-out function” in higher education that community colleges played an important role by gently dissuading those aspirants inappropriate for the pursuit of a baccalaureate degree and steering them towards a more appropriate career and educational path. “Certain social units ameliorate the consequent stress by redefining failure and providing for a “soft” denial; in other words, they perform a “cooling-out” function. As Clark observed “The junior college especially plays this role” (1960, p. 569). Clark portrayed this role as a necessary part of the higher education system, while others (Brint & Karabel, 1989; Dougherty, 2001) describe the cooling-out feature as a way for the business sector and the “elite” to maintain socio-economic class structures cutting-off access for students coming from lower income backgrounds to an education that would positively and significantly impact their economic status. They interpret falling transfer rates as a failure of community colleges and proof that they serve to maintain current power structures, diverting students from their higher aspirations rather than facilitating those aspirations. Clowes and Levin (1989) made the argument that over the course of the 20th century community colleges and less selective four
year colleges have increasingly expanded their vocational and occupational programs so that their academic programs are “atrophying.” Rather than allow this slow erosion of their transfer mission, they said, the community college sector should abandon the transfer part of its mission (Clowes & Levin, 1989).

In contrast, other researchers argue that many factors other than the maintenance of power structures impact rates of transfer, suggesting that community colleges’ transfer function continues to be an important part of a democratic system of higher education. For example, Cheslock (2005) found that one of the determinants for transfer rates into specific institutions were linked to that institution’s attrition rates, with lower attrition rates leading to fewer spaces for transfer students and therefore lower rates of transfers being allowed. Cheslock’s research suggested that, as the more selective, private institutions rates of attrition had fallen over time, they had allowed fewer transfer students in, and, eventually, this pattern might also be seen at the larger, public institutions. As another factor causing declining transfer rates, Cohen and Brawer (2008) argue that students are remarkably malleable, choosing between vocational and transfer programs depending on their goals at the moment, and that community colleges provide a channel for upward mobility regardless of whether it is for transfer or vocational degree attainment.

Other examinations of the transfer rate include Goldrick-Rab and Pfeffer (2009) who are interested in reverse transfer students and show that first generation students and those of low socio-economic status (SES) are at a high risk for transferring from the four-year sector to
the two-year sector, despite being equally well-prepared for college. Their work highlights that transfer rates between the two-year and four-year sector are complicated and dictated by complicated metrics. It also suggests the possibility that without community colleges, rather than transferring and continuing their education elsewhere, some of these reverse transfer students might simply drop-out of higher education entirely.

Meguizo and Dowd’s (2008) research looks at transfer rates from the perspective of whether state transfer policies and middle-class concerns about rising tuition prices at more selective colleges squeeze out lower-income students from transfer slots available at certain four-year colleges. This research suggests that transfer rates, particularly for low SES students, may be impacted by tuition prices as higher SES students may use transfer as a means to decrease the first two years of their college costs. Their follow-up research studies the success of community college transfer students and finds, “Our main conclusion is that previous estimates have overstated the diversion effect. Alongside other recent contributions to the democratization-versus-diversion-effect debate, this study provides an additional piece of evidence demonstrating that the diversion effect is much smaller than was previously estimated” (Melguizo & Dowd, 2009, p. 56).

In addition to this collection of research that provides evidence of the democratization role community colleges can play in the lives of students, it is clear that the community college sector is the de facto portal that many from underrepresented and low SES groups utilize to gain the benefits of a postsecondary education. One of the reasons for this lies in the low
tuition model adopted by community colleges. Lower-income students are price sensitive and less likely to consider higher tuition institutions than their wealthier counterparts. Savoca (1990) found that low-income students are more likely to respond to tuition prices in their college search than high-income students, and that they made crucial decisions about enrollment based upon the published price without a consideration of potential aid. In more recent studies by both Hill and Winston (2006) and Nutting (2005) low- and moderate-income students were very sensitive to the published tuition costs of a college when considering enrollment.

In addition to the public, two-year sector being the de facto entry portal for many low SES students, recent presidential administrations, both Democratic and Republican, have reawakened the federal interest in the community college sector. The community college sector is seen as an engine for economic growth that can train students with the job skills required as witnessed in the two quotes below:

[We must] make sure people get the workforce training they need, and what better place to talk about it than at a community college that is working. Community colleges are available, affordable and flexible. They are capable of adjusting the curriculum to help meet critical employer needs. – President G.W. Bush (Anne Arundel Community College, 2006).

These [community] colleges are the unsung heroes of America’s education system. They may not get the credit they deserve, they may not get the same resources as other
schools, but they provide a gateway to millions of Americans to good jobs and a better life. These are places where young people can continue their education without taking on a lot of debt. These are places where workers can gain new skills to move up in their careers. – President Obama (2010)

One can see in these two quotes that the issue of access and affordability continue to be pertinent and relevant to national level policy-makers and that they see community colleges as an important player. In order to promote the democratization aspect of the sector, then, it is essential to understand the role financial aid can play in assisting in access and mobility by understanding the research findings of the opportunities and limitations of the role financial aid.

It may seem simple common sense that need-based financial aid provides access and improves persistence and success for low SES students, but this was not always the understanding, particularly for the link between aid and persistence. Institutional-fit models originally did not include finances in a significant when analyzing persistence (St. John, 2000). Tinto (1987) one of the leading proponents of this model, believed that financial problems were an excuse for students rather than the actual reason for departing.

In a comprehensive review of the literature that covered students’ enrollment response (i.e. access) to tuition prices and financial aid, Heller came to the following conclusion: “As the price of college goes up, the probability of enrollment tends to go down” (1997, p. 649). The literature reviewed by Heller found that the level of price elasticity of college enrollments as a result of an increase in tuition rates varied among distinct groups, but, generally, as tuition
increased and financial aid decreased, enrollment diminished at a given institution. Among the five key observations in the review was that: “Students in community colleges are more sensitive to tuition and aid changes than are students in 4-year public colleges and universities” (Heller, 1997, p. 650)

In the 15 years since this review, numerous studies have been done on the different types of financial aid and their impact on students. The federal financial aid application provides students access to federal, state and institutional aid primarily in the form of grants, loans and work-study funds. Overall financial aid has a positive impact on persistence and success but the literature has found differential impacts of each of the forms of financial aid. St. John, Chung, Musoba, Simmons, Wooden and Mendez (2004) developed and used a 50 state database with data from five fiscal years between 1992 and 2000 to study state finance strategies for education on academic preparation and financial access. Among other findings, they found that need-based grants to students had the largest positive influence on student enrollment of any other financial variable studied within their model (St. John et al., 2004, p. 2). The results of their study were so compelling that they recommended that states provide need-based grants at the rate of one-quarter of the average tuition charge for the state’s public higher education sector in order to provide financial access to low SES students. Similarly, Bettinger (2010) conducted a study on an Ohio need-based aid program to show that need-based aid decreased dropout rates and increased student GPA. When Ohio changed its grant aid program, Bettinger studied the difference in outcomes between students who were eligible under the old and new programs.
One of the trends in financial aid that has created concern among researchers is the heavy reliance on loans and private loans as other types of need-based aid do not keep pace with tuition increases. Between 1996 and 2006, student loans taken out for educational expenses increased by 155% (98% when adjusted for inflation) (Heller, 2008a). Unlike grants, where the literature primarily links positive outcomes of grant aid to college persistence and success, research provides a very mixed picture of the impact of loans. Consider, for example, the following four studies of the same issue, each with a very different conclusion: After a review of the literature, and despite mixed results, Heller (2008a) concluded that loans don’t have as profound an effect on access, persistence and success as grants, and that this is especially true for low-income students; Dowd (2004) found a positive correlation between subsidized loans and first year persistence; Hossler, Ziskin, Sooyeon, Osman and Gross (2008) found that debt inhibited graduation rates and that mixed evidence on loans suggested that they were not effective at improving persistence; and, DesJardins, Ahlburg and McCall (2002) found that when institutions converted loans to grants persistence improved.

In addition, Reed, Asher, Frotman and Cochrane (2011) looked at the increase in private loans and the increased cost for the borrower of these loans over federal loans. They find that many students take out the private loans before they have exhausted their ability to take out the more affordable federal loans. They also express concern that the current process for taking out these loans does not have to include the verification of the student’s postsecondary institution, which means that students may not be getting adequate financial aid counseling.
Apart from the type of financial aid, the literature also discusses the importance of when students find out about financial aid. Mundel (2008) argues that by better educating students during high school about the net price of college the college-going rates of low-income students could be improved, and the stratification of enrollment at different types of colleges could also be impacted. Low SES students are more heavily influenced by list price and have relatively little information regarding grant opportunities available and therefore the net price of college. Mundel (2008) recommends marketing programs at the high school level that educate students, parents, teachers and counselors regarding grant programs and college net prices versus list prices. Heller’s (2006) research presents the idea of simplifying the federal aid application process and incentivizing students to apply for financial aid at a much earlier point in the student’s educational career. Rather than waiting until a student is at the end of her high school career and prepared to fill out the FAFSA and apply for college, Heller (2006) contends that committing financial aid to lower income families while a student is still in middle school or early in her high school career will incentivize the student and family to prepare academically and financially for college. By waiting until the student applies for college, Heller maintains that lower income students will have already made the decision not to apply and not have adequately prepared for college, and then it will be too late for them to prepare adequately and choose. Perna (2008) finds that low-income students often have neither adequate information about student loan programs nor access to appropriate financial aid counseling so they may decide not to attend college or pursue alternative forms of financing college, like working long hours, that have a negative impact on persistence. Perna (2008) advocates better training of
high school counselors on financial aid and the incorporation of other mechanisms of providing college financing information to high school families especially in low resourced schools, from which many community college students come.

Now we turn to the final body of literature to be reviewed. This final body of literature deals with the nexus between financial aid application rates and community colleges. Up until this point, the literature has primarily looked at financial aid as a vehicle for access (enrollment) and persistence. In this next section, the literature looks first at federal policies that may be causing some who would otherwise qualify not to apply for financial aid, and then more specifically at literature that focuses on financial aid application rates at community colleges and what this sector can do to improve those rates.

Financial aid applications and community colleges.

The most prominent research work on low rates of financial aid application has focused on increasing applications for financial aid across all sectors of higher education by simplifying the FAFSA (Bettinger, Long, Oreopoulos, & Sandonmatsu, 2009; Dynarski & Scott-Clayton, 2008, 2006, 2007a; Dynarski & Wiederspan, 2012; Long, 2008). Using classical and behavioral economics theory, Dynarski and Scott-Clayton’s (2008, 2006) research suggests that by simplifying the FAFSA, more students would apply for financial aid. The complexity of the FAFSA, they found, serves to improve the targeting of the student grants and loans but only minimally and the cost of targeting in this way exceeds the costs saved by more narrowly targeting. As a result, Dynarski and Scott-Clayton (2007) advocate for a financial aid application
process that consists of no more than a check-off box on the current IRS form 1040, showing that this would increase financial aid applications and therefore college enrollment among low- and moderate-income students. The check-off box would serve as a simple way of indicating that someone in the household would attend college and by checking the box would be applying for financial aid. They also recommend providing students with a 'postcard' outlining the level of federal grant aid the student can anticipate given her household's adjusted gross income, believing this information will incentivize students to apply.

Bettinger, et.al. (2009) evaluate a test study with a treatment and control group, testing whether or not immediate feedback on the amount of grant to be provided will incentivize applications among low- and moderate-income students as Dynarski and Scott-Clayton (2007) predict. The participants in the treatment group of low- and moderate-income families were provided professional advice from tax preparers in filling out the FAFSA and then received immediate feedback on the estimated financial aid package they would receive. The control group families also received personalized feedback on their estimated financial aid packages, but were not given any assistance in filling out the FAFSA. Bettinger, et. al. (2009) found that the professional help in filling out the FAFSA was critical to increasing the number of students filling out the FAFSA, and that it improved rates of college enrollment. The students from the control group of families who had only received the personalized aid eligibility information, showed no increased rate of FAFSA completion, college enrollment, or need-based financial aid.
After recent changes in the FAFSA application and application process, many targeted at simplification, Dynarski and Wiederspan (2012) reviewed these changes to analyze their impact on the accessibility of the financial aid process since the original research done by Dynarski and Scott-Clayton (2006). They find the changes to the form have been halting and inadequate in scope to affect college enrollment.

A smaller body of literature has focused specifically on public, two-year college students and financial aid applications falling primarily into two types of research: quantitative analysis at the national level and qualitative analysis at the institutional level. The quantitative research work on financial aid applications at two-year, public colleges has been descriptive analysis done at the national level. Researchers have studied the rates of financial aid application for different segments of higher education (Advisory Committee on Student Financial Assistance, 2008; Kantrowitz, 2009, 2011) comparing, for example, the percentage of students at two-year institutions who apply to that of the students at four-year institutions or comparing low-income students to middle- and high-income students. Both Kantrowitz (2009; 2011) and the Advisory Committee on Student Financial Assistance (2008) found that many of the students who did not apply would have qualified for need-based aid and that public, two-year institutions had the lowest percentage of students applying for financial aid. They also found that low- and middle-income students at community colleges apply at lower rates than those at four-year colleges.

The other category of literature about community colleges and low rates of financial aid applications has been qualitative program evaluations focused on the financial aid system at
specific colleges, how it specifically helps or hinders two-year college students, and how two-year institutions can improve access to financial aid for their students by increasing application rates. In one study, Frankle Cochrane and Hernández-Gravelle (2007) conducted a financial aid program evaluation of California community colleges. JBL Associates (2010) prepared a similar but somewhat broader evaluation report for the College Board and the American Association of Community Colleges evaluating community college programs they considered 'best practices' in four states (California, New York, Kentucky and Connecticut).

Frankle Cochrane and Hernández-Gravelle (2007) visited colleges throughout the California community college system, interviewing experts and reviewing research to look specifically at policies and practices that affected students' access to financial aid. They found a wide range of policies and practices amongst the different financial aid offices, some that increased student access to federal and state aid (they called these 'green lights') while others hindered students' ability to apply for aid (they called these 'red tape'). It is important to note here that California has very low fees for community college students. These fees are waived for the majority of low-income students, so financial aid covers the additional expenses for students like books and supplies, transportation, child care, and housing. This lack of tuition costs and low fees may in part explain the extremely low rate of financial aid applications (34%) for California community college students as compared to the national rate (44%). Still, even with these lower costs, Frankle Cochrane and Hernández-Gravelle (2007) find that financial barriers for students are significant and have negative outcomes for access and persistence.
The JBL Associates, Inc. (2010) report was produced as a guide for administrators at community colleges to assist them in increasing rates of financial aid applications on their campuses. The research documents ‘best practices’ focusing primarily at the institutional level, but include some observations of state policy environment best practices. The primary observation at the statewide level is that having a presence of statewide coordination seemed to be the common factor among the successful practices found in the evaluation study (JBL Associates Inc, 2010).

Although covering slightly different size study groups, each of these program evaluation reports (Frankle Cochrane & Hernandez-Gravelle, 2007, and JBL Associates Inc, 2010) made similar recommendations at the institutional level. Programs most successful at encouraging financial aid applications provided bilingual materials and services, office hours beyond the normal workweek, culturally appropriate services, assistance in helping to complete the FAFSA, an integration of financial aid with other admissions offices, and financial aid literacy outreach, especially around the different types of loans available.

Deil-Amen and Rosenbaum (2003) and Rosenbaum, Deil-Amen and Person (2006) have provided the most extensive qualitative, modern studies on the financial aid process at community colleges. Part of the genesis for their work was a quantitative data analysis paired with a case study done by Bailey, Badway and Gumport (2001) that examined how for-profits compared to public community colleges in terms of programs and students. Bailey et.al. (2001) suggested that the for-profit college’s success (in areas like financial aid application rates) was
due in part to the integrated nature of their admissions, financial aid, assessment, advisement and registration functions. The for-profit college studied had designed the integrated structure because “By smoothing the entry experience for students, college officials hope to improve persistence and achievement” (Bailey et al., 2001, p. 33).

Deil-Amen and Rosenbaum (2003) and Rosenbaum et. al. (2006) expanded on this work using extensive qualitative data gathered from for-profit colleges and community colleges. The Deil-Amen and Rosenbaum (2003) article finds that many community college students lack the social prerequisites for college success and that the college structure does not provide for this lack of knowledge. On the other hand, for-profit colleges “Take steps to structure out the need for this social know-how and address the needs of disadvantaged students” (Deil-Amen & Rosenbaum, 2003, p. 120). The book by Rosenbaum, Deil-Amen and Person (2006) expands on this idea of structuring the college service departments, like financial aid, to negate the need for the social know-how skills missing for many who attend the open admissions sectors of higher education. In the financial aid application procedures, all three studies found that the for-profit colleges’ integrated services linking enrollment, registration and financial aid, were more successful at removing barriers to admissions than the separated office structures found at the community colleges they studied.

The work of Rosenbaum et.al. (2006) provides the most thorough, current examination of the environment at community colleges. Through the qualitative nature of the study, they are able to illustrate some of the complications and nuances of the lives of students found in
open access institutions. The critical analysis provided by Deil-Amen and Rosenbaum (2003) and Rosenbaum et al. (2006) of the strengths and weaknesses of the institutional environments offers some of the strongest available research on community colleges as a sector with a unique mission. In the next and final section of this chapter, I will discuss how my own research will build on this and other work done in the area of financial aid and community colleges.

**Where this research fits.**

In this study I look explicitly at the community college institutional financial aid environment as nested within both a state and federal financial aid environment and analyze the factors operating within that wider environment and within the institutional environment that create particular financial aid outcomes. I first developed a model of the financial aid environment at the national level using quantitative national level data that has focused on national level outcomes and then carried out a qualitative institutional analysis of policies and practices at the micro level that further informs and better illustrates the forces that drive the community college financial aid environment.

I have used the national-level data to expand the analysis of what is happening with financial aid application rates beyond the descriptive and to determine the cause of the relatively low rates within the community college sector as a whole. I look at the interrelationship between how students are coming to understand financial aid and how that understanding is affecting financial aid application rates. I also explore which factors are placing students within the public, two-year sector at risk for being non-applicants.
With that national level analysis as context, I use a mixed methods case study to explore the policies, procedures and practices that create an institutional financial aid environment, in order to identify and describe those factors that contribute to a more nuanced and complex picture than the purely quantitative data supply. I have chosen to do this single study at a community college that has been very successful (relative to the community college sector nationally) at obtaining high rates of financial aid applications. By using a relatively successful program, rather than focusing on poor institutional procedures and practices that hinder financial aid applications, I am able to look at barriers to further improving the financial aid application rates caused by the extrainstitutional policy environment and competing institutional concerns and policies.
CHAPTER 3: Methods
The research in this study has been motivated by the need to better understand the low rates of financial aid applications within the public, two-year sector of higher education. The study design explicitly sees these rates as a product of the student inputs and the financial aid environment. The research design conceptualizes the financial aid environment as a nested set of environmental contexts in which the student is situated. The student makes choices that are determined by her own experiences and the financial aid environment.

I divided this chapter into four sections. In the first, I explain the methods used for the national level analysis and in the second, I explain the methods used for the case study. Each of the two initial sections covers the research methods used, an explanation of methodological decisions made and the limitations of the research methods employed. The third section discusses my own perspective as a researcher and practitioner to provide the reader with an understanding of the role that I played as a researcher. The fourth section discusses the limitations of the data and research methods.

**Methods for National Level Analysis**

**Dataset.**

The quantitative data analysis uses a nationally representative, restricted-use, secondary dataset, the 2007-2008 National Postsecondary Student Aid Study (NPSAS:08). The NPSAS national dataset, first collected for the 1986-1987 academic year, provides individual-level quantitative data. NPSAS provides a wealth of financial aid information and has been utilized in numerous financial aid studies over the years, including the Advisory Committee on Student
Financial Assistance (2008), Cunningham and Santiago (2008), Dynarski and Scott Clayton (2008), Dynarski and Wiederspan (2012), Kantrowitz (2009a, 2009b, 2011), and King (2004, 2006). I chose NPSAS because not only did it provide the data needed for my analysis but its prominence in the relevant literature allowed me to build on that literature.

Sample.

I limited the dataset used to those students who were undergraduates, U.S. citizens or resident aliens, and had attended only one institution of higher education during the survey year. I was only interested in undergraduates since this was the only category relevant to community colleges. I restricted the dataset to U.S. citizens and resident aliens as I explore issues of federal financial aid and these are the two groups eligible. If I had included foreign and international students, they would have skewed the analysis towards non-applicants not applying due to concerns that they would be ineligible. I limited the sample to those who had attended only one institution of higher education since a key component of my analysis means assigning the student to a particular sector of higher education and understanding how that sector’s environment influenced them. A student who had attended multiple sectors would be difficult to classify when trying to assess where she had interacted most directly with the financial aid process.

This gives me a sample size of 91,781 students in a weighted sample. Table 2 shows the weighted portion of this sample assigned to each sector of higher education.
Table 2. Weighted NPSAS:08 Sample Used

<table>
<thead>
<tr>
<th>Higher Education Sector</th>
<th>Proportion of weighted sample from NPSAS:08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public, 4-year</td>
<td>.319</td>
</tr>
<tr>
<td>Public, 2-year</td>
<td>.431</td>
</tr>
<tr>
<td>Public, &lt;2-year</td>
<td>.005</td>
</tr>
<tr>
<td>Private, non-profit 4-year</td>
<td>.143</td>
</tr>
<tr>
<td>Private, non-profit 2-year</td>
<td>.003</td>
</tr>
<tr>
<td>Private, non-profit &gt;2-year</td>
<td>.001</td>
</tr>
<tr>
<td>Private, for-profit 4-year</td>
<td>.050</td>
</tr>
<tr>
<td>Private, for-profit 2-year</td>
<td>.027</td>
</tr>
<tr>
<td>Private, for-profit &gt;2-year</td>
<td>.022</td>
</tr>
</tbody>
</table>

**Socio-demographic variables.**

My research design views student inputs as a function of social background, high school experience, economic background, and college experience. There are nine different socio-demographic variables described in this data. Variables were chosen based upon previous educational research which found all of them contributed to different college affects (Pascarella & Terenzini, 2005). The first socio-demographic variable is gender with two, mutually exclusive categories: male and female. The second is race/ethnicity with five, mutually exclusive categories: White/non-Latino, Black, Latino, Asian, and other/non-White.

The third variable is dependency status of the student, which is based upon the federal financial aid regulations that dictate when students claim dependent status and when they claim independent status within the financial aid process. The fourth socio-demographic variable
used is delayed enrollment and indicates whether a student delayed enrollment in college after high school graduation. If the student enrolled in postsecondary education a year or more after graduating from high school, she counted as delayed enrollment. These two variables, dependency status and delayed enrollment, reflect characteristics of the non-traditional student. The prevalence of the non-traditional student helps differentiate the student body at the community college from their four-year counter-parts (Adelman, 2006b; Cohen & Brawer, 2008; Dougherty, 2001; Levinson, 2005). There has been substantial literature that suggests that the differentiation of traditional and non-traditional students may significantly impact student outcomes like application for financial aid (Johnson & Nussbaum, 2012; Kantrowitz, 2009a; King, 2006; Sandoval-Lucero, Maes, & Chopra, 2011; Taniguchi & Kaufman, 2005), so I have included these variables in the analysis.

The fifth variable used is mother’s education. Since parental education is a commonly used variable in educational attainment literature, I wanted to test whether it impacted whether a student applied for financial aid. Rather than use both father’s education and mother’s education and potentially diluting the effect of either, however, I chose to use just the mother’s education since it has been shown to have a slightly greater influence on educational attainment (Buis, 2012; Chevalier, Harmon, O’Sullivan, & Walker, 2010), the most relevant parallel to financial aid applications I could find. I analyze whether the mother having at least some postsecondary education experience improved the student’s chance of applying for financial aid. However, since 5.6% of the respondents did not know their mother’s highest level of education, this variable was turned into three classifications: mother’s highest level of
education some postsecondary or beyond, mother’s highest level of education a high school diploma or less, and mother’s highest level of education unknown.

The sixth variable included indicates whether any other members of the student’s household attend college. This was included to measure whether students with other household members in college would be more likely to know about financial aid through the other household member’s exposure to college financial aid. It is also true that an additional member(s) of the household in college increases a student’s chances of being eligible for financial aid (Liu & Van der Klaauw, 2007).

The seventh variable used is income. The income variable used for the descriptive research questions placed each student in an income percentile and is calculated separately for dependent and independent students. For the descriptive analysis, income percentiles are broken into four quartiles. For the regression analysis, income is used as a continuous variable. In order to ensure that income effects are fully controlled for in the regression analysis, an income-squared variable is also employed. In the case of the regression analysis, income is used as a continuous variable in order not to lose any of the information available in the variable by clustering income into quartiles. If the income quartile were used for the regression analysis, each student would fall into one of only four categories. Rather than taking into account that a student income at the high end of the second quartile is much more like a student income at the low end of the third quartile than it is is like a student income at the low end of the second quartile, the two incomes that fall into the second quartile would look exactly alike and would
have the same amount of variance from the student income in the third quartile. By using a continuous variable for income, the difference in all three incomes is captured.

The last two socio-demographic variables include whether the student is a first year student, and whether the student is enrolled full-time or part-time. The first-year variable has been included in order to analyze whether there is a difference in the financial aid application choices students make upon entering college and after they have been in college. Once enrolled in college, the decision of whether or not to apply for financial aid is made under different circumstances than upon first enrolling at the institution. By including first-year status as a variable, I am able to separate out the different choices made by first-year students versus those already in college. This becomes particularly important during the regression analysis where the student’s first year status can be used as a control variable when analyzing the impact of other variables on the financial aid decision.

The final variable is the enrollment status: full-time or part-time. The descriptive research work done to date has found that part-time students have much higher rates of non-application (Advisory Committee on Student Financial Assistance, 2001, 2008; Kantrowitz, 2009b, 2011). By including enrollment status, I am able to look specifically at the kinds of issues that apply to part-time students, who make up a relatively large portion of community college students (American Association of Community Colleges, 2012b).

Although my calculations utilized sampling weights to account for the sampling design employed in NPSAS, further adjustments were not made to adjust for the stratification and
clustering. Because the NPSAS:08 dataset has stratum with a single sampling unit, generating standard errors that included the stratified sampling and primary sampling unit variables was not possible without compromising other aspects of the data.
Table 3. Description of overall, public two-year, and public four year samples from NPSAS:08

<table>
<thead>
<tr>
<th>Variable</th>
<th>Total Sample</th>
<th>Public, Two Year Sample</th>
<th>Public, Four-Year Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean</td>
<td>mean (weighted)</td>
<td>mean</td>
</tr>
<tr>
<td>All</td>
<td>0.278</td>
<td>0.431</td>
<td>0.349</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>0.583</td>
<td>0.567</td>
<td>0.589</td>
</tr>
<tr>
<td>Male</td>
<td>0.417</td>
<td>0.433</td>
<td>0.411</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White, non-Latino</td>
<td>0.627</td>
<td>0.644</td>
<td>0.627</td>
</tr>
<tr>
<td>Black</td>
<td>0.156</td>
<td>0.140</td>
<td>0.177</td>
</tr>
<tr>
<td>Latino</td>
<td>0.132</td>
<td>0.132</td>
<td>0.120</td>
</tr>
<tr>
<td>Asian</td>
<td>0.044</td>
<td>0.043</td>
<td>0.035</td>
</tr>
<tr>
<td>Other</td>
<td>0.041</td>
<td>0.042</td>
<td>0.042</td>
</tr>
<tr>
<td>Dependency Status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dependent</td>
<td>0.544</td>
<td>0.529</td>
<td>0.435</td>
</tr>
<tr>
<td>Independent</td>
<td>0.456</td>
<td>0.471</td>
<td>0.565</td>
</tr>
<tr>
<td>Delayed enrollment status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delayed enroll.</td>
<td>0.289</td>
<td>0.314</td>
<td>0.407</td>
</tr>
<tr>
<td>Traditional (out of high school)</td>
<td>0.711</td>
<td>0.686</td>
<td>0.593</td>
</tr>
<tr>
<td>Mother’s Highest Level of Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any post-secondary</td>
<td>0.519</td>
<td>0.518</td>
<td>0.441</td>
</tr>
<tr>
<td>High school or less</td>
<td>0.425</td>
<td>0.429</td>
<td>0.494</td>
</tr>
<tr>
<td>Unknown</td>
<td>0.057</td>
<td>0.054</td>
<td>0.065</td>
</tr>
<tr>
<td>Household in college</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Just student</td>
<td>0.765</td>
<td>0.772</td>
<td>0.813</td>
</tr>
<tr>
<td>Others in household in college</td>
<td>0.235</td>
<td>0.228</td>
<td>0.187</td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st quartile</td>
<td>0.309</td>
<td>0.249</td>
<td>0.291</td>
</tr>
<tr>
<td>2nd quartile</td>
<td>0.255</td>
<td>0.250</td>
<td>0.448</td>
</tr>
<tr>
<td>3rd quartile</td>
<td>0.226</td>
<td>0.253</td>
<td>0.239</td>
</tr>
<tr>
<td>4th quartile</td>
<td>0.210</td>
<td>0.247</td>
<td>0.191</td>
</tr>
<tr>
<td>Total income (cont.)</td>
<td>50,638.36</td>
<td>54.93</td>
<td>42,616.28</td>
</tr>
<tr>
<td>income SD</td>
<td>(50670.67)</td>
<td>51.68</td>
<td>(39057.63)</td>
</tr>
<tr>
<td>Status in college</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First year</td>
<td>0.337</td>
<td>0.411</td>
<td>0.518</td>
</tr>
<tr>
<td>Beyond first year</td>
<td>0.663</td>
<td>0.589</td>
<td>0.482</td>
</tr>
<tr>
<td>Attendance in college</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable</td>
<td>Total Sample</td>
<td>Public, Two Year Sample</td>
<td>Public, Four-Year Sample</td>
</tr>
<tr>
<td>----------</td>
<td>--------------</td>
<td>-------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td></td>
<td>mean (weighted)</td>
<td>mean (weighted)</td>
<td>mean (weighted)</td>
</tr>
<tr>
<td>Full-time</td>
<td>0.648</td>
<td>0.510</td>
<td>0.405</td>
</tr>
<tr>
<td>Part-time</td>
<td>0.352</td>
<td>0.490</td>
<td>0.595</td>
</tr>
</tbody>
</table>

# of Observations | 91,781 | 91,781 | 25,543 | 39,517 | 32,054 | 29,310 |

Financial aid variables.

My research design for the national level analysis views the financial aid environment as consisting of college type and sources of financial aid information. For the college type, I have chosen to use the NPSAS data that divide institutions of higher education into nine categories, with three sectors (public, private non-profit, and private for-profit) and three levels of institution within each sector (four-year, two-year, and less than two-year). Table 4 provides an overview of the sample size for each financial aid variable for the overall sample and then the public, two-year and public, four-year sectors separately.
Table 4. Description of overall, public two-year and public four-year sample from NPSAS:08

<table>
<thead>
<tr>
<th>Variable</th>
<th>Total Sample</th>
<th>Public, Two Year Sample</th>
<th>Public, Four-Year Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filled out the FAFSA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>0.719</td>
<td>0.585</td>
<td>0.711</td>
</tr>
<tr>
<td>No</td>
<td></td>
<td></td>
<td>0.628</td>
</tr>
<tr>
<td>Source of information</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends &amp; family</td>
<td>0.647</td>
<td>0.616</td>
<td>0.720</td>
</tr>
<tr>
<td>Internet research</td>
<td>0.419</td>
<td>0.392</td>
<td>0.460</td>
</tr>
<tr>
<td>Counselor</td>
<td>0.532</td>
<td>0.476</td>
<td>0.480</td>
</tr>
<tr>
<td>Non-applicant reason</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt</td>
<td>0.407</td>
<td>0.409</td>
<td>0.423</td>
</tr>
<tr>
<td>Work</td>
<td>0.193</td>
<td>0.189</td>
<td>0.194</td>
</tr>
<tr>
<td>Information</td>
<td>0.211</td>
<td>0.222</td>
<td>0.571</td>
</tr>
<tr>
<td>Need</td>
<td>0.532</td>
<td>0.517</td>
<td>0.622</td>
</tr>
<tr>
<td>Eligibility</td>
<td>0.605</td>
<td>0.602</td>
<td>0.620</td>
</tr>
</tbody>
</table>

| # of observations | 91,781 | 91,781 | 25,543 | 25,543 | 32,054 | 32,054 |

For the **sources of financial aid information**, the NPSAS survey asks all respondents how they learned about financial aid, and provides them with three sources of information: friends and family, internet research, and speaking to a high school or college counselor. The respondents can choose as many of the three sources as applicable. I used each of these sources as a variable in my research dataset.

I used six data elements to represent my **financial aid outcomes**. The first variable, which was available for all respondents, was whether the respondent had filled out the FAFSA to apply for financial aid. This variable represents whether or not a student applied for financial aid. While under some circumstances and at some institutions, one can apply for financial aid
without filling out the FAFSA, the vast majority of institutions use the FAFSA at a minimum to assign aid. Federal and most state financial aid is allocated through the FAFSA, so used the FAFSA application variable to indicate whether a student applied for financial aid. In fact, it is important to note here that through this study I use the terms ‘filled out the FAFSA’ and ‘applied for financial aid’ interchangeably.

The other five financial aid outcome variables were collected only for non-applicants since they were the reasons the student did not apply for financial aid. The five variables were that the student did not apply for financial aid because: 1) she did not want to go into debt (debt), 2) she thought it was too much work to apply (work), 3) she did not have enough information on the financial aid process (information), 4) she did not need financial aid (need), and/or, 5) she did not think she would be eligible for financial aid (eligibility). The non-applicant could select as many of these five variables as applicable.

**National-level data analysis.**

**The descriptive research questions analysis.**

I first analyzed the descriptive research questions. The questions are:

1. By socio-demographic characteristics, what are the sources of information students use to make their financial aid decisions and what is the outcome?

2. By postsecondary institution-type, what are the sources of information students use to make their financial aid decisions and what is the outcome?
3. By socio-demographic characteristics, how do non-applicants perceive the benefits of filling out the FAFSA? Do public, two-year non-applicants differ in their perceptions about financial aid from other sectors?

4. By information source, how do non-applicants perceive the benefits of filling out the FAFSA? Is the relationship between information source and perception of the benefits of filling out the FAFSA different for public, two-year non-applicants?

In order to address the first two of the descriptive set of research questions, I used probability (sampling) weights and ran summary statistics cross tabbing the socio-demographic variables with sources of financial aid information first, separating out the results by applicants and non-applicants. Then I ran the same cross-tabs using sectors of higher education rather than the student socio-demographic variables. I analyze these results to see if there are any patterns or absence of patterns worth noting for the overarching research concern here (i.e. the low rates of financial aid applications at community colleges). I am particularly interested in the interrelationship between the sources of financial aid information the student reports utilizing and whether or not she applies for financial aid.

Subsequently, in order to answer the third descriptive research question I analyze the rate at which non-applicants report each of the five reasons for not filling out the FAFSA that are available in NPSAS. I do this analysis for all students and then separate out public, two-year student responses and public, four-year student responses. As will be seen in the analysis chapter, I limit my comparison of the community college student to the public, four-year college
student as the public, four-year college sector provides the most useful comparison group available in the data.

The fourth descriptive question requires that I tabulate the interrelationship between sources of information about financial aid used by non-applicants and the reasons they give for not filling out the FAFSA. I tabulate this relationship for the whole sample and then for the public, two-year and separately the public, four-year students.

*The predictive research questions.*

I examined the predictive research questions using logistic regression analysis:

1. Can a student’s socio-demographic characteristics help predict whether she will complete the financial aid process? Do the socio-demographic characteristics that help predict whether a student will complete the financial aid process differ for two-year, public college students?

2. Can the sources of information a student utilizes to learn about the financial aid process predict whether she will complete the financial aid process? Do the sources of information that help predict whether a student will complete the financial aid process differ for two-year, public college students?

To answer these two questions, I run one logistic regression model three times, using first the entire sample, then again for public, two-year students and public, four-year students. I use the socio-demographic variables (*student inputs*) and the information source variables
(financial aid environment) as the independent variables. Each of the three logistic regression models run, then, has twelve independent variables.

The last two predictive research questions are:

3. Can a non-applicant's socio-demographic characteristics help predict how she will perceive the benefits of completing the financial aid process? Do the socio-demographic characteristics that help predict how a non-applicant will perceive the benefits of completing the financial aid process differ for two-year, public college students?

4. Can the sources of information a non-applicant utilizes to learn about the financial aid process predict how she will perceive the benefits of completing the financial aid process? Do the sources of information that help predict how a non-applicant will perceive the benefits of completing the financial aid process differ for two-year, public college students?

To answer these two questions, I run five logistic regression models three times each. The first time I use all non-applicants and the last two times I use only the non-applicants from the public, two-year sector and the public, four-year sector. The independent variables are again the socio-demographic variables and the sources of information for all five models. The dependent variable for each of the five models is one of the five reasons non-applicants give for not filling out the FAFSA: doesn't want to take on debt, too much work, not enough information, no financial need, and not eligible.

The predictive (and descriptive) models provide information at the national level. The information collected from the analysis done on the NPSAS data give a very broad picture of
what is happening with financial aid application rates within the sectors of higher education and some insight into why it might be happening. Since the financial aid application process begins at the federal level with the FAFSA, the broad perspective provides important insights into the interrelationship between the overarching financial aid system and specific groups of students. There are other layers to the financial aid system that impact the financial aid environment in which the individual student engages. The case study provides insight into these layers and how they interact with the federal environment.

The Case Study

The research questions to be answered in the case study are:

1. What are the underlying policies, procedures and practices of the case study institution as they relate to financial aid and how do they shape the institutional financial aid environment?

2. How does the financial aid environment at the case study institution impact the financial aid outcomes?

Yin (2009) describes “how” questions as being well suited to exploratory case studies, and this falls into the category of exploratory case study. I intend the research design to expand the conceptual model and provide new avenues for research in the realm of financial aid and community colleges. The unit of analysis here is the institution, Northampton Community College (NCC), with a focus on its financial aid environment. I am interested in how the mission of the institution affects the financial aid environment through the college’s policies,
procedures and practices and how the institutional dynamics influences the financial aid outcomes.

Based on Krathwohl (2009) and Yin (2009, 2012) I designed the data collection for the case study to triangulate information. I have used three sources of data to triangulate information: college documents, interviews with administrators and staff, and a survey of students. The college documents provided an overview of the college’s mission and policies, as well as specific incidents of how the policies reflected the mission. The interviews with 13 administrators and staff members provided the data that drove the case study analysis. The student survey conducted was distributed to first semester students and provided information on the student experience with the NCC financial aid environment.

The research design was approved by both NCC’s IRB process and Pennsylvania State University’s Office of Research Protocol (PSU-ORP). I received NCC’s approval on August 14, 2012 pending approval from the PSU-ORP. PSU-ORP provided approval for the study on an exempted research basis on September 10, 2012.

The case study institution.

Northampton Community College is a public, comprehensive, accredited two-year college with its main campus located in Bethlehem in Northampton County, Pennsylvania and one branch campus located farther north in Monroe County. NCC was chosen as the single case study because its financial aid environment makes it a unique case, as defined by Yin (2009). Its uniqueness lies in its high rate of financial aid applications, which hovers around 70%
as compared to the national rate of 43% for public, two-year institutions (Kantrowitz, 2009b).

My rationale for focusing on a successful community college financial aid environment is in my interest in how the public, two year environment operates within the larger financial aid environment in which it is embedded. By choosing to examine a relatively successful college, the study is able to “control” for inadequate institutional practices and assure that the variation is due to extrainstitutional policy environment and competing institutional concerns and policies. Pennsylvania ranks 16th in the nation for the cost of tuition and fees for public, two-year colleges, costing almost 15% more than the national average (Washington Higher Education Coordinating Board, 2009). Due to these higher than average costs, financial aid may play a more important role for the college and in whether or not students attend, leading to a higher rate of applications for those enrolled. The high rate of applications allows the research to explore the dynamic relationship between the institutional mission, the community college’s student body and the goals of the financial aid environment.

In addition, I chose NCC because I had worked there for five years and have maintained my relationships with faculty and staff at the institution. These relationships gave me unique access to key informants and provided me with insight into the role each plays in the college environment. Yin recommends that a researcher choose a case to which she has access and “will most likely illuminate your research questions” (2009, p. 26) and NCC met both those criteria.
Document review.

The college documents reviewed included the college’s mission, vision and values statement, five years of internal annual reports (2008-2012), the annual NCC Foundation Report (2010/11 and 2011/12), memos on meetings amongst the Student Affairs directors, the ‘no-show survey’ conducted through the admissions office, and the college’s website. I used the documents to augment and corroborate information gathered in the interviews and survey. The mission, vision and values statement and foundation reports are documents created for public consumption and are printed up and distributed to the college’s wider community, including community and business leaders and donors. The college’s mission, vision, and values statement was based on a year-long process that included student, faculty, staff, administrators, and external stakeholders. The internal annual report provides information to staff regarding the college’s operations, accomplishments and challenges. Information in the annual report is used throughout the college for reports, goal settings, grant applications, and other internal information needs. The meeting memos and no-show survey also serve internal information needs.

Data gathered included in-depth information on institutional priorities, the intersection between policy discussions and the institutional financial aid environment, aspects of the institutional policies and practices that reflected the extra-institutional financial aid policy environment, practices that reflected the institution’s own mission and policies, and student

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2 At the time the current NCC mission, vision and values statement was created, I worked full-time as a grants officer at the college and was part of the committee charged with drafting the preliminary mission statement.
characteristics that affected the daily practices and institutional policies in the financial aid environment.

**Focused interviews.**

I employed a nonprobability purposive sampling strategy for the interviews with the NCC administrators and staff members to focus on collecting the data most germane to my research questions, as recommended by Krathwohl (2009, pp. 171–172). Through the use of reputational and snowball sampling (Krathwohl, 2009), I created a list of key informants who have had significant interaction with the NCC financial aid environment either at the policy or practice level (see Appendix 5 for full list of interviews). Through reputational sampling, I initially identified the Vice-President of Student Services and the Director of Financial Aid for interviews. During their interviews, I identified other key informants, using snowball sampling. The interviews were focused, semi-structured interviews (Bogdan & Biklen, 2007; Merton, Fiske, & Kendall, 1990; Yin, 2009) lasting one to two and a half hours each (see Appendix 6 and 7 for the informed consent and interview guide).

The interviewees were contacted by email and interviews were scheduled between September 27th and October 16th, 2012. Interviewees received a written informed consent and were told that their participation in the study was voluntary. They gave both verbal and written approval prior to the start of the interview. Participants understood that the interviews were confidential and I would use no names, however the name of the college and I would not keep positions interviewed confidential and so there was a potential that their input
might be discernible. No risks to interviewees were identified based upon their participation in the study.

I conducted all interviews. I transcribed interviews within two days of the interview taking place, and I kept memos detailing emerging themes and additional areas of inquiry. I used the memos to adapt the interview protocol. Any additional areas of inquiry for a particular interviewee I handled through a brief (fewer than 10 minutes) phone call or email. Once all interviews were completed and transcribed, they were printed and initially read three times each. I kept notes on emerging themes and ideas during the initial read through of all interviews. During the second reading, I refined the themes germane to my research questions and coded each interview using a manual color-coding system. During a third read-through of all interviews, I crosschecked themes and checked for consistency in my coding.

One theme emerged early during the interviews that led me to modify the interview protocol to collect more data. The theme involved the impact of the federal simplification of the FAFSA application process. I had not anticipated any discussion regarding this topic and two people interviewed early discussed it extensively. If it did not come up in subsequent interviews, I queried whether the interviewee had noted any differences since the simplification.

The interviews from the key informants at NCC provided the basis for my themes and conclusions from the case study. I used the document review and open-ended responses from the student survey to verify through triangulation the themes and conclusions.
The student survey.

As part of my data gathering for this case study, I conducted a survey with ‘new’ NCC students, as defined by students who were in their first semester at NCC. This definition means that the students were first-time college students, or had attended another college prior to NCC but this was their first semester at NCC. Students surveyed also had to be taking either the “College Success” course or one of ten courses\(^3\) considered by NCC administration as ‘gate-keeper’ classes that provide students the entryway to the academic majors. All classes were college-level courses.

Invitations to participate in the survey were emailed to students in all classroom sections of all ten courses and the “College Success” course by the Vice-President of Student Affairs. Surveys were not sent to students taking on-line versions of these courses. The link to the survey and informed consent approved during the IRB process for both NCC and PSU were part of the email. Students’ participation was anonymous and no potential harm was identified due to their participation. The survey was conducted through Zoomerang, an on-line, secure service. Participation was encouraged through a raffle for three $50 gift cards. Students were able to enter the raffle upon completion of the survey through a separate survey. There was no link between the two surveys except that the website automatically directed student towards the raffle entry once they finished the research survey. The invitation

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\(^3\) The courses included were Accounting 101, Business 101, Computer Science 101, Speech Communication 102, English 101, History 113, Math 140 or 150, Psychology 103, and Sociology 103.
to participate and informed consent can be seen in Appendix 1 and the full student survey is included in Appendix 2.

The survey invitation and link was sent to 2,558 non-redundant email addresses on both campuses. The survey was open for participation from September 10th to October 18th and two follow-up emails were sent two weeks and four weeks after the initial email was sent. There were 446 respondents with 389 fully completed surveys, representing an 87% completion rate and a total 15% return rate. This rate of return is relatively high for NCC students, according to the NCC Director for Planning, Assessment and Institutional Effectiveness.

I designed the student survey to collect data to fulfill two capacities. The first was that I repeated many of the questions that were collected for the NPSAS:08 data in order to compare and contrast the responses from NCC students with the national level data. I analyzed this quantitative data in the same manner that I analyzed the NPSAS:08 data to answer the descriptive research questions. I did not try to replicate the analysis done to answer the predictive research questions as the data are not as complete as the NPSAS:08 data to allow for meaningful analysis of this nature. In particular I did not collect income data from students as I had no way of verifying that data nor did I believe that many of the dependent students would be able to accurately report household income. (In NPSAS this data are collected from the FAFSA and other verifiable sources.) Without income data as a control variable, the predictive models become far less meaningful since household income drives much of the financial aid experience.
I also included open-ended questions designed to elicit student experiences in the NCC financial aid environment. I read through all the open-ended answers and used the same manual color-coding theme that I had used with the interviews. I used this information to confirm and validate the information that I had gathered in the interviews. I designed the survey to encourage participants to provide information for the open-ended questions.

After I created an initial draft of the data, I had four volunteers test it who were between the ages of 14 and 48 years old. I made revisions according to feedback received. I then provided the survey to the Vice-President of Student Affairs and the Director for Planning, Assessment and Institutional Effectiveness. The Vice-President requested that I add one question to differentiate the students who attend the branch campus of the college from those who attend the main campus, as she wanted information separated by campuses for her own internal evaluation purposes. The Director recommended no changes.

Researcher Perspective.

In order to appropriately evaluate the research and conclusions that I present here, the reader should understand my own perspective on research in general and community colleges in particular. To this end, I have included a brief section here on my perspective.

In my own beliefs about research and the research topics that interest me, I am most comfortable with the labels ‘critical theorist’ and ‘pragmatist.’ As a critical theorist I believe that the work of a researcher is value-laden. I believe this about both quantitative and qualitative data. Garret Hardin, quoted by Garland Allen in his biology treatise, observed, “The
strength of science does not lie in any claim to infallibility but rather in being an ongoing intellectual process with no pretense of providing final answers or absolute truths" (2001, p. 81). I believe that quantitative data and analysis provide insight but I do not believe in the infallibility of data. As a result of the construction of any research design – whether quantitative or qualitative -- being value-laden, I believe it sheds light on some issues while leaving others in darkness.

As a critical theorist, I see the current context and dynamics as deeply rooted in an historical context. Student achievement gaps, for example, don't show up randomly across different campuses. Students who come from historically disadvantaged groups achieve at lower rates than students from the dominant culture because society's institutions are constructed to support the dominant culture.

In the pragmatic model the outcome provides further avenues of inquiry to explore for research is a journey and not, as it is for the positivists, a destination. For the pragmatist one has to look at what worked in the past to develop intelligent action asking: How was it done? Why was it done? For whom was it done? The action of the past combined with these reflections leads to knowledge. Pragmatism relies on the slow building of wisdom through this process of action, leading to intelligent action leading to knowledge, so that the older a pragmatist becomes the wiser she is.

On a Pete Seeger and Arlo Guthrie (1981) record album that I had years ago, Seeger talked about a letter Lee Hays had written to Pete's wife. In the letter Hays said something to
the effect of, "I don't know where the poop I get all these ideas. The older I get the more interesting my mind gets. I don't know that I always agree with it, but it gets more interesting."

I see this as an integral part of the pragmatist approach. It is important to allow one's mind to play with ideas, whether one entirely agrees with where the ideas take one or not, as one's experience grows and matures. As I gather more experience and reflect on it, I have gathered more knowledge that I can use in reflecting on my new experiences. I can engage with research differently for I have a greater store of experience and knowledge to use as a resource. This resonates with how Biesta and Burbules describe Dewey's concept of action and intelligent action:

There is a direct relationship between the amount of "old" knowledge or meaning that an individual can have access to and the opportunities for an intelligent approach to problematic situations. This is first of all true on an intra-individual level. The more numerous and varied our previous experiences and our previous knowledge and learning are, the more sophisticated our conceptual operations will be and the better chance we will have of finding an adequate way of dealing with the problems we encounter (2003, p. 69).

I first became involved with the administration of higher education nine years ago as a grant writer at Northampton Community College. The open access mission of the community college has become my project. I want to see the term 'access' continue to grow in its meaning and embrace not just open enrollment but also a student's ability to persist and complete her degree. I want to understand better who is not persisting, why they are not persisting and how
to better encourage persistence for all students while closing the gaps for those students from oppressed groups at a higher risk for not completing a degree.

My perspective on the importance of the role that community colleges play in the higher education sector informs my research work. Having worked at Northampton Community College for five years, I had an intimate knowledge of the college. In the quantitative research analysis, my background and experience allowed me both to reflect on the data and issues that it raised as well as identify what the data might not be illuminating in the financial aid environmental dynamics. During the case study, my experience working at NCC provided me access and a level of familiarity with the interviewees that made collecting the data easier. It also gave me insight into the perspective of those I was interviewing.

Limitations.

There are two limitations to the NPSAS:08 dataset that are relevant to my analysis. The biggest limitation for my research is that NPSAS:08 only catalogues students based on the higher education institution in which they were enrolled at the time surveyed. This means that my research only reflects those students who, regardless of whether or not they applied for financial aid, were able to attend college. Any students who did not apply for financial aid and had to drop her intention to attend community college (or any other sector of higher education) due to a lack of financial access would not be included in this data. This means that as I analyze the causal impact of the independent variables on why students did not apply for financial aid, I am only analyzing those students who did not apply but still went to college. I am
not able to analyze those who did not apply for financial aid and did not go to college for financial reasons or any other reason.

The other limitation in the NPSAS:08 data is that for some of the analyses the sample size does not allow for a robust, significant analysis, especially at the level of the individual sectors of higher education. This problem shows up primarily when analyzing the reasons non-applicants give for why they did not fill out a FAFSA. Non-applicants have up to five reasons they can select for why they chose not to apply for financial aid. For some of these categories, there is not a sufficient number of community college non-applicants for a specific reason to conduct any meaningful analysis.

There were limitations in the NCC case study data collection in all three areas: document review, interviews, and student surveys. For the document review, the most glaring limitation was in a lack of documentation on the policies and procedures in the financial aid office. I had to rely on less direct sources, creating an understanding about the policies and procedures and the values that drove them from the other internal documentation and student surveys. I used the document review to verify information gathered in the interviews, so could not count exclusively on the interviews to fill the holes less by the lack of formally documented office policies and procedures.

The most obvious limitation in the interviews was that all of those interviewed had a vested interest in promoting a particular image of their position as well as the reputation of the college. With the exception of the retired President and Vice-President of Institutional
Advancement, everyone I interviewed for this study currently works at the college and was aware that my research would be available to read by others at the college. The two retired interviewees also have a vested interest in the reputation of the college in that they are both very recently retired in July prior to the interviews and had worked at the college for more than 35 years each. The support I received from the Vice-President of Student Affairs provided me with access to the student affairs offices, but could have served as a damper on the perspective of some staff as well. I do not believe this was a major limitation, however, since interviewees were reflective of the weaknesses as well as the strengths of the college’s financial aid environment.

The student survey limitations lay in the depth of information I was able to get from students. The administrators who provided me with feedback on the survey urged me to keep it as simple and quick as possible as their experience was that students had a limited amount of patience with filling out surveys. I did not have the resources to provide a strong incentive to finish a long and complex survey, so I had to select carefully and sparingly the open-ended questions that I included. I did not want to intimidate the same students who did not fill out the FAFSA because it was too long, and thereby skew my own results towards those willing to fill out long, complicated forms.
CHAPTER 4: Analysis
Overview

In this chapter I present a quantitative analysis using data from the 2008 National Postsecondary Student Aid Study (NPSAS:08) and an analysis of a mixed methods case study using research data I collected at Northampton Community College (NCC) in the fall of 2012. Data analysis from NPSAS:08 focuses on who does and does not apply for federal financial aid (i.e. fill out the FAFSA), the reasons given by students for not applying, and the sources of information students reported using in order to make their decisions regarding financial aid. The NCC case study investigates the institutional policies, procedures and practices of the financial aid process at the college and the external influences in order to examine the community college financial aid environment.

The NPSAS data I used include both a descriptive and correlation analysis of the factors that impact financial aid outcomes. Since the primary research interest of this dissertation focuses on a specific institutional environment (community colleges) and how the institutional environment impacts the rate of financial aid applications, one of the key pieces of information provided in the NPSAS:08 database is the source(s) of information used by the student regarding financial aid decisions. The sources of financial aid information variables serve as a proxy for measuring the information a student uses to make financial aid decisions and the impact that information can have on the student's decision. By using the sources of information I can measure whether or not a student who gets financial aid information from an informal source (like friends and family) or a formal source (like a high school or college counselor) is a better consumer of financial aid. Therefore, the initial descriptive analysis explores the
interrelationship of application rates to sources of information by demographic characteristics. From there, the descriptive analysis describes rates of FAFSA application and sources of financial aid information broken down into nine sectors of higher education, including four-year, two-year and less-than-two-year institutions in the public, private, non-profit, and private, for-profit arenas.

As the descriptive analysis moves forward from this point, it focuses exclusively upon the four-year and two-year public sector, comparing these sectors to one another and the overall post-secondary student population. Reasons non-applicants identify for not applying for financial aid are added into the analysis. Here there is a description of the interrelationship between reasons for not applying by sector of higher education and demographic characteristics. Then the analysis looks at the sources of information used by both applicants and non-applicants within each of the sectors of interest. The final part of the NPSAS:08 descriptive analyses investigates the interrelationship between information source and reasons given by students for not applying for financial aid.

The NPSAS:08 correlation analysis encompasses six regression analyses. Using demographic characteristics and sources of information about financial aid as independent variables, the first regression analysis uses whether or not students apply for financial aid as the dependent variable. Then five regressions are run for non-applicants using as the dependent variable each of the five reasons students cited in NPSAS:08 for not applying for financial aid: 1) the student did not want to take on debt, 2) the student felt the financial aid application process was too much work, 3) the student did not know how to apply for financial aid, 4) the student...
did not feel she needed financial aid, and, 5) the student did not feel she would be eligible for financial aid.

The NCC case study research analysis presents data from three sources: 1) a survey conducted by the college on 'no-shows' and other official college documents and reports, 2) a student survey conducted for this dissertation, and 3) interviews with 13 members of the NCC administration, counselors and faculty. The case study begins with a description of the college’s financial aid environment generated from the college documents, reports and the annual survey conducted by the college on 'no-shows,' or those students who begin the application process but ultimately do not attend the college. How far each of these students get into the application process before dropping out is unclear from the data available, but at a minimum they fill out the college's admission application form. Then I analyze the student survey results, comparing those results to the national level data collected through NPSAS:08. The interviews with the high- and mid-level administrators, counselors and faculty are the final data evaluated.

**National Level Outcomes and Environment**

**FAFSA application rates and sources of financial aid information.**

In the NPSAS:08 survey, students were asked a series of three questions designed to understand better how respondents came to understand and make decisions about the financial aid process. The questions are as follows:

- When you were making decisions about financial aid, which of the following did you do?
1. Discussed options with family and/or friends: No/Yes.

2. Research options on the Internet: No/Yes.

3. Talked with counselor or financial aid office staff in high school or college: No/Yes.

Each respondent was able to select as many sources of information as apply. In the next several sections, rates of usage for each form of information are described, first by demographic characteristics then by sector of higher education. Later in the chapter, the interrelationship between the sources of information used and the reasons given for not applying for financial aid by those students who did not fill out a FAFSA will be described.

**By demographic characteristics.**

Table 5 describes the rates of application for FAFSA for different demographic characteristics by the source of information used to learn about and make decisions on the financial aid application process. Demographic categories in the table are largely self-explanatory with two exceptions. Mother's education is divided into three categories: the first category is no post-secondary education reported, the second is some post-secondary education reported, and the third category is the mother's education is unknown. The "HH members in PS" indicates whether or not there are other members of the student's household who are in post-secondary education.
The first four columns of data provide percentages on the entire sample for the row. The last six columns of data are divided into three sections of two columns each. The first column in each of the sections provides the percentage of the row that used the specific source of information for financial aid who then applied for financial aid. The second column in each of the three sections provides the percentage of those who did not use the specific source of information for financial aid and then applied for financial aid.

Table 5. NPSAS: FAFSA application rates by sources of financial aid information and demographics

<table>
<thead>
<tr>
<th></th>
<th>Applied for FAFSA</th>
<th>Spoke to F&amp;F</th>
<th>Used Internet</th>
<th>Spoke to Counselor</th>
<th>Of those who did not speak to friends &amp; family, % who applied</th>
<th>Of those who did not do research on the internet, % who applied</th>
<th>Of those who spoke to a counselor, % who applied</th>
<th>Of those who did not speak to a counselor, % who applied</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ALL</strong></td>
<td>59%</td>
<td>62%</td>
<td>39%</td>
<td>48%</td>
<td>64%</td>
<td>49%</td>
<td>69%</td>
<td>52%</td>
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<td>62%</td>
<td>39%</td>
<td>51%</td>
<td>68%</td>
<td>56%</td>
<td>71%</td>
<td>58%</td>
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<td>62%</td>
<td>39%</td>
<td>44%</td>
<td>60%</td>
<td>40%</td>
<td>65%</td>
<td>44%</td>
</tr>
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<td>White</td>
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<td>63%</td>
<td>39%</td>
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<td>61%</td>
<td>42%</td>
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<td>41%</td>
<td>59%</td>
<td>77%</td>
<td>69%</td>
<td>79%</td>
<td>70%</td>
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<td>38%</td>
<td>56%</td>
<td>70%</td>
<td>60%</td>
<td>73%</td>
<td>62%</td>
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<td>41%</td>
<td>52%</td>
<td>66%</td>
<td>55%</td>
<td>72%</td>
<td>54%</td>
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<td>Dependent</td>
<td>62%</td>
<td>77%</td>
<td>47%</td>
<td>49%</td>
<td>66%</td>
<td>46%</td>
<td>71%</td>
<td>54%</td>
</tr>
<tr>
<td>Independent</td>
<td>55%</td>
<td>44%</td>
<td>31%</td>
<td>47%</td>
<td>61%</td>
<td>51%</td>
<td>66%</td>
<td>50%</td>
</tr>
<tr>
<td>Delayed Traditional (out of HS)</td>
<td>57%</td>
<td>48%</td>
<td>32%</td>
<td>49%</td>
<td>63%</td>
<td>53%</td>
<td>67%</td>
<td>53%</td>
</tr>
<tr>
<td></td>
<td>59%</td>
<td>68%</td>
<td>42%</td>
<td>47%</td>
<td>65%</td>
<td>46%</td>
<td>69%</td>
<td>51%</td>
</tr>
</tbody>
</table>
I will explore some of the trends in the data, but there are five specific results that I want to draw particular attention to for this study, and they are:

- the differences between males and females,
- the differences between Asians and other ethnicities,
- the difference between dependent students and independent students,
the lack of difference between those who are in their first year of college and
those beyond their first year, and,

- the difference between students registered as full-time and part-time.

I have bolded these results in the table for easy reference.

The overall rate of application for financial aid is 59%. Women apply at a rate 11% higher than men apply (63% versus 52%). Groups whose rate of application is at least 5% or more higher than the overall rate include Blacks (74%), Latinos (66%), those whose mother's level of education is unknown (69%), those in the bottom two quartiles of income (77% lowest quartile and 65% second quartile), and full-time students (72%). Largely mirroring these statistics, those who apply at a rate at least 5% less than the overall rate include males (52%), White, non-Latinos (54%), Asians (49%), the top two income quartiles (54% and 38%), and part-time students (45%). Some of these disparities in rates of application may be due to the conflating of income and race, an issue that will be resolved later in this chapter when I analyze the regression results.

The difference between rates of application for males and females cannot be readily explained with this data. However, this disparity is one of the consistent themes that runs throughout the analysis of the national level data as it develops in this chapter, and further analysis will help to shed some light on this trend. The same is the case for Asian and independent students, in that why they might not be applying at the same rate as other groups is not immediately apparent. However, it is interesting to note that for all three of these low-
application groups (males, Asians, and independent students), the percentage of those who do
not speak to a counselor about financial aid and then apply for financial aid is lower than for
other groups. This begins to suggest that speaking to a counselor can make an important
difference for these groups.

The relative lack of difference between first year students and those with more
advanced standing suggests that students make up their mind about financial aid early and that
being in college does not change their understanding. This is an interesting trend since one
might expect that being in a higher education environment and exposed to other students who
receive financial aid would encourage students to apply after their first year.

There are several reasons that part-time students might apply at a much lower rate than
full-time students. First, since much of the financial aid available is predicated upon full-time
attendance. Part-time students may judge that it is not worth the investment to spend the time
applying for aid for which they believe they are unlikely to be eligible. Second, part-time
students pay less tuition than full-time students and so one might conclude that they are more
likely to be able to pay for their expenses. However, I will show later that this is not the case
when data on why students choose not to apply for financial aid is analyzed.

Overall, the most popular source of information is friends and family (62%), while the
rate of speaking to a counselor (48%) is 14% less, and research on the internet, the least
popular source of information at a rate of 39%, is 9% less than that. It is important to note
here that while the percentage of those speaking to friends and family doesn’t change much
between the overall sample (62%) and those who apply (64%), the same is not true for either those who do research on the internet, or those who speak to a counselor. That is to say that while overall 39% use the internet, of those who apply for financial aid 69% use the internet; overall 48% speak to a counselor while 76% of those who apply speak to a counselor. This is potentially encouraging as it suggests that through providing better information through the internet and counselors, schools and colleges can encourage students to apply. However, it may also indicate that those who seek information beyond speaking to more informal sources like friends and family are those who have more intention to apply.

*By higher education sector.*

Table 6, below, shows application rates and the sources of information used by the sector of higher education the student attended. The table provides information for the entire NPSAS:08 sample in the first row for reference, and then breaks the sample down in subsequent rows into nine sectors of higher education comprised of three arenas each (public, private non-profit, and private for-profit) divided into three levels of institution (four-year, two-year and less than two-year). Across the top of the table, the first column provides the weighted sample sizes used, and the rest of the table is laid out exactly as Table 5. The first four columns reflect data from the entire sample for the row. The following six columns are divided into three sections with each showing the percentage of those who applied for financial aid by whether or not they utilized a specific information source.
This table holds two trends worth noting for this study. The first is the difference in application rates between sectors of higher education. The second is the patterns seen in application rates for public, two-year students based upon the source of information used.

Table 6. NPSAS: Sources of financial aid information by sector of higher education attended

<table>
<thead>
<tr>
<th></th>
<th>Applied for FAFSA</th>
<th>% of ALL who...</th>
<th>Of those who spoke to friends &amp; family, % who applied</th>
<th>Of those who did not speak to friends &amp; family, % who applied</th>
<th>Of those who did research on the internet, % who applied</th>
<th>Of those who did not do research on the internet, % who applied</th>
<th>Of those who spoke to a counselor, % who applied</th>
<th>Of those who did not speak to a counselor, % who applied</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>91,781</td>
<td>59%</td>
<td>62%</td>
<td>39%</td>
<td>48%</td>
<td>64%</td>
<td>49%</td>
<td>69%</td>
</tr>
<tr>
<td><strong>Public</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-year</td>
<td>32,054</td>
<td>63%</td>
<td>71%</td>
<td>46%</td>
<td>45%</td>
<td>67%</td>
<td>52%</td>
<td>72%</td>
</tr>
<tr>
<td>2-year</td>
<td>25,543</td>
<td>43%</td>
<td>54%</td>
<td>33%</td>
<td>42%</td>
<td>49%</td>
<td>35%</td>
<td>54%</td>
</tr>
<tr>
<td>&lt;2-year</td>
<td>1,193</td>
<td>48%</td>
<td>51%</td>
<td>27%</td>
<td>52%</td>
<td>50%</td>
<td>46%</td>
<td>55%</td>
</tr>
<tr>
<td><strong>Private, non-profit</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-year</td>
<td>18,259</td>
<td>71%</td>
<td>70%</td>
<td>45%</td>
<td>51%</td>
<td>77%</td>
<td>57%</td>
<td>82%</td>
</tr>
<tr>
<td>2-year</td>
<td>935</td>
<td>76%</td>
<td>52%</td>
<td>34%</td>
<td>61%</td>
<td>83%</td>
<td>68%</td>
<td>85%</td>
</tr>
<tr>
<td>&lt;2-year</td>
<td>288</td>
<td>82%</td>
<td>65%</td>
<td>34%</td>
<td>59%</td>
<td>85%</td>
<td>77%</td>
<td>91%</td>
</tr>
<tr>
<td><strong>Private, for-profit</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-year</td>
<td>5,846</td>
<td>96%</td>
<td>47%</td>
<td>36%</td>
<td>73%</td>
<td>96%</td>
<td>97%</td>
<td>97%</td>
</tr>
<tr>
<td>2-year</td>
<td>2,883</td>
<td>99%</td>
<td>52%</td>
<td>34%</td>
<td>79%</td>
<td>99%</td>
<td>99%</td>
<td>99%</td>
</tr>
<tr>
<td>&lt;2-year</td>
<td>4,780</td>
<td>88%</td>
<td>57%</td>
<td>35%</td>
<td>69%</td>
<td>87%</td>
<td>89%</td>
<td>89%</td>
</tr>
</tbody>
</table>

Source: NPSAS:08, data analysis by author. Bold connotes statistics focused on in analysis.

*Sample sizes are based on weighted samples

Table 6 shows that there is a higher rate of financial aid applications for the private arenas as compared to the public arena, and a higher rate in the for-profit institutions as compared to the non-profit institutions. The difference in public and private application rates may be in part due to the fact that tuition is higher at private institutions as compared to public institutions (Baum & Payea, 2011; United States Senate Health, Education, Labor and Pensions Committee, 2012). However, tuition rates at private, for-profit institutions are lower than at private, non-profit institutions, (Baum & Payea, 2011; United States Senate Health, Education, Labor and Pensions Committee, 2012) and the application rate in the for-profit sector is higher,
so tuition prices cannot be the only thing driving the difference in application rates. We know that student household income levels in the private, for-profit sector are lower than in either the public or private, non-profit sectors (Baum & Payea, 2011). The combination of having the lowest levels of household income and the second highest levels of tuition could explain why the for-profit sector has the highest rates of application for financial aid. NPSAS tracks students by the institution that they attend, so if a student did not apply for financial aid and then could not attend an institution due to the cost, she would not show up in the NPSAS:08 database under that institution.

Public two-year students have the lowest rates of application under every single category in this table. The noteworthy difference in the rates within the public, two-year sector comes in the two columns under those who spoke to a counselor. For the public, four-year and private, non-profit, four-year and two-year institutions, there is a 26% difference in the rate of those who spoke to a counselor and applied versus those who did not speak to a counselor and applied. For the public-two year sector, this difference jumps to 36% points. The only sector that is comparable to this is the public, less than two-year sector. Again, this trend suggests the importance of the role counselors can play in financial aid, and highlights this importance for the public, two-year sector.

This data pose a number of questions: Why are students in public, two-year sector speaking to counselors at such a low rate? Is it because they lack the information to talk to counselors? Are there too few counselors available to them? Are these the students to whom counselors have not reached out? This is one of the issues that is explored in the case study.
FAFSA applications rates and reasons for not applying

At this point in the analysis of the NPSAS:08 data, I will begin to sharpen my focus to examine and compare only those students in the public, four-year and public, two-year sectors. My overriding research interest here is in the public, two-year sector. The narrowing of focus to this sector and the four-year public sector is based upon several issues. As can be seen in Table 6, sample sizes for many of the other sectors are too small to provide useful comparisons. In addition, there is not enough variation in the rate of FAFSA applications in a number of the sectors to provide a useful analysis since almost all the students apply for aid. Especially as I move forward to analyze reasons given by non-applicants for not applying for financial aid, it would be difficult to make comparisons to the for-profit sector where students overwhelmingly do apply. This leaves the public, four-year and private, non-profit, four-year institutions as the two remaining sectors that have a large enough sample size and sufficient variation in whether or not they applied for financial aid. I have chosen to look just at the public, four-year as this sector is more similar to the public, two-year sector based upon the student body and tuition rates than the private, four-year school. From this point on in the chapter, if I refer to a two-year or a four-year student, without further specifying the sector it can be assumed I am referring to those within the public sector.

In the NPSAS:08 database there are five reasons a non-applicant could identify as why she did not apply for financial aid. The question and reasons offered were:

1. Please indicate whether the following were reasons you did not apply for financial aid. Was it because you:
1. Did not want to take on debt: No/Yes.
2. Thought the application forms were too much work or too time consuming: No/Yes.
3. Did not have enough information about how to apply for financial aid: No/Yes.
4. Did not need financial aid: No/Yes.
5. Thought you would be ineligible: No/Yes.

The student could select as many of these reasons as applied to her situation.

Throughout the analysis in this chapter, these five reasons will be referred in short-hand: debt, work, information, need, and eligibility. Only those who did not apply for financial aid responded to these questions.

*By Demographic Characteristics.*

The overall sample.

Table 7 describes the interrelationship between demographic characteristics of students who did not apply for financial aid and the reasons they did not apply, overall and broken down into public four-year and two-year sectors. For all students, not believing one is eligible (60%), not believing one needed financial aid (52%) and not wanting to take on any debt (41%) are the top three reasons for not applying. Not having sufficient information (22%) and feeling the application process was too much work (19%) were the two least cited reasons for not applying.
There are several trends in the data covered in this section. Those trends include:

- in general, there is very little variation in the data by demographic characteristics for the reasons for not filling out a FAFSA,
- there continue to be striking differences between males and females, as males are more likely to say that they did not apply because they had no financial need while females are more likely to say they would not have been eligible, and,
Table 7. NPSAS: Reasons non-Applicants do not Apply for Financial Aid by Demographic Characteristics

<table>
<thead>
<tr>
<th>% of Non-Applicants</th>
<th>% of Non-Applicants Who Reported Each Issue as a Reason for not Applying for Financial Aid</th>
<th>Public four-year sector, reasons for not applying for the FAFSA</th>
<th>Public two-year sector, reasons for not applying for the FAFSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>41%</td>
<td>19%</td>
<td>22%</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>40%</td>
<td>19%</td>
<td>22%</td>
</tr>
<tr>
<td>Male</td>
<td>41%</td>
<td>19%</td>
<td>22%</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>40%</td>
<td>18%</td>
<td>21%</td>
</tr>
<tr>
<td>Black</td>
<td>46%</td>
<td>19%</td>
<td>21%</td>
</tr>
<tr>
<td>Latino</td>
<td>39%</td>
<td>18%</td>
<td>25%</td>
</tr>
<tr>
<td>Asian</td>
<td>44%</td>
<td>26%</td>
<td>29%</td>
</tr>
<tr>
<td>Other</td>
<td>43%</td>
<td>24%</td>
<td>28%</td>
</tr>
<tr>
<td>Dependency Status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dependent</td>
<td>40%</td>
<td>20%</td>
<td>24%</td>
</tr>
<tr>
<td>Independent</td>
<td>41%</td>
<td>18%</td>
<td>20%</td>
</tr>
<tr>
<td>Delayed Enrollment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delayed</td>
<td>41%</td>
<td>19%</td>
<td>24%</td>
</tr>
<tr>
<td>Traditional (out of HS)</td>
<td>41%</td>
<td>19%</td>
<td>22%</td>
</tr>
<tr>
<td>Parental Education (Mother)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any post-secondary</td>
<td>42%</td>
<td>19%</td>
<td>22%</td>
</tr>
<tr>
<td>Unknown</td>
<td>41%</td>
<td>19%</td>
<td>23%</td>
</tr>
<tr>
<td>High school or less</td>
<td>40%</td>
<td>18%</td>
<td>23%</td>
</tr>
<tr>
<td>% of Non-Applicants</td>
<td>% of Non-Applicants Who Reported Each Issue as a Reason for not Applying for Financial Aid</td>
<td>Public four-year sector, reasons for not applying for the FAFSA</td>
<td>Public two-year sector, reasons for not applying for the FAFSA</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>Household in college</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Just student</td>
<td>41%</td>
<td>19%</td>
<td>23%</td>
</tr>
<tr>
<td>Others</td>
<td>39%</td>
<td>18%</td>
<td>20%</td>
</tr>
<tr>
<td>Income quartile</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st</td>
<td>44%</td>
<td>24%</td>
<td>31%</td>
</tr>
<tr>
<td>2nd</td>
<td>43%</td>
<td>21%</td>
<td>27%</td>
</tr>
<tr>
<td>3rd</td>
<td>43%</td>
<td>19%</td>
<td>23%</td>
</tr>
<tr>
<td>4th</td>
<td>36%</td>
<td>16%</td>
<td>15%</td>
</tr>
<tr>
<td>Status in college</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First year</td>
<td>40%</td>
<td>19%</td>
<td>24%</td>
</tr>
<tr>
<td>Beyond first year</td>
<td>41%</td>
<td>19%</td>
<td>21%</td>
</tr>
<tr>
<td>Attendance in college</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>39%</td>
<td>19%</td>
<td>21%</td>
</tr>
<tr>
<td>Part-time</td>
<td>42%</td>
<td>19%</td>
<td>23%</td>
</tr>
</tbody>
</table>

Source: NPSAS:08, data analysis by author. Shading connotes that differences across categories were deemed statistically significant at conventional (p<.05) levels. Bold connotes statistics focused on in analysis.
- the only conspicuous difference between full-time and part-time students is that full-time, non-applicants have a higher rate of saying they did not apply because they did not need financial aid.

I will look at these trends in the overall data, and then examine the differences between the four-year and two-year sectors.

Overall there is little variation by demographic characteristic in the rates of reporting that not wanting to take on debt was a reason for not applying, as shown in Table 7. Blacks are the exception to this, who reported a higher rate (46%, overall, 48% at four-year institutions and 46% at two-year institutions) than other racial/ethnic groups. The highest income quartile reported this at a much lower rate (36%) than any other group.

The only variation greater than 5% difference from the overall sample in the rate of reporting too much work as a reason for not applying can be seen in the racial/ethnic category by Asians (26%) and Other non/white minorities (24%), and the lowest income quartile (24%). Still, the variation here is only just over 5% and the striking trend is that there is very little variation. In fact, the higher the income quartile, the lower the rate of citing the application process being too much work. This phenomenon may be due to lower income students finding the process of applying more daunting and having less access to professionals who can help them through the procedures and paperwork required.

This explanation makes particular sense when combined with the fact that the greatest variation in rates of those reporting a lack of information as a reason for not applying is
between the different income quartiles. The lowest income quartile cited this reason at the highest rate of any demographic group in the table (31%), while the highest income quartile reports this reason at the lowest rate (15%). Asians (29%) and other, non-White minorities (28%) are the only other demographic groups that vary by more than 3% from the rate of the overall sample.

The most compelling variations in overall rates of reporting reasons for not applying can be seen in the need and eligibility categories. Differences in these categories can be seen in the gender, race/ethnicity, dependency status, and attendance status categories. These two categories – need and eligibility – seem to be tied together in the data, so I will analyze them together.

All non-White groups reported not needing financial aid at a lower rate than Whites (55%). The lowest rates were for Blacks (42%) and Latinos (44%). Differences in reporting eligibility were negligible among race/ethnicity categories.

Men reported that they did not need financial aid at a rate 10% higher than women (57% versus 47%). Women reported at a much higher rate (64%) that they did not apply because they did not think they would be eligible than the rate at which men reported the same (56%). The variation in gender is particularly intriguing when one considers that this means that women had a 10% lower rate of reporting that they did not need financial aid, but an 8% higher rate of reporting that they did not think they would be eligible. No other variation in the rate at which different demographic groups reported eligibility as a reason is as great as that found
in gender. Even income, with the lowest quartile rate 7% lower than the highest quartile's rate, has less variation (albeit only by 1%). In other words, when compared to women, men say they do not need aid but would be eligible for it if they applied, while women say they need the aid but would not be eligible. Is this because men are unwilling to admit they need assistance? This explanation would fit with the earlier trend seen that males do not seek counseling for financial aid at the same rate as women. Is it because women have a particularly poor understanding of eligibility? Further study would be needed in order to understand if this difference is driven by one of these two groups having an erroneous understanding of need or eligibility, or if there is some reason that one group has greater financial need and the other is more likely to be eligible for financial aid.

Due to the increased college expenses in households with more than one college student, one might expect that students in these households would have a decreased rate of citing not needing financial aid. The opposite is true with households with only one student in college citing not having need at a rate of 50% while households with more than one student in college reported no need at a rate of 57%. This may be because the students who are in households with multiple people going to college are not aware of the increased financial stress on the budget, or that within the aid process this makes them eligible for more financial aid.

The other surprise under the category of need is that part-time students reported this as a reason for not applying at a rate 11% lower than full-time students. This suggests that many part-time students are experiencing unmet financial need. Remembering that the first chart showed that part-time students are not talking to counselors about financial aid at as high
a rate as full-time students and those who talk to counselors apply at more than twice the rate of those who do not, this is an area where financial aid counselors might be able to have a significant impact.

**Comparing the four-year and two-year sectors.**

There is little variation in the two sectors, although one sees that four-year non-applicants report a lack of need at a higher rate. There are some differences based on race/ethnicity and the gender trends are slightly different.

The rates at which students in the public four-year and two-year sectors cited debt and work as their reasons for not applying for financial aid were consistent with the overall sample (see the first row of Table 7). There was some variation in the rates of those who cited information as four-year students reported this at a lower rate (20%) than two-year students (24%). There was also a small variation in the rates of those who cited eligibility with four-year students reporting this at a slightly higher rate (62%) than two-year students (59%). The largest variation of rates, however, came in those who cited need as a factor with four-year students saying they did not have financial need at a higher rate (56%) than two-year students (49%). This might be surprising given that overall four-year students face a higher cost of attendance than two-year students do (Baum & Payea, 2011) so it would be reasonable to expect that their financial need might be greater. Part of the explanation for this difference lies in the fact that two-year college students are more likely to come from lower income families and not have any savings for college than are four-year students who tend to be more affluent (Baum &
Payea, 2011). By comparing between income groups in the two sectors, though, one can see that although the gap shrinks but it remains for every income quartile.

As one goes down the column to look at specific demographic groups, there is little differentiation between rates of reporting debt, work, information, need, and eligibility by four-year versus two-year students. There are a few notable exceptions. Asians at four-year schools reported that the financial aid process was too much work at a rate 10% higher than the same group at two-year institutions. Latinos at two-year institutions reported not having enough information at a rate 7% higher than at four-year institutions, while the lowest income quartile from the two-year sector reported not having enough information at a rate 10% higher than in the four-year sector. Like the overall sample, there is a lot of variation in the rate of reporting lack of need between four-year and two-year demographic groups. The exceptions to this are Blacks who reported a lack of financial need at the same rate (41%) in both sectors and Latinos, who reported this reason at similar rates in both sectors (45% for four-year and 43% for two-year). Blacks at four-year schools reported not believing they would be eligible for aid at a higher rate (69% versus 59%) than those at two-year schools.

The other rate differentiation worth noting is the difference in gender groups in each of the sectors. As with the overall sector, there is a stark difference between males and females within each sector as they cited lack of need and lack of eligibility, and there is a difference between sectors. In the four-year sector 17% more females cited lack of eligibility (68%) over lack of financial need (51%), while 4% more males cited no financial need (61%) over eligibility (57%). The females in the two-year sector showed an greater difference in rates (19%),
between citing a lack of financial need (44%) and thinking they would not be eligible (63%). Males in the two-year sector, unlike the four-year sector’s males, reported a lack of financial need at a lower rate (54%) than eligibility (56%).

**Reasons for not applying and sources of information.**

Table 8 describes the interrelationship of sources of financial aid information and reasons students give for not applying for financial aid for students as a whole and for those students enrolled in the public sector four-year and two-year institutions. Considering the overall sample, it is interesting to note that regardless of the source of financial information, students reported not having enough information at the same rate (24%). The greatest variation in rates is for need, where the highest rate of citing not needing financial aid is for those students who spoke to friends or family (48%), while the lowest rate is for those who spoke to a counselor (42%). This would make sense in that those who conferred with family and found that plans had been made for financing college within the family would not have moved forward and consulted with a counselor about financial aid, while those who did not confer with family knowing that family financing for post-secondary education was not available and spoke to a counselor.

Going down through the rows of this table, however, one finds several differences in the experience of four-year students and two-year students. First, there is a large (7%) difference in the rates at which four-year students who spoke to a counselor say they did not apply because it was too much work (16%) versus two-year students (23%). Two-year students report that the application was too much work at virtually the same rate, regardless of their
source of information, while four-year students who spoke to a counselor have a 4% lower rate than those who used either of the other two sources. It may be that two-year non-applicants spoke primarily to high school counselors who did not help them with the financial aid process for college due to the impression that the student might not be heading directly to college. This would be consistent with the information collected in the case study that suggests there are a large number of students who come late to the college application process which complicates their financial aid applications.

Table 8. NPSAS:08 Sources of Information by Reasons for Not Applying and Institutional Sector

<table>
<thead>
<tr>
<th>Sectors of Higher Education</th>
<th>Spoke to family &amp; friends</th>
<th>Used internet</th>
<th>Spoke to HS counselor or college financial aid officer</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>Debt</td>
<td>44%</td>
<td>47%</td>
</tr>
<tr>
<td></td>
<td>Work</td>
<td>21%</td>
<td>22%</td>
</tr>
<tr>
<td></td>
<td>Info</td>
<td>24%</td>
<td>24%</td>
</tr>
<tr>
<td></td>
<td>Need</td>
<td>48%</td>
<td>44%</td>
</tr>
<tr>
<td></td>
<td>Eligible</td>
<td>62%</td>
<td>66%</td>
</tr>
<tr>
<td>Public, four-years</td>
<td>Debt</td>
<td>44%</td>
<td>48%</td>
</tr>
<tr>
<td></td>
<td>Work</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>Info</td>
<td>21%</td>
<td>21%</td>
</tr>
<tr>
<td></td>
<td>Need</td>
<td>52%</td>
<td>48%</td>
</tr>
<tr>
<td></td>
<td>Eligible</td>
<td>65%</td>
<td>69%</td>
</tr>
<tr>
<td>Public, two-years</td>
<td>Debt</td>
<td>44%</td>
<td>46%</td>
</tr>
<tr>
<td></td>
<td>Work</td>
<td>22%</td>
<td>23%</td>
</tr>
<tr>
<td></td>
<td>Info</td>
<td>26%</td>
<td>27%</td>
</tr>
<tr>
<td></td>
<td>Need</td>
<td>45%</td>
<td>42%</td>
</tr>
<tr>
<td></td>
<td>Eligible</td>
<td>60%</td>
<td>64%</td>
</tr>
</tbody>
</table>

Source: NPSAS:08, data analyzed by author
How demographic characteristics and sources of information impact federal financial aid application rates.

In this section I focused on determining factors -- both demographic and source of financial aid information -- that placed a student at risk for not applying for federal financial aid, as well as factors that placed the student at risk for the five reasons cited for not applying for financial aid. To determine what the risk factors were, I ran six logistic regression models. I used 'applied for federal financial aid' as the dependent variable and demographic characteristics and 'sources of financial aid information' as the independent variables in the first model. In each of the next five models, I used one of the five reasons given for not applying (i.e. did not want to take on debt, did not have enough information, thought it was too much work, did not need financial aid, did not think would be eligible for financial aid) as the dependent variable and then used the same demographic and 'sources of information' as independent variables that I used in the first model. The first model was run on all undergraduate students who were U.S. citizens and attended one university during the survey year. The next five models were run on those students from the first model who had not applied for federal financial aid.

Table 9 provides the results of the first regression model. The first column (1) shows the odds ratio, standard error, and significance level of each independent variable for all undergraduate students, while the last two columns provide results for just public, four-year students (2) and public two-year students (3). The results for all the independent variables in the model were significant at least at the p<0.05 level, with the exception of having other college students in the household for two-year college students. Most results were significant at the p<0.001 level.
<table>
<thead>
<tr>
<th></th>
<th>(1) All Sectors</th>
<th>(2) Public, 4-yr</th>
<th>(3) Public, 2-yr</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Odds Ratio/se</td>
<td>Odds Ratio/se</td>
<td>Odds Ratio/se</td>
</tr>
<tr>
<td>Female</td>
<td>1.501***</td>
<td>1.319***</td>
<td>1.647***</td>
</tr>
<tr>
<td></td>
<td>(0.036)</td>
<td>(0.046)</td>
<td>(0.064)</td>
</tr>
<tr>
<td>Black</td>
<td>1.963***</td>
<td>2.265***</td>
<td>1.618***</td>
</tr>
<tr>
<td></td>
<td>(0.079)</td>
<td>(0.151)</td>
<td>(0.093)</td>
</tr>
<tr>
<td>Latino</td>
<td>1.327***</td>
<td>1.334***</td>
<td>1.188***</td>
</tr>
<tr>
<td></td>
<td>(0.049)</td>
<td>(0.079)</td>
<td>(0.068)</td>
</tr>
<tr>
<td>Asian</td>
<td>0.668***</td>
<td>0.850*</td>
<td>0.481***</td>
</tr>
<tr>
<td></td>
<td>(0.038)</td>
<td>(0.066)</td>
<td>(0.047)</td>
</tr>
<tr>
<td>Other, non-white</td>
<td>1.151*</td>
<td>1.272**</td>
<td>1.070</td>
</tr>
<tr>
<td></td>
<td>(0.071)</td>
<td>(0.119)</td>
<td>(0.098)</td>
</tr>
<tr>
<td>Dependent</td>
<td>1.323***</td>
<td>1.757***</td>
<td>1.417***</td>
</tr>
<tr>
<td></td>
<td>(0.044)</td>
<td>(0.093)</td>
<td>(0.068)</td>
</tr>
<tr>
<td>Delayed</td>
<td>1.159***</td>
<td>1.173**</td>
<td>1.181***</td>
</tr>
<tr>
<td>Enrollment</td>
<td>(0.034)</td>
<td>(0.063)</td>
<td>(0.049)</td>
</tr>
<tr>
<td>Income</td>
<td>0.983***</td>
<td>0.982***</td>
<td>0.978***</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Income-sq</td>
<td>1.000***</td>
<td>1.000***</td>
<td>1.000***</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Mother’s Ed.</td>
<td>1.586***</td>
<td>1.448**</td>
<td>1.665***</td>
</tr>
<tr>
<td>Unknown</td>
<td>(0.095)</td>
<td>(0.166)</td>
<td>(0.140)</td>
</tr>
<tr>
<td>Mother’s Ed.</td>
<td>1.288***</td>
<td>1.417***</td>
<td>1.337***</td>
</tr>
<tr>
<td>HS deg or less</td>
<td>(0.033)</td>
<td>(0.054)</td>
<td>(0.054)</td>
</tr>
<tr>
<td>Other household</td>
<td>1.100*</td>
<td>1.141***</td>
<td>1.068</td>
</tr>
<tr>
<td>Members in college</td>
<td>(0.032)</td>
<td>(0.045)</td>
<td>(0.054)</td>
</tr>
<tr>
<td>First year student</td>
<td>1.133***</td>
<td>1.304***</td>
<td>1.280***</td>
</tr>
<tr>
<td></td>
<td>(0.029)</td>
<td>(0.059)</td>
<td>(0.050)</td>
</tr>
<tr>
<td>Full-time</td>
<td>3.870***</td>
<td>2.702***</td>
<td>2.770***</td>
</tr>
<tr>
<td></td>
<td>(0.105)</td>
<td>(0.117)</td>
<td>(0.119)</td>
</tr>
<tr>
<td>Friends &amp; family</td>
<td>1.318***</td>
<td>1.373***</td>
<td>1.256***</td>
</tr>
<tr>
<td>for fin. aid info.</td>
<td>(0.035)</td>
<td>(0.055)</td>
<td>(0.052)</td>
</tr>
<tr>
<td>Internet research</td>
<td>1.444***</td>
<td>1.506***</td>
<td>1.327***</td>
</tr>
<tr>
<td>for fin. aid info.</td>
<td>(0.038)</td>
<td>(0.055)</td>
<td>(0.057)</td>
</tr>
<tr>
<td>Spoke to</td>
<td>3.105***</td>
<td>2.267***</td>
<td>3.266***</td>
</tr>
<tr>
<td>Counselor for fin. aid info.</td>
<td>(0.077)</td>
<td>(0.083)</td>
<td>(0.128)</td>
</tr>
<tr>
<td>N</td>
<td>91,781</td>
<td>32,054</td>
<td>25,543</td>
</tr>
</tbody>
</table>

Source: NPSAS:08, data analyzed by author. Reference groups include: White, Mother’s education some post-secondary, and student only member of household in college.
The single factor that placed a student in the overall population at the greatest risk for not applying for federal financial aid was part-time status as a student. Full-time students were 3.9 times more likely to apply for federal financial aid than part-time students. The second factor that placed a student in the overall population at the greatest risk for not applying was if they did not speak to a high school or college counselor about financial aid. Students who spoke to a counselor were 3.1 times more likely to apply. These results are somewhat constrained for the two sectors being focused on here, but still apparent. The reverse of the overall population and four-year students, for two-year students not speaking to a counselor put one at a higher risk for not applying than did being a part-time student. Two-year students who spoke to a counselor were 3.3 times more likely to apply than those who did not.

The data strongly suggest that a causal relationship exists between speaking to a counselor and applying for financial aid applications given that those who speak to a counselor apply at a much higher rate. That those who spoke to a counselor were more likely to be predisposed to apply for financial aid is a threat to that conclusion. Those who spoke to a counselor were a self-selected group rather than being a random sample and as such this group had a systematic difference in the critical characteristic of being predisposed to apply for financial aid over those who did not speak to a counselor, a selection bias that threatens the validity of concluding that speaking to the counselor caused the students to apply (Shadish et al., 2002, p. 55). The threat, however, is weak compared to the data. First, when compared to the four-year student the correlation between speaking to a counselor and applying for financial aid was much stronger for the two-year student. No obvious reason exists to suggest that
two-year college students who spoke to a counselor were more predisposed to applying for financial aid than four-year college students who spoke to a counselor, so the increased financial aid application rate (of two-year students over four-year students) is due to some cause other than just predisposition.

Second, speaking to a counselor for the two-year students was also correlated with a shift in the student's own understanding of her financial need and eligibility as it related to not applying for financial aid. Therefore the question of whether a discussion with the counselor in part impacted the reasons that non-applicants decided not to apply needs further exploration. It is plausible that students who spoke to a counselor about financial aid were predisposed to believe they needed financial aid. This would account for why those who spoke to a counselor and then did not apply were less likely to say they did not apply due to financial need than other non-applicants. This logic does not hold, however, when the findings show that for non-applicants who spoke to a counselor there was an increased rate of reporting that the reason for not applying was she was ineligible for financial aid. It does not make sense that those predisposed to believe themselves ineligible for financial aid spoke to a counselor at a higher rate than those who did not believe they were ineligible. The discussion with a counselor about financial aid, then, can reasonably be supposed to have impacted the student's understanding of her own need and eligibility. If non-applicants' understanding of these two issues was impacted by speaking to a counselor, it is likely that they also had an impact on applicants' understanding of these issues and on their decision to apply. In conclusion, speaking to a counselor correlates with being a better consumer of financial aid.
Blacks and Latinos were more likely to apply for financial aid than White, non-Latinos. Blacks have the highest rate of application. In the overall sample they were 2.0 times more likely to apply than Whites, while Blacks in the four-year sector were 2.3 times more likely and in the two-year sector were 1.6 times more likely to apply. Latinos' rates were not as high as Blacks, being 1.3 times more likely to apply compared to Whites overall and in the four-year sector, and only 1.2 times more likely in the two-year sector. Asians, on the other hand, were less likely than Whites to apply for federal aid. In the overall sample they were .67 times as likely to apply compared to Whites, while Asians at four-year institutions were .85 times as likely and Asians at two-year institutions were less than half (.48) as likely to apply.

Since both income, and income-squared were included in the model to control for income levels, this suggests that something other than income is driving the different rates of applications by ethnicity. Further along in this analysis, when I examine the reasons students do not apply, some light is shed on what else could be driving these ethnic differences; however that answer is still limited.

There is also a significant difference (at the p<0.001 level) in the risk factor for not applying based upon gender. Women overall were half again (1.5) more likely than men to apply for federal financial aid, while women at four-year institutions were a third (1.3) more likely and women at two-year institutions were two-thirds (1.65) more likely. As with the differences in rates of application by ethnicity, differences in gender cannot be explained by differences in incomes. As I move further into the regression models one of the issues I focus
on is the different risk factors for men versus women regarding why each reported not applying for financial aid.

Another factor that had significant and substantial impact on a student's risk factor for not applying for federal aid was the mother's level of education. Compared to students whose mothers had some level of postsecondary education, students whose mothers had a high school education or less were 1.29 times more likely to apply for financial aid. If a mother's education level was unknown, the student was 1.59 times more likely to apply than those whose mother had some postsecondary education. These numbers do not alter much by sector of higher education, ranging from a low of 1.34 times more likely for two-year students whose mother had a high school degree or less to 1.67 times more likely for two-year students whose mother's education level was unknown. The reasons for this are unclear.

The final factor that had both a significant and substantial impact on a student's risk factor was her dependency status. Dependent students were 1.32 times more likely than independent students to apply overall, while in the four-year sector they were 1.76 times more likely and 1.41 times more likely in the two-year sector. Possibly this is due to the fact that the dependent students are more likely to be the traditional college student, recently graduated from high school and targeted for college attendance by high school counselors and college marketing departments, so would have more access to information about the college application and the financial aid process. What contradicts this interpretation is that those who delayed enrollment into college (i.e. did not attend college directly after leaving high school)
were about 16% more likely to apply for financial aid than those who did not delay enrollment. Those who delayed enrollment in both the public four-year and public two-year were slightly more likely than the overall population (17% and 18% respectively) to apply for financial aid over those who did not delay enrollment. Since those who did not delay enrollment into college are more likely to be traditional college students, the differences in financial aid applications between dependent students and those who delayed enrollment needs further investigation.

**How demographic characteristics and sources of information explain the reasons students did not apply for federal financial aid.**

In order to better understand why students did not apply for federal financial aid, I ran five regression models using as the dependent variable for each model one of the five reasons given in NPSAS:08 for a student not applying while retaining the same demographic and information source variables used in the first regression model as the independent variables. Table 10 (split onto two consecutive pages) provides the results for all five of the regression models. Columns (4) through (6) show the odds ratio and standard deviation for those who said they did not apply for financial aid because they did not want to take on any debt, with the columns showing respectively the results for the overall sample, the public four-year sector and public two-year sector. Columns (7) through (9) provide the same information for those who said they did not apply because it was too much work. Columns (10) through (12) provide the information for those who said that they did not have sufficient information about how to apply for financial aid, while columns (13) through (15) show the data for those who did not apply because they said they did not need financial aid and columns (16) through (18) indicate the
results for those who did not apply because they said they did not believe they would be eligible.

I will analyze the data for each group of demographic characteristics and then the information sources, to help elucidate how each independent variable might be impacting the reasons students do not apply for financial aid. The only exceptions to this are the income variables which were included as control variables.

**Gender.**

The two statistically significant differences in the reasons why males and females reported they did not apply for financial aid were need and eligibility. Females were only .67 times as likely to report that they did not need financial aid as males, but were 1.36 times more likely to report that they did not think they would be eligible. When comparing public four-year and two-year results, the greatest difference appears in reporting on eligibility as the reason for not applying. While women at public four-year colleges were 1.59 times more likely than their male counterparts to cite eligibility as a reason for not applying, females at two-year colleges reported this reason only 1.29 times as often as their male counterparts.

We know from the work of Kantrowitz (2011) that many of those who reported not applying because they did not believe they were eligible actually had income levels that indicated they would have been eligible for federal grant assistance. This, along with the fact that income was controlled for in these models, means there is no obvious reason to believe that males actually had less financial aid need than females. One possible explanation is that males were
less likely to want to ask for assistance or that they were more likely to believe they could support themselves. They may have been more likely than females to feel that whether or not they were eligible, they did not want to receive assistance. Another possible explanation is that families were more likely to be willing to financially assist the male family members through college, leaving females with a greater need for assistance. This explanation would help to explain why females reported needing financial aid at a higher rate than males but not believing they would qualify at a higher rate since they (the female students) may not have felt they would qualify based on their families’ income.
Table 10: NPSAS: Five logistic regression models -- Five reasons for not applying for federal financial aid as dependent variable, continued on next page

<table>
<thead>
<tr>
<th></th>
<th>(4) DEBT All Sectors Odds Ratio/se</th>
<th>(5) DEBT Public, 4 yr Odds Ratio/se</th>
<th>(6) DEBT Public 2 yr Odds Ratio/se</th>
<th>(7) WORK All Sectors Odds Ratio/se</th>
<th>(8) WORK Public, 4 yr Odds Ratio/se</th>
<th>(9) WORK Public 2 yr Odds Ratio/se</th>
<th>(10) INFO All Sectors Odds Ratio/se</th>
<th>(11) INFO Public, 4 yr Odds Ratio/se</th>
<th>(12) INFO Public 2 yr Odds Ratio/se</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>0.943 (0.043)</td>
<td>0.984 (0.071)</td>
<td>0.935 (0.057)</td>
<td>1.050 (0.060)</td>
<td>1.093 (0.098)</td>
<td>1.020 (0.077)</td>
<td>1.023 (0.056)</td>
<td>1.089 (0.100)</td>
<td>0.997 (0.070)</td>
</tr>
<tr>
<td>Black</td>
<td>1.202* (0.109)</td>
<td>1.140 (0.183)</td>
<td>1.276* (0.141)</td>
<td>1.037 (0.116)</td>
<td>0.822 (0.171)</td>
<td>1.086 (0.148)</td>
<td>0.865 (0.093)</td>
<td>1.218 (0.232)</td>
<td>0.797 (0.106)</td>
</tr>
<tr>
<td>Latino</td>
<td>0.940 (0.071)</td>
<td>0.906 (0.125)</td>
<td>0.936 (0.089)</td>
<td>0.995 (0.093)</td>
<td>0.912 (0.156)</td>
<td>0.999 (0.117)</td>
<td>1.132 (0.097)</td>
<td>0.978 (0.159)</td>
<td>1.153 (0.123)</td>
</tr>
<tr>
<td>Asian</td>
<td>1.161 (0.115)</td>
<td>1.211 (0.177)</td>
<td>1.138 (0.151)</td>
<td>1.517* (0.168)</td>
<td>2.053** (0.330)</td>
<td>1.227 (0.192)</td>
<td>1.387* (0.151)</td>
<td>1.556** (0.260)</td>
<td>1.310 (0.187)</td>
</tr>
<tr>
<td>Other, non-white</td>
<td>1.075 (0.129)</td>
<td>0.828 (0.173)</td>
<td>1.226 (0.184)</td>
<td>1.397 (0.200)</td>
<td>1.161 (0.290)</td>
<td>1.577* (0.276)</td>
<td>1.309* (0.179)</td>
<td>1.183 (0.293)</td>
<td>1.374 (0.231)</td>
</tr>
<tr>
<td>Dependent</td>
<td>1.048 (0.063)</td>
<td>0.782 (0.084)</td>
<td>1.161 (0.087)</td>
<td>1.276* (0.094)</td>
<td>1.000 (0.137)</td>
<td>1.319* (0.119)</td>
<td>1.917* (0.138)</td>
<td>1.406* (0.196)</td>
<td>2.086** (0.181)</td>
</tr>
<tr>
<td>Delayed</td>
<td>0.960 (0.053)</td>
<td>0.921 (0.099)</td>
<td>0.938 (0.063)</td>
<td>1.055 (0.073)</td>
<td>0.911 (0.123)</td>
<td>1.041 (0.086)</td>
<td>1.197* (0.076)</td>
<td>0.985 (0.137)</td>
<td>1.210 (0.092)</td>
</tr>
<tr>
<td>Enrollment</td>
<td>0.996** (0.001)</td>
<td>0.997* (0.001)</td>
<td>0.997 (0.002)</td>
<td>0.996 (0.001)</td>
<td>0.997 (0.002)</td>
<td>0.996 (0.002)</td>
<td>0.990** (0.001)</td>
<td>0.992** (0.002)</td>
<td>0.989** (0.002)</td>
</tr>
<tr>
<td>Income-sq</td>
<td>1.000 (0.000)</td>
<td>1.000 (0.000)</td>
<td>1.000 (0.000)</td>
<td>1.000 (0.000)</td>
<td>1.000 (0.000)</td>
<td>1.000 (0.000)</td>
<td>1.000 (0.000)</td>
<td>1.000 (0.000)</td>
<td>1.000 (0.000)</td>
</tr>
<tr>
<td>Mother’s Ed.</td>
<td>0.875 (0.112)</td>
<td>0.706 (0.166)</td>
<td>0.869 (0.133)</td>
<td>0.915 (0.140)</td>
<td>0.712 (0.206)</td>
<td>0.977 (0.175)</td>
<td>0.923 (0.131)</td>
<td>0.785 (0.234)</td>
<td>0.941 (0.157)</td>
</tr>
<tr>
<td>Unknown</td>
<td>0.865* (0.044)</td>
<td>0.950 (0.078)</td>
<td>0.865* (0.055)</td>
<td>0.954 (0.059)</td>
<td>0.955 (0.096)</td>
<td>0.948 (0.074)</td>
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<td>1.073 (0.110)</td>
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<tr>
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<td>1.102 (0.089)</td>
<td>0.937 (0.071)</td>
<td>0.998 (0.068)</td>
<td>0.918 (0.094)</td>
<td>1.075 (0.099)</td>
<td>0.931 (0.061)</td>
<td>1.061 (0.105)</td>
<td>0.907 (0.080)</td>
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<tr>
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<td>1.068 (0.094)</td>
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<td>1.027 (0.133)</td>
<td>1.006 (0.076)</td>
<td>0.874** (0.062)</td>
<td>0.845 (0.127)</td>
<td>0.942 (0.077)</td>
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<td>0.845 (0.086)</td>
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<td>1.125 (0.112)</td>
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<td>1.070 (0.110)</td>
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<td>1.170 (0.127)</td>
<td>1.157 (0.106)</td>
<td>1.055 (0.069)</td>
<td>1.034 (0.112)</td>
<td>1.085 (0.093)</td>
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<td>1.000 (0.073)</td>
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<td>1.100 (0.103)</td>
<td>0.945 (0.066)</td>
<td>0.820 (0.099)</td>
<td>0.966 (0.086)</td>
</tr>
</tbody>
</table>

\* Exponentiated coefficients; Standard errors in parentheses, * p < 0.05, ** p < 0.01, *** p < 0.001. Reference groups include: White, Mother’s education some post-secondary, and student only member of household in college.
Table 10: NPSAS: Five logistic regression models -- Five reasons for not applying for federal financial aid as dependent variable, continued from previous page

<table>
<thead>
<tr>
<th></th>
<th>(13) NEED All Sectors</th>
<th>(14) NEED Public, 4 yr</th>
<th>(15) NEED Public 2 yr</th>
<th>(16) ELIGIBILITY All Sectors</th>
<th>(17) ELIGIBILITY Public, 4-yr</th>
<th>(18) ELIGIBILITY Public 2-yr</th>
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<td>Odds Ratio/se</td>
<td>Odds Ratio/se</td>
<td>Odds Ratio/se</td>
<td>Odds Ratio/se</td>
<td>Odds Ratio/se</td>
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<td>(0.109)</td>
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<td>(0.115)</td>
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<tr>
<td>Dependent</td>
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<td>0.664**</td>
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<tr>
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<td>(0.112)</td>
<td>(0.061)</td>
<td>(0.043)</td>
<td>(0.096)</td>
<td>(0.049)</td>
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<tr>
<td>Delayed</td>
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<td>1.003</td>
<td>0.931</td>
<td>1.004</td>
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<td>Enrollment</td>
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<td>1.010</td>
<td>1.008</td>
<td>1.004**</td>
<td>1.003**</td>
<td>1.004**</td>
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<td>Income</td>
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<td>(0.006)</td>
<td>(0.001)</td>
<td>(0.012)</td>
<td>(0.006)</td>
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<td>1.000</td>
<td>1.000</td>
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<td>1.000</td>
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<td>(0.000)</td>
<td>(0.000)</td>
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<td>0.930</td>
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<td>(0.125)</td>
<td>(0.114)</td>
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<td>(0.083)</td>
<td>(0.057)</td>
<td>(0.054)</td>
<td>(0.085)</td>
<td>(0.072)</td>
</tr>
<tr>
<td>HS deg or less</td>
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<td>0.998</td>
<td>1.057</td>
<td>1.083</td>
<td>1.187*</td>
<td>1.056</td>
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<tr>
<td>Other household</td>
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<td>(0.083)</td>
<td>(0.080)</td>
<td>(0.059)</td>
<td>(0.098)</td>
<td>(0.079)</td>
</tr>
<tr>
<td>Members in college</td>
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<td>0.970</td>
<td>0.949</td>
<td>0.913</td>
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<tr>
<td></td>
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<td>(0.099)</td>
<td>(0.060)</td>
<td>(0.046)</td>
<td>(0.092)</td>
<td>(0.061)</td>
</tr>
<tr>
<td>First year student</td>
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<td>1.449***</td>
<td>1.204***</td>
<td>1.092</td>
<td>1.067</td>
<td>1.085</td>
</tr>
<tr>
<td>Full-time</td>
<td>(0.070)</td>
<td>(0.124)</td>
<td>(0.092)</td>
<td>(0.058)</td>
<td>(0.091)</td>
<td>(0.082)</td>
</tr>
<tr>
<td>Friends &amp; family</td>
<td>0.793***</td>
<td>0.720***</td>
<td>0.815***</td>
<td>1.126*</td>
<td>1.178*</td>
<td>1.074</td>
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<td>for fin. aid info.</td>
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<td>(0.054)</td>
<td>(0.056)</td>
<td>(0.095)</td>
<td>(0.072)</td>
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<tr>
<td>Internet research for fin. aid info.</td>
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<td>0.762**</td>
<td>0.843*</td>
<td>1.295***</td>
<td>1.447***</td>
<td>1.246*</td>
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<tr>
<td></td>
<td>(0.046)</td>
<td>(0.069)</td>
<td>(0.065)</td>
<td>(0.075)</td>
<td>(0.130)</td>
<td>(0.097)</td>
</tr>
<tr>
<td>Spoke to</td>
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<td>0.733**</td>
<td>0.790**</td>
<td>1.164*</td>
<td>1.126*</td>
<td>1.195*</td>
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<td>(0.063)</td>
<td>(0.072)</td>
<td>(0.112)</td>
<td>(0.097)</td>
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<tr>
<td>N</td>
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<td>5,056</td>
<td>6,914</td>
<td>14,300</td>
<td>5,056</td>
<td>6,914</td>
</tr>
</tbody>
</table>

Exponentiated coefficients; Standard errors in parentheses. * p < 0.05, ** p < 0.01, *** p < 0.001 Source: NPSAS:08, data analyzed by author. Reference groups include: White, Mother’s education some post-secondary, and student only member of household in college.


RACE/ETHNICITY.

Blacks were 20% more likely than Whites to report that they did not apply for financial aid because they did not want to take on debt. Whites, however, were 27% more likely than Blacks to report that they did not apply because they did not need financial aid. These trends held up at a statistically significant level for Blacks in the public, two-year sector, where they were 27% more likely than Whites to cite not wanting debt, and while Whites were 28% more likely to report not needing financial aid when compared to Blacks. For Blacks at four-year institutions, there were no statistically significant differences in the reasons that they reported not applying for financial aid as compared to their White counterparts.

Like Blacks, Latinos were less likely than Whites to report not needing financial aid as a reason for not applying. Overall, Whites were 25% more likely to report no financial need compared to Latinos, while at the four-year institutions Whites were 36% more likely to report this reason and at two-year institutions they were 22% more likely to report not needing financial aid. Latinos’ overall and at two-year institutions were 18% and 24% more likely than their counterpart Whites to report that they did not apply for financial aid because they did not believe they would be eligible. Since NPSAS:08 does not ask what a student understands by "eligible" it is somewhat problematic to interpret the result since one does not know if a non-applicant meant that they thought their household made too much income to qualify, if they thought that there was a merit component to financial aid and their own grades or test scores did not qualify, or for some other reason they thought they would not qualify for financial aid. However, it is reasonable to conclude that Latinos were at a higher risk for believing they were
not eligible due to immigration status and that they would be at a higher risk for this than White, non-Latino students. It also is reasonable, given the current political climate regarding undocumented students and higher education, that far fewer undocumented students would enroll at the more expensive four-year institutions, which would explain why this is an issue at two-year colleges but not four-year colleges since students are more likely to be able to finance their education without federal aid at the lower tuition schools.

Asians were 52% more likely than Whites to report that the federal financial aid application process was too much work, and those at four-year colleges were twice as likely. Those at two-year colleges were not significantly more likely than Whites to report this reason, however. These numbers seem to be closely linked to the risk for not having enough information about financial aid, as Asians were 39% more likely than Whites to cite this reason, and Asians at four-year institutions were 56% more likely to cite a lack of information. If looking at the federal financial aid application were to appear overwhelming and too confusing to complete, a non-applicant could be expected to report the reasons for not completing the form as it was too much work and/or she did not have enough information. Similar to the amount of work as an issue, Asians at two-year institutions did not report a lack of information at a statistically significant higher rate than Whites.

Asians, like Latinos, were less likely than Whites to report that they did not need financial aid for the overall sample and four-year colleges, but there was no significant difference for two-year non-applicants.


**Dependency status.**

Dependent non-applicants were 28% more likely than independent non-applicants to report that the process was too much work and 92% more likely to report that they did not have enough information. On the other hand, independent non-applicants were 14% more likely than dependent non-applicants to report not needing financial aid, and 28% more likely to report they did not believe they would be eligible. At the four-year institutions, there was no statistically significant difference between dependents and independents reporting that the financial aid process was too much work, and dependent non-applicants were 40% more likely than independent non-applicants to report that they did not have enough information. In contrast, at two-year institutions dependent non-applicants were 32% more likely to say that the process was too much work and were 108% more likely to say that they did not have enough information to apply for financial aid. Again, as with Asians, we see that at two-year institutions the issue of the amount of work that the federal financial aid application form required and the lack of information a student had about the process show similar trends.

Since independent students seem to cite fewer problems than dependent students with the amount of work and getting the information on how to apply to financial aid, this suggests that figuring out how to maneuver through a bureaucratic process like financial aid may be a skill that dependent students at two-year institutions have not learned. It is also true that independent students would have more control over the application process since dependent students have to rely on getting their parents’ financial information for the process. If parents are not cooperative, dependent students cannot apply for financial aid but this reason for not
applying does not explicitly show up in NPSAS:08. It is plausible that students with parents who are uncooperative or unprepared to complete the financial aid process would show up under the 'too much work' and/or 'not enough information' categories.

At two-year institutions, independent non-applicants were 18% more likely than dependent non-applicants to report a lack of financial need as a reason for not applying, while they were 34% more likely to report believing they wouldn't be eligible as a reason. Looking at non-applicants in the four-year sector, there was no significant difference in the rate at which dependent and independent non-applicants indicated these reasons for not applying.

This data suggest that somehow dependent students are coming to two-year colleges more intimidated by and with less information about the financial aid process than independent students, but not necessarily with less need or eligibility for financial aid. They may be showing up in the two-year sector because unless they have applied for financial aid they cannot afford the four-year sector.

**Delayed enrollment.**

The only statistically significant difference between those who come to college directly from high school and those who delay enrollment in college found in this analysis of reasons for not applying for financial aid was on the amount of information a non-applicant has about the process. Overall and in the two-year sector, those who delayed enrollment were about 20% more likely to say they did not have enough information to apply. Those who delay enrollment do not have access to a high school counselor nor are they as likely to be in daily contact with
peers who are also preparing to attend college, so this is a plausible explanation for the lack of information as a greater problem for those who delay enrollment.

**Mother's education.**

The mother’s education seems to have little bearing on why non-applicants report not applying. The only statistically significant results were those at two-year institutions whose mother had a high school degree or less were .87 times as likely to report not wanting to take on debt. The only other result that was significant in the overall sample (no need) was not significant for the two-year sector.

**Other household members in college.**

Whether or not a non-applicant had another household member in college was not significant for any reason with the exception of four-year non-applicants who had other college students in the household. They were 19% more likely than those who were the only college student in the household to say they did not apply because they believed they would not be eligible for financial aid. This may be due to the fact that with another college member in college they had previously had experience with financial aid, and not been successful. This, however, also suggests that students at four-year institutions are not aware that additional household members attending college improve their own chances of qualifying for financial aid. Having other members of the household in college is not a significant fact for two-year college non-applicants for any of the five reasons for not applying.
First-year student.

Being a first-year student did not place students at a higher risk for not applying for financial aid for any of the five reasons used in this analysis. This is somewhat surprising since one might expect that non-applicants who were already enrolled in college would have more information about the financial aid process than those who were entering their first year. However, since we saw in the first model that first year students are significantly more likely to apply for financial aid (1.3 times more likely at two year institutions) this data suggest that students make their decisions about financial aid early in their college career and that after the first year are unlikely to start applying or change their reason for not applying.

Enrollment status.

Full-time enrollment status had a minimal impact within the public sector on reasons for not applying. This is important to note since we saw earlier that enrollment status was the primary predictor for whether or not a student applied for financial aid. So while enrollment status correlates to whether a student applies, it does not appear to correlate with any reason individuals cite for not applying. The only statistically significant difference between reasons that full-time and part-time students in the public sector did not apply for financial aid was in regards to need. Full-time students in the four-year sector were 45% more likely than part-time students to cite that they did not need financial aid as the reason for not applying. In the two-year sector, full-time students were 20% more likely to cite this reason. Overall, full-time students were less likely (.862 times) than part-time students to apply because they did not
want to take on debt. This difference did not show up in either the four-year or two-year public environments, however.

**Sources of information.**

I will analyze the impact that sources of information seem to have on the conclusions non-applicants come to regarding financial aid in order to compare the outcomes between sources. Sources of information on financial aid are of critical importance to this study on the financial aid institutional environment. Since my research questions focus on two-year institutions, I will begin by analyzing the financial aid information environment for this sector and then compare those results to the four-year and overall environments.

Two-year college students who spoke to friends and family or did research on the internet are 20% and 25% more likely to say that they did not apply because they did not want to incur any debt over those who did not consult these sources. Those who spoke to friends and family were 30% more likely to say that they did not apply because it was too much work over those who did not speak to friends and family. Those who spoke to a counselor were no more or less likely to cite either of these reasons than those who did not speak to a counselor.

No source of information seemed to have any impact on whether two-year non-applicants said they did not have enough information to apply. Speaking to family and friends made two-year non-applicants less likely to believe they did not need financial aid (by a factor of .82), while family and friends had no influence on a non-applicant believing she was not eligible. Those non-applicants who reported using internet research.84 times less likely to believe they
had no financial need, and 1.25 times more likely to believe that they were not eligible for financial aid.

The only two places that speaking to a counselor was able to predict reasons for not applying for financial aid were for those who said they did not have any financial need and those who said they did not believe they were eligible. Two-year non-applicants who spoke to a counselor were only .79 times as likely to say that they did not apply because they did not need financial aid as those who did not speak to a counselor. The results showing a decreased likelihood of no financial need as a reason for not applying could mean that students who went to speak to a counselor about financial aid were already more likely to believe they had financial need than those who did not. It could also mean that counselors were effective in discussing the long-term benefits of retention and success for those who receive financial aid.

Two-year non-applicants who spoke to a counselor were 20% more likely to say they did not apply because they did not think they were eligible. Non-applicants who spoke to a counselor who were more likely to report their eligibility may have meant ‘non-eligible’ for a number of different reasons because there is no specificity in the term ‘eligible.’ It is hard to imagine why those who spoke to a counselor were more likely to report that they were ineligible, unless there is a progression to the reasons a student does not apply. By “progression” I mean that the first hurdles a student has to overcome to apply for financial aid is believing that she can successfully do the work (work barrier) and understanding how to do it (information barrier). If the counselor successfully helps the student to overcome these two barriers, the student may then progress to understand that she is not eligible for financial aid.
(eligibility barrier). This would explain why there is a correlation between non-applicants who spoke to a counselor and reported not being eligible. In this case, the student’s assessment of her own eligibility may reflect that she has become a more educated consumer of financial aid. One way to test the validity of this explanation would be to run an analysis on students’ eligibility for financial aid based on household income and then see if non-applicants who spoke to a counselor and reported being ineligible were more likely to be income-ineligible than non-applicants who did not speak to a counselor and reported being ineligible. Of course it is important to note here that there are types of financial aid available through the FAFSA that may not be need-based aid and the student might still benefit from filling out the FAFSA. However, she would certainly be making a more educated evaluation of her eligibility for need-based aid than a student who believes she is ineligible because she is not an honors student.

For the overall sample, the outcomes were very similar to the two-year sector with the most notable exception being that in the overall sample those who spoke to friends and family were 13% more likely to not apply than because they thought they were ineligible. In the four-year sector, the results were also largely similar to the two-year sector. One of the differences lay in the fact that those who spoke to a counselor in the four-year sector were only .71 times as likely as to cite too much work for not applying as those who did not speak to a counselor while speaking to a counselor made no statistically significant difference in the two-year sector. In addition, the magnitude of the impact that the internet research had on four-year students understanding of their eligibility was greater. Four-year students who did research on the internet were 45% more likely (compared to the 25% increased likelihood for two-year
students) to believe they were not eligible for aid as compared to those who did not do internet research.

These results suggest that friends, family and the internet had a greater impact than counselors on those who did not apply and their reasons for not applying. Friends, family and the internet impacted a student's willingness to take on debt, the amount of work she perceived in the financial aid process, as well as her perception of whether she could afford college without financial aid and her own eligibility for financial aid. Counselors' most pronounced impact was on whether students felt they could afford a post-secondary education without financial aid and the non-applicant's perception of her own eligibility. Counselors had the biggest influence on whether one applies but not a big influence on why non-applicants did not apply.

Four-year counselors have an impact on students' perception of how much effort (work) is required to apply, an arena in which one would hope that counselors would help to facilitate. The lack of this impact in the overall sample or the two-year schools could be explained by high school counselors not adequately assisting students in navigating the process if the student appears to be uncommitted to college or headed towards the two-year sector, which was noted earlier with those when looking at the descriptive variables. It is also possible that those in the four-year sector who speak to a counselor and then do not apply were at a lower risk for not having enough information on how to apply from the outset of the process. Another factor here could be that the financial aid process itself could be simpler at the four-
year sector level so that speaking to a counselor about the process had a greater impact on reducing the complexity of applying for the student.

In comparing these results to data analyzed earlier, of particular note is that speaking to a counselor seemed to have the greatest impact on the two categories of reasons that were also the most cited reasons for not applying: not feeling one needed financial aid and not believing one was eligible for financial aid. It is also important to remember that speaking to a counselor made a student 227% more likely to apply for financial aid in the two-year sector.

From here, I will turn to the case study data analysis. While the quantitative data were national in scope and the case study’s scope is institutional, there are similar findings. The case study helps to illuminate aspects of the national data and expands and enhances other parts.

**Northampton Community College: A Case Study of One Financial Aid Institutional Environment and its Financial Aid Outcomes**

Founded in 1967 with its main campus in Bethlehem, Pennsylvania, Northampton Community College (NCC) enrolls around 11,000 credit students each semester (roughly 8,000 full-time equivalent) (Northampton Community College, 2012). The college is a comprehensive two-year college offering Associate in Arts, Associate in Science and Associate in Applied Science degrees. This case study will begin by describing the financial aid office and its concerns as seen through official college documents. From there the financial aid process will be explored through the NCC student perspective as gathered from the survey conducted specifically for this research. Responses from this survey will help both to understand better
the financial aid institutional environment at NCC and how it corresponds to the national level description as analyzed through the NPSAS:08 data. Finally, interviews conducted with 13 high- and mid-level administrators, and counselors and faculty members regarding the financial aid institutional environment at NCC will be analyzed and synthesized with the other two sources of information collected.

The NCC financial aid institutional environment: document perspective.

The NCC financial aid office operates as part of the student services division of the college. The college operates under a strategic plan that has three initiatives: access, engagement and excellence ("Northampton Community College strategic plan 2009 – 2014," 2009). The work of the financial aid office fits most directly under the ‘access’ initiative which is defined as providing educational opportunities "paying particular attention to keeping NCC affordable" ("Northampton Community College strategic plan 2009 – 2014," p. 3, 2009). The financial aid office is staffed by a Director, Associate Director, three full-time financial aid officers, three full-time support staff and three part-time support staff. In a review of internal annual reports of the last five years, applications for financial aid and the percentage of Pell recipients has increased every year at a rate greater than annual applications or enrollment (Northampton Community College, 2008, 2009, 2010, 2011, 2012). As of the 2011 school year, almost half the credit students were Pell recipients (Northampton Community College, 2012, Student Affairs section).

During the 2011-2012 year, the financial aid office processed 13,336 financial aid applications, while 7,879 students were awarded and accepted grants, loans or other financial
aid benefits (Northampton Community College, 2012). For new students, there was a 70% application rate with 2,495 new students applying out of a total of 3,546 total new students (McGuire Closson, M. personal communication, January 11, 2013). A total of 8,219 initial award letters were mailed to prospective students and an additional 10,191 revised award notifications were mailed or emailed to students, for a total of 18,410 award notifications for 7,879 student acceptances (Northampton Community College, 2012, Student Affairs section). This means that for each enrolled student using financial aid, the college sent out an average of 2.34 award notifications, reflecting a heavy paperwork flow.

The workflow for the financial aid office can be seen in Table 11 that describes the number of financial aid applications received for processing throughout the year. The table covers a year and a half period because this is the span of time over which the office receives financial aid applications for a given school year. One can see that while the bulk of the financial aid applications for NCC come in by June 1st, there were a substantial number that arrived after that date and throughout the school year. This was particularly true for the summer months leading up to the fall semester and the first several months of the fall semester.
Table 11. NCC: Financial Aid Applications Received for entire 2011/12 School Year

<table>
<thead>
<tr>
<th>Dates application received</th>
<th>Number of applications received</th>
<th>Total received for year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 1, 2011 to March 1, 2011</td>
<td>598</td>
<td>598</td>
</tr>
<tr>
<td>March 2, 2011 to June 1, 2011</td>
<td>7,078</td>
<td>7,676</td>
</tr>
<tr>
<td>June 2, 2011 to Aug. 1, 2011</td>
<td>1,838</td>
<td>9,514</td>
</tr>
<tr>
<td>Aug. 2, 2011 to Oct. 1, 2011</td>
<td>1,636</td>
<td>11,150</td>
</tr>
<tr>
<td>Oct. 2, 2011 to Dec. 1, 2011</td>
<td>874</td>
<td>12,024</td>
</tr>
<tr>
<td>Dec. 2, 2011 to Feb. 1, 2012</td>
<td>817</td>
<td>12,841</td>
</tr>
<tr>
<td>Feb. 2, 2012 to Apr. 1, 2012</td>
<td>253</td>
<td>13,094</td>
</tr>
<tr>
<td>Apr. 2, 2012 to June 8, 2012</td>
<td>242</td>
<td>13,336</td>
</tr>
</tbody>
</table>

Source: (Northampton Community College, 2012, Student Services section under financial aid report)

This data suggest a heavy workload for the NCC financial aid office, and that a substantial portion of it had to be processed after the beginning of the semester when tuition bills were due at the college. The NCC information brochures and paperwork distributed to students emphasized that March 31st was the financial aid priority application deadline for the fall semester and October 1st was the priority deadline for spring semester and that those who did not apply by this deadline "may be required to pay their bill until their financial aid application is processed." While NCC has a 'priority' deadline, the college does not have a hard deadline for financial aid applications and will process applications as they come in, unlike the norm in the four year sector. Although NCC processes financial aid applications submitted after the priority deadline, the federal financial aid deadline is June 30th (United States Department of Education, 2012) and the state of Pennsylvania's deadline is August 1st for first
time college students, so students who apply after these deadlines miss the opportunity to receive federal and state grant aid.

The Director of the financial aid division and Vice President of Student Affairs have taken particular note of the number of loans and the debt being incurred by its students and their parents. The following comments were found in the annual internal reports in the sections the Director and Vice-President contribute to the annual report:

While there was growth in the Pell Grant program, there is considerable concern about the amount of loans being processed, in particular the alternative loan program. This year 72 students -- almost double that of last year -- received $322,472 in loans. Last year alternative loans went to 40 students for $199,941. These are very costly loans for students and their families -- with high interest rates and unforgiving payback policies. (Northampton Community College, 2008, Student Services section introduction)

Of the $8.9 million ($6.7 million) in student Stafford loans, $4.8 million ($3.4 million) are non-need based unsubsidized loans. Parent Plus Loans decreased for the third year in a row to $315,778 ($338,059).4 (Northampton Community College, 2009, Student Services section under the financial aid office report)

Of the $10.4 million ($8.9 million) in student Stafford loans, $5.3 million ($4.8 million) are non-need based unsubsidized loans. Parent Plus Loans decreased for the fourth

4 Numbers in parenthesis are from the previous school year included in the report for comparison purposes.
year in a row to $282,719 ($315,778). (Northampton Community College, 2010, Student Services section under the financial aid office report)

Of the $10.5 million ($10.4 million) in student Stafford loans, $5.1 million ($5.3 million) are non-need based unsubsidized loans. After four years of Parent Plus Loans decreasing, last year parent loans amounted to $374,259 ($282,719), a total dollar increase of 32% over last year. (Northampton Community College, 2011, Student Services section under the financial aid office report)

While enrollment leveled off, federal financial aid dollars did not. We offered $36,905,291 in aid which is 11% more than last year. Our Pell recipients continue to rise and now are nearly half our student population at 5,618 students. More distressing is that we continue to see an increase in the amount of students borrowing money. Parent Plus loan dollars increased by 27%. (Northampton Community College, 2012, Student Services section introduction)

The concern over student debt expressed in these internal reports was echoed in the high- and mid-level administrators' and counselors' interviews conducted. The concern here was not a concern for the institution’s standing with federal financial aid programs due to non-repayment, as detailed by The Project on Student Debt (Cochrane & Szabo-Kubit, 2011). The loans that caused concern to NCC's administrators and counselors were the private, high interest loans. Their concerns are backed by the research of Hart and Mustafa (2008) who suggest that low and low-middle income students are particularly susceptible to borrowing and
will use the high interest unsubsidized private loans if the lower, interest subsidize loans are not available, thereby increasing the cost of college attendance.

The internal annual reports also refer to an NCC, in-house survey begun in the fall of 2010 to determine why those who had begun the admissions process and had not ended up attending NCC chose not to attend. The results of that survey can be seen in Table 12. In this survey, respondents were able to choose more than one reason, so total responses add up to more than the total number surveyed. The top two reasons for not attending -- 'financial concerns/difficulties' and 'didn't apply for financial aid or didn't apply early enough' -- reflected a concern with how the student would fund her college education. In 2010, these two categories captured 113 of the 236 responses given, while the remaining nine categories captured the remaining 126 responses. The 126 remaining responses included eight responses in the 'Other' category that also reflected a concern with how the student would fund her college education (e.g. "Dropped for non-payment," "Not enough financial aid to cover housing costs," "Did not have financial aid in time due to verification process," and "Financial aid was late."). The results in 2011 were similar with 173 of the 447 falling within the first two categories and 4 of the 'Other' comments reflecting financial concerns (e.g. "Financial aid paperwork too confusing," and "Never notified if financial aid came through.").
Table 12. NCC No-Show Survey Results for Fall 2010 and 2011

<table>
<thead>
<tr>
<th>Reason</th>
<th>Fall 2010 Survey (n=157)</th>
<th>Fall 2011 Survey (n=324)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial concerns/difficulties</td>
<td>65</td>
<td>109</td>
</tr>
<tr>
<td>Didn't apply for financial aid or didn't apply early enough</td>
<td>48</td>
<td>64</td>
</tr>
<tr>
<td>Chose to attend different college</td>
<td>23</td>
<td>74</td>
</tr>
<tr>
<td>Too many commitments</td>
<td>13</td>
<td>32</td>
</tr>
<tr>
<td>No housing</td>
<td>21</td>
<td>35</td>
</tr>
<tr>
<td>Classes needed were closed</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>Classes needed not offered at convenient time</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Classes needed not offered this semester</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Not accepted into chosen program</td>
<td>8</td>
<td>43</td>
</tr>
<tr>
<td>Did not receive enough information to make a decision</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Other</td>
<td>27</td>
<td>64</td>
</tr>
</tbody>
</table>

Source: NCC internal No-Show Survey: Fall 2010 & 2011

Even if one assumes that every respondent who said that she 'didn’t apply for financial aid' also said that she did not attend NCC due to 'financial concerns,' this would mean that a minimum of 41% of the respondents in the 2010 survey and 34% of the respondents in the 2011 survey were no-shows due to a lack of financial support. College administrators familiar with this survey reported that respondents who chose these categories were not the same respondents who attended other colleges, but rather that these responses indicated the

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5 In this survey, respondents were able to choose more than one reason, so total responses add up to more than the total number surveyed.
6 NCC has offered residential housing for its students since 1986.
7 While NCC is an open admissions institution, there are specific academic programs that have admission requirements.
individual chose not to pursue a post-secondary education. This suggests that for a significant number of potential students in the NCC catchment area, financial aid makes the difference in whether or not a student attends post-secondary education.

**The NCC financial aid institutional environment: Student perspective.**

On September 9, 2012, the NCC Vice-President of Students Services sent out an email inviting 2,500 students to participate in a survey on financial aid that I had developed based on questions from the NPSAS:08. The survey was sent to students who the NCC student database had registered as 'new students' who were in courses typically taken by first semester, degree students. The survey was open for 5 weeks until October 17th, and students were sent two email reminders and offered an incentive to fill out the survey. The survey had an 18% return rate, with 445 students responding. Along with questions modeled on some of the questions asked on NPSAS:08, I included open-ended responses in order to elicit a more complete picture. I did not include demographic information that was unlikely to receive an accurate response (e.g., income), the rationale for which is explained in the methods chapter (chapter 3). I have included three quantitative analyses here that mirror the analyses done on the national data: 1) FAFSA application rates and sources of information by demographic characteristics, 2) FAFSA non-applicants' reasons for not applying by demographic characteristics, and, 3) Reasons for not applying for federal financial aid by source of information. My analyses looks at trends in the data and compare results with the national data.

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8 The incentive was the chance to be registered in a raffle with three prizes of $50 gift cards that could be used at campus vendor sites.
survey, as well as providing some discussion on how the open-ended responses further elucidate the financial aid application environment students negotiated.

**FAFSA application rates and sources of information by demographic characteristics.**

Based on the survey, the overall rate of applications at NCC were 86%, much higher than the 59% reported overall at the national level, and far higher than the 43% for public, two-year college sector rate reported out of the NPSAS:08 data. It is also higher than the actual rate of financial aid applications (70%) at the college (McGuire Closson, M. personal communication, January 11, 2013). This potentially meant that those who took the initiative to apply for financial aid were more likely to respond to the survey in what Shadish, Cook and Campbell call reactive self-reporting (2002, p. 77), which may explain the elevated response rate.

While the results from this survey may be over-reporting financial aid application rates, there is no reason to believe that the relative rate at which particular demographic groups used the different sources of financial aid information has been distorted. In addition, there is no reason to believe that the rate at which non-applicants reported reasons for not applying has been distorted. It is important to note here that some of the categories are very small so drawing conclusions would not be warranted.

As with the national data, Blacks (96%), Latinos (92%), and those whose mother’s level of education is unknown (94%) applied at a rate at least 5% higher than the overall population.
In addition and contrary to national level data, independents (91%), those whose mother’s had no post-secondary education (93%), and those who were beyond their first year in college (94%) also reported applying for financial aid at a rate at least 5% higher than the overall
Table 13. NCC: FAFSA application rates and sources of information by demographic characteristics

<table>
<thead>
<tr>
<th>Category (n)*</th>
<th>Applied for FAFSA?</th>
<th>Spoke to friends &amp; family</th>
<th>Used internet</th>
<th>Spoke to counselor</th>
<th>Of those who spoke to friends &amp; family % who applied</th>
<th>Of those who did not speak to friends &amp; family % who applied</th>
<th>Of those who did research on their own % who applied</th>
<th>Of those who did not do research on their own % who applied</th>
<th>Of those who spoke to a counselor % who applied</th>
<th>Of those who did not speak to a counselor % who applied</th>
</tr>
</thead>
<tbody>
<tr>
<td>All (445)</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Gender</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Female (288)</td>
<td>86%</td>
<td>61%</td>
<td>39%</td>
<td>43%</td>
<td>89%</td>
<td>82%</td>
<td>100%</td>
<td>82%</td>
<td>90%</td>
<td>66%</td>
</tr>
<tr>
<td>Male (100)</td>
<td>88%</td>
<td>25%</td>
<td>23%</td>
<td>24%</td>
<td>88%</td>
<td>88%</td>
<td>94%</td>
<td>85%</td>
<td>87%</td>
<td>79%</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
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<td></td>
<td></td>
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<td></td>
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<td></td>
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<tr>
<td>White (277)</td>
<td>84%</td>
<td>68%</td>
<td>60%</td>
<td>61%</td>
<td>88%</td>
<td>76%</td>
<td>92%</td>
<td>79%</td>
<td>91%</td>
<td>65%</td>
</tr>
<tr>
<td>Black (54)</td>
<td>96%</td>
<td>11%</td>
<td>13%</td>
<td>12%</td>
<td>96%</td>
<td>96%</td>
<td>100%</td>
<td>94%</td>
<td>96%</td>
<td>100%</td>
</tr>
<tr>
<td>Latino(84)</td>
<td>92%</td>
<td>19%</td>
<td>24%</td>
<td>25%</td>
<td>92%</td>
<td>92%</td>
<td>93%</td>
<td>91%</td>
<td>94%</td>
<td>79%</td>
</tr>
<tr>
<td>Asian (12)</td>
<td>58%</td>
<td>50%</td>
<td>50%</td>
<td>42%</td>
<td>83%</td>
<td>33%</td>
<td>50%</td>
<td>67%</td>
<td>80%</td>
<td>17%</td>
</tr>
<tr>
<td>Dependency Status</td>
<td></td>
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<td></td>
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<tr>
<td>Dependent (223)</td>
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<tr>
<td>Independent (136)</td>
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<tr>
<td>Mother’s Educ Level</td>
<td></td>
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<td></td>
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<tr>
<td>No post-secondary (144)</td>
<td></td>
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<td></td>
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<tr>
<td>Any post-secondary (220)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unknown (18)</td>
<td>94%</td>
<td>5%</td>
<td>5%</td>
<td>4%</td>
<td>92%</td>
<td>100%</td>
<td>100%</td>
<td>91%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Household in college</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Just student (265)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others (123)</td>
<td>87%</td>
<td>44%</td>
<td>11%</td>
<td>31%</td>
<td>56%</td>
<td>82%</td>
<td>90%</td>
<td>86%</td>
<td>88%</td>
<td>77%</td>
</tr>
<tr>
<td>Status in college</td>
<td></td>
<td></td>
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<tr>
<td>First year (370)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Beyond first year (18)</td>
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<tr>
<td>Attendance in college</td>
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<td></td>
</tr>
<tr>
<td>Full-time (311)</td>
<td>86%</td>
<td>83%</td>
<td>83%</td>
<td>90%</td>
<td>90%</td>
<td>81%</td>
<td>93%</td>
<td>82%</td>
<td>90%</td>
<td>68%</td>
</tr>
<tr>
<td>Part-time (62)</td>
<td>84%</td>
<td>17%</td>
<td>10%</td>
<td>10%</td>
<td>83%</td>
<td>85%</td>
<td>88%</td>
<td>81%</td>
<td>84%</td>
<td>71%</td>
</tr>
</tbody>
</table>
population. Unlike the national data analysis, NCC rates of application for full-time compared to part-time students are similar as are rates for males compared to females.

Table 14 shows a summary of the difference between overall rates of information sources used based on the different sectors and data analyzed here. Similar to the national level data the most popular source of information about financial aid was friends and family (61%), speaking to a counselor (43%) was second and researching for oneself (39%) was third. At the national level the rates of applying for those who consulted each of these sources were lower than students reported at NCC. At NCC, the rates of non-application for each source were very low: 11% for friends and family, 7% for researching on one’s own, and 10% for counselors. The low rates of non-applicants by each source of information at NCC could imply that those who sought out a source of information were more likely to be encouraged to apply than those at the national level. Since these percentages are of all students who responded to the survey, if non-applicants responded at a lower rate than applicants to the NCC survey this could also explain the low percentages in the 'did not apply' cells.

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9 Students in the NCC survey were asked if they researched financial aid themselves rather than whether they specifically researched on the internet as in the NPSAS:08 survey. The reason for this was that after consulting with college officials, it was deemed more appropriate wording to capture those who did some research on their own that did not include the internet.
Table 14. NCC: A comparison of FAFSA application rates and sources of fin. aid info.

<table>
<thead>
<tr>
<th></th>
<th>% of ALL who…</th>
<th>Of those who spoke to friends &amp; family, % who applied</th>
<th>Of those who did not speak to friends &amp; family, % who applied</th>
<th>Of those who did research on the internet, % who applied</th>
<th>Of those who did not do research on the internet % who applied</th>
<th>Of those who spoke to a cnslr. % who applied</th>
<th>Of those who did not speak to a cnslr. applied</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPSAS:08 All</td>
<td>59% 62% 39% 48%</td>
<td>64% 49%</td>
<td>69% 52%</td>
<td>76% 43%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NPSAS:08 2-year</td>
<td>43% 54% 33% 42%</td>
<td>49% 35%</td>
<td>54% 37%</td>
<td>63% 27%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NCC</td>
<td>86% 61% 39% 43%</td>
<td>89% 82%</td>
<td>93% 82%</td>
<td>90% 66%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: NPSAS:08 and NCC Student Financial Aid Survey

Returning to the data in Table 13, one can see that a few groups -- Latinos, independents, those with a high school diploma, and full-time students -- reported talking to a counselor at a higher frequency than to friends and family. The relatively high rate of Latinos reporting having spoken to a counselor could be due to a theme reported during the administrator, counselor and faculty interviews. In four of the 13 interviews, two administrators, and two counselors reported that NCC has made an effort to support the Latinos in the college’s catchment area in the financial aid and college admissions process with special programs and outreach to this population. The higher rates of talking to counselors than friends and family for independents can be explained in that independent students were more likely to not have come directly from high school to college, and would have been more likely not to have peers who would also be planning to attend college and therefore interested and informed sufficiently to discuss financial aid. In addition, if a student was independent, she
would have been less likely to be living with her parents (family) and spoken directly with them about financial aid and financing her education. While some of the independents were married, 107 of the 136 independents who responded were not married or living with a partner, so would not have had a spouse or partner to speak with about financial aid. The higher rates for full-time students may be due to the fact that they were not as likely to be working more than 20 hours per week as part-time students (25% of full-time students worked more than 20 hours per week, while 48% of part-time students worked more than 20 hours per week) and therefore would have had more time to consult with a counselor.

Differences between genders at NCC regarding seeking information and applying for financial aid were much smaller than at the national level. While women reported consulting each source of information at a slightly higher rate than men, overall men reported applying for financial aid at a slightly higher rate. Although males responded to the survey at a lower level than females, there is no reason to believe that the rates of response within each category was different in relative terms, so it is reasonable to suppose that the data here accurately represents any differences in trends between males and females. Why the differences between males and females at NCC is more muted than at the national level cannot be found in this data and would require further investigation.
Non-applicants and reasons they report for not applying by demographic characteristics.

The data for why NCC's non-applicants do not apply for financial aid is more problematic to interpret due to very small sample sizes in many of the categories. In Table 15, one can see the sample size for each category in parenthesis after the category name.

Like the national data, there is a gender difference when it comes to reporting not having financial need and not believing oneself eligible. Just as with the NPSAS:08 analyses, women (40%) reported at a lower rate than men (58%) not having financial need, and yet reported at a higher rate (36%) then men (17%) that they believed themselves ineligible for financial aid. I did not find any echoing theme regarding gender differences in the interview data. This is an area that requires further investigation to determine the causes of this difference.

Overall, students at NCC reported a lower rate of concern regarding debt as a reason for not applying for financial aid than students at two-year colleges at the national level (16% versus 41%). In addition, students at NCC reported that the financial aid application process was too much work at a lower rate than nationally (9% versus 19%). A lack of information, however, was reported at almost the same rate as nationally (19% versus 24%). NCC students also reported not having financial need at a lower rate (39% versus 49%), as was not believing they were eligible at a lower rate (25% versus 59%). At the national level, not believing one was eligible was the top reason for not applying for public, two-year colleges, while not having
financial need was the next most popular reason, followed by not want to take on debt, not having enough information and feeling the process was too much work was the least cited reason. NCC students reported the reasons in a different order, placing not having financial need at the top of the list, followed by not believing they would be eligible, not having enough information, not wanting to take on debt, and believing the process was too much work.

However, the open-ended response 'Other' ranked just above not wanting to take on debt.

Appendix 3 has a full list of the 'Other' reasons provided. I would like to draw on several themes found in the students' open-ended responses that are not expressed adequately by the NPSAS:08 survey and which are later reiterated in the 13 interviews conducted at NCC.

The first of those themes are students who are classified as dependent but cannot get their parents' financial information. The following are the four of sixty 'other' answers that suggested uncooperative or not present parents hindered the students' ability to navigate the financial aid process:

I couldn't get my parents tax information/records and was unsure of how to file on my own.

Because neither of my parents cooperated with the income information

I didn't have my parents around to help me

I don't know what financial aid is and I'm not sure if my parents would let me apply.
Table 15. NCC: Reasons non-Applicants at NCC did not Apply for Financial Aid by Demographic Characteristics

<table>
<thead>
<tr>
<th>Demographic Characteristics (n)</th>
<th>% of Non-Applicants who reported each reason for not applying for financial aid</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Debt</td>
</tr>
<tr>
<td>All (64)</td>
<td>16%</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Female (42)</td>
<td>14%</td>
</tr>
<tr>
<td>Male (12)</td>
<td>33%</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
</tr>
<tr>
<td>White (45)</td>
<td>16%</td>
</tr>
<tr>
<td>Black (2)</td>
<td>0%</td>
</tr>
<tr>
<td>Latino (7)</td>
<td>57%</td>
</tr>
<tr>
<td>Asian (5)</td>
<td>40%</td>
</tr>
<tr>
<td>Dependency Status</td>
<td></td>
</tr>
<tr>
<td>Dependent (37)</td>
<td>22%</td>
</tr>
<tr>
<td>Independent (12)</td>
<td>8%</td>
</tr>
<tr>
<td>HS Diploma</td>
<td></td>
</tr>
<tr>
<td>Grad. HS (48)</td>
<td>23%</td>
</tr>
<tr>
<td>GED (2)</td>
<td>0%</td>
</tr>
<tr>
<td>Parental Education (Mother)</td>
<td></td>
</tr>
<tr>
<td>High school or less (10)</td>
<td>20%</td>
</tr>
<tr>
<td>Any post-secondary (50)</td>
<td>12%</td>
</tr>
<tr>
<td>Unknown (1)</td>
<td>0%</td>
</tr>
<tr>
<td>Household in college</td>
<td></td>
</tr>
<tr>
<td>Just student (38)</td>
<td>18%</td>
</tr>
<tr>
<td>Others (16)</td>
<td>19%</td>
</tr>
<tr>
<td>Status in college</td>
<td></td>
</tr>
<tr>
<td>First year (53)</td>
<td>19%</td>
</tr>
<tr>
<td>Beyond first year (1)</td>
<td>0%</td>
</tr>
<tr>
<td>Attendance in college</td>
<td></td>
</tr>
<tr>
<td>Full-time (42)</td>
<td>17%</td>
</tr>
<tr>
<td>Part-time (10)</td>
<td>18%</td>
</tr>
</tbody>
</table>

Source: NCC Student Financial Aid Survey, 2012

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10 It is important to remember that the n represents the total number of non-applicants in this category. The percentages in each category,
These responses suggest that the NPSAS data may not be capturing one of the barriers students at NCC have encountered in the financial aid process. How wide spread this problem is nationally, whether one sector of higher education is more susceptible than another sector, or whether particular demographic groups are more likely to face this barrier than others are all questions posed by this data that require further research to answer.

In addition to this barrier, several people cited that they were too late to apply for financial aid. The comments made on this were "I applied late and did not think I could still receive financial aid. Also I didn't know how to do it" and "Missed due date." It makes logical sense that the problem of timing and missing deadlines would more prevalent at open access institutions like NCC than at institutions where students apply under a deadline. The community college sector, with open admissions policies, is more flexible around the issue of deadlines than most four-year college with selective admissions. However, students like some who responded to this survey, can find that while it may not be too late to enroll, it is too late to apply for and receive most financial aid, with one clear exception being the higher priced, unsubsidized private loans that NCC administrators expressed concern about in the internal reports. The issue of when a student applied or sought to apply is another one not captured by the national level data.

Another theme from the 'Other' responses is that students "don't know what they don't know" as one interviewee put it. Without more information, it is not possible to verify whether a student is accurate in her assessment of her ineligibility. However, in some of the 'Other' responses, there is a warranted suspicion that the student might not be making an
accurate assessment of her eligibility. Several of the quotes, including "I didn't think I had the grades to get any financial aid" and "Even though my mother is single with only one income coming in, our family usually is not considered broke enough to receive any help," suggests that the student did not understand how or when one qualifies for need-based financial aid. If students are counting themselves ineligible because they do not have a top GPA or their family isn’t eligible for social welfare assistance, they have made a decision to not apply for financial aid based on wrong information. However, it is not enough to know this if the goal is to encourage them to apply. One needs to know why they believe themselves ineligible and from where they are receiving their information in order to correct their information and make them better consumers of financial aid.

**Reasons for not applying by source of information.**

Table 16 provides information on why students at NCC reported that they did not apply for financial aid. As with other data from non-applicants for financial aid, however, due to small sample numbers in each cell, data trends are difficult to discern accurately as the data are too volatile. Across the sources of information, not believing oneself eligible and reporting not needing financial aid are the top choices for why students did not apply. Debt also seems to be mentioned at a higher rate by source than it was by demographics. At the high end are those who spoke just to NCC staff and faculty. This may reflect the concern heard earlier in the college's internal report and repeated later in the 13 interviews. The concern involved student
borrowing and private loans, and this concern may be conveyed to the students when they speak to college personnel.

Table 16. NCC: Reasons for not applying by source of information

<table>
<thead>
<tr>
<th>Reason for Not Applying (% of non-applicants by source of information)</th>
<th>n</th>
<th>Debt</th>
<th>Work</th>
<th>Info</th>
<th>Need</th>
<th>Elig.</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spoke to no one</td>
<td>15</td>
<td>13%</td>
<td>0%</td>
<td>33%</td>
<td>60%</td>
<td>20%</td>
<td>7%</td>
</tr>
<tr>
<td>Spoke just to NCC staff or faculty</td>
<td>10</td>
<td>30%</td>
<td>0%</td>
<td>10%</td>
<td>50%</td>
<td>10%</td>
<td>30%</td>
</tr>
<tr>
<td>Spoke to someone at another college or university</td>
<td>7</td>
<td>14%</td>
<td>29%</td>
<td>14%</td>
<td>29%</td>
<td>71%</td>
<td>0%</td>
</tr>
<tr>
<td>Spoke to HS counselor or teacher</td>
<td>11</td>
<td>27%</td>
<td>9%</td>
<td>9%</td>
<td>18%</td>
<td>45%</td>
<td>27%</td>
</tr>
<tr>
<td>Spoke to family and friends</td>
<td>26</td>
<td>23%</td>
<td>19%</td>
<td>27%</td>
<td>27%</td>
<td>42%</td>
<td>19%</td>
</tr>
<tr>
<td>I researched financial aid on my own</td>
<td>11</td>
<td>0%</td>
<td>18%</td>
<td>18%</td>
<td>27%</td>
<td>36%</td>
<td>36%</td>
</tr>
</tbody>
</table>

At this point, I will turn to the interviews conducted as they help to place the student interviews and college documentation into perspective.

**The NCC financial aid institutional environment: Cabinet members, administrators, & counselor perspectives.**

Over the course of three weeks, from September 27th - October 16th, 2012, I interviewed 13 individuals from NCC. They held a variety of positions, all of which had some connection to either the process of financial aid or budgetary and policy decision-making regarding the financial aid office at NCC. They had worked at NCC anywhere from 2 to 37 years in a variety of capacities. Appendix 5 has a list of positions and the number of years of service at NCC of each person interviewed. In addition, I have included the term which I use for each position. In order to maintain a level of confidentiality, I have labeled four of these
positions as 'Cabinet member,' referring to those who have sat on the President's cabinet overseeing institutional policy. Six more of the interviewees will be referred to as 'Administrator' as they administer programs and practices either within the financial aid office or within offices that directly interact with financial aid. The final three interviewees will be referred to as 'Counselor' as their primary responsibility is to work directly with students at the level of practice. The faculty member interviewed serves as both a counselor to an underrepresented population at NCC and as teaching faculty for a college success course. Some of the interviews focused on wider questions of policy and priorities for the institution and where financial aid fits into the wider institutional context, while other interviews were designed to understand the daily workings of the financial aid process and how incoming students were integrated into that process.

Four themes emerged from these interviews that provided a broad view of the institutional financial aid environment and how that environment facilitates and hinders NCC incoming students applying for financial aid: the importance of financial aid for NCC's target student populations, the dual role of the financial aid office: processing versus educating and facilitating, the NCC student circumstances that shape the institutional financial aid environment, and simplification at the national level leads to complication at the institutional environment level. I will discuss each of these four themes in the next four sections and how they relate to the information culled from the institution's documents and student survey results.
The importance of financial aid for NCC's target student population.

Cabinet members who had a long term view of NCC from a policy-making perspective reflected upon the role of financial barriers and the college's perspective on financial aid. All of them felt that financial access had been perceived as part of the open access mission from early in the college's history. The following quotes were taken from three separate interviews with administrators whose history and positions with the college allowed them to articulate the overarching perspective that addressed financial aid as an access issues:

I think NCC administrators have always viewed financial barriers as an access issue.

Our role is to break down those barriers. That has been consistent since I have been here. (Cabinet member)

It was always a goal to have more students apply for aid. It was something that we always tracked and encouraged and tried to make the process simple. It was always on the radar screen. (Cabinet member)

And I can always remember conversations when we talked about raising tuition, because someone was always the voice that said what is going to be the impact on our students. So I think there was always sensitivity to the financial barriers or any perceived financial barriers. Whether that was a Richardson\textsuperscript{11} mindset... I know it was a Kopecek mindset. I assume, knowing Dick, it was his mindset but I can't say that based on any firsthand

\textsuperscript{11} The speaker refers to Richard J. Richardson, Jr., the first president of NCC. He served for a decade and was followed by Robert Kopecek, who served as NCC president for 26 years.
knowledge. I know that Bob had a very strong student affairs background and so there was always sensitivity to financial barriers and access. (Cabinet member)

In these quotes one can see the historical concern in financial barriers to access for NCC students as a policy and practices discussion. The first cabinet member quoted here articulates the policy of seeing financial barriers as an access issue and wanting to remove those barriers. The second cabinet member talks about the explicit goal of having more students apply for financial aid, as well as alluding to practices targeted at making the process of applying for financial aid simpler. The third cabinet member's quote was within the context of reflecting upon the kind of policy discussions that took place at the level of the President's cabinet in the early decades of the college's existence.

Concerns about financial barriers and the role of financial aid were also prevalent in the interviews. Counselors and administrators who worked directly with students talked about the struggle students have to meet financial commitments and how financial aid facilitates their attendance in school:

At least the student population that I get to serve and see really are students from low-income homes so if they do not have some sort of assistance they will not be able to afford to go to college so it is critical for them to have some sort of addition help.

(Counselor)

It [financial aid] is definitely very critical because we have a large student population with a very low income so they can’t pay for their tuition. They process their information
and we have to process quickly so they are able to start their courses. I think it makes a difference in whether or not they attend. They don't have money to pay for their education. (Counselor)

I think for the ones who utilize financial aid it is essential. I have come across a handful who decide not to apply for various reasons but I think it is critical. It can be the determining factor in whether or not they attend NCC. (Counselor)

At [the private college where I used to work] they [the students] needed enough money to make a choice between different private colleges. Here our students with the low-income this makes it possible for them to attend. It isn't a choice, even with the low tuition they really can't afford it and the Pell allows them to come to college. At [the private college] we have more middle income, lower-middle income; here more than 50% who qualify for federal grant qualify for the maximum federal grant.

(Administrator)

In this set of quotes from counselors and an administrator who have served from two to 20 years at NCC one can see the recurring sentiment that low-income students make-up a large portion of the college's student body and that for this population financial aid can make the difference between whether or not they attend. The quotes show that financial aid is seen as playing an essential role for NCC's open access mission. There is also the clear perception that financial aid often makes the difference in whether or not a student attends the institution. This perception of the critical difference financial aid plays is confirmed in the results of the
NCC No-Show Survey, recalling that the results of that survey were that the top reason students did not attend NCC was due to financial barriers and a lack of financial aid. The description of a student body with a substantial percentage of low-income students is also confirmed by the significant percentage of the student body who qualifies for Pell grants, as presented in the internal annual reports.

*The dual role of the financial aid office: processing versus educating and facilitating.*

All the cabinet members interviewed and several administrators and counselors articulated some concerns regarding the dual role that the financial aid office staff played in the financial aid application process. On the one hand the student service counselor role that provided students with the information and assistance they need in order to successfully negotiate the financial aid process. The second role was the nuts and bolts of processing the financial aid packages in a timely fashion. At all levels of staff interviewed, this theme repeated itself numerous times: the trade-off between the handholding, intensive educating of students that had to take place versus the paperwork that had to be processed in order for the financial aid applications to go through.

NCC’s institutional financial aid environment leans heavily towards favoring the one-on-one counseling and hands-on interaction with the students to make sure that each financial aid package is appropriate for that person. This was reflected in the interviews, as well as the student surveys. The most comprehensive of these quotes were two that came from two of
the cabinet members. The first reflects on what has been the policy at NCC for over 30 years, while the second talks about current practices within the financial aid office:

Now we tried to get students to not go for certain loans, and we worked with the families to look at the future and the benefits of grants and not taking out certain loans. I don’t know the detail about which loans but some of the loans you know where the students have difficulty paying back. So we always encouraged students for Pell and PHEAA grant and the key is having very strong financial aid professionals who understand that and work with families and not just process the paper and not looking at the situation of that family and saying "You’re better off going over here because this won’t saddle you for life." And this slows the process down but it is so much better in the long run. So I think you have to hire people who aren't just processing clerks but people who understand the different loans and grants and opportunities. That has been the approach we have always taken. (Cabinet member)

There is a balance between how much you touch the financial aid file. For example, one of the things that Cindy [the NCC Director of Financial Aid] does is when someone applies for an alternate loan which are outrageously expensive as you know, she calls those people and says "Are you sure you want to do this? Do you understand what you are getting yourself into here? If you drop out you go right into repayment. Blah, blah, blah... These are 18% as opposed to the subsidized." She doesn't have to do that. She could process the paperwork and let it go, you know. She spends a lot of time with families trying to find other solutions to things. We had a student who their family had
filed the tax returns incorrectly; there was a major boo-boo on it. She actually called the place that did the tax return and said "Here's what you did wrong and here's the impact it is going to have on this student." She didn't have to do that. She could have said to the student you have to go back with your family and do this right. That's what I love about our financial aid office. It also though sometimes slows down the process. You are taking such individual care of people. So I'm not sure right now... we've done a lot of people resource, I think now we need technical resource. We need really strong technical support. Are there things within the aid process that we could automate more for the 70% of the population that are pretty similar, so that for the 30% of people who need all the handholding, you can do it? It is interesting to me that some of the last few hires at other colleges are hiring computer services people not financial aid experts because it is becoming so technical just to understand the processing of the automated packaging. We all got Jenzabar\textsuperscript{12} or Banner and we're all trying to change them and modify them to something for our institution. It is getting so technical. (Cabinet Member)

In the above quotes, the tension between the hands-on working with students to negotiate financial aid on the one hand, and doing the paperwork of packaging on the other comes across as these cabinet members describe the need for two very different styles of work in the same office. One, as typified by the financial aid director in the second quote, is a very student-centered style of operating that is concerned with the helping the student negotiate the

\textsuperscript{12} This is the software package currently used at NCC in conjunction with "CARS."
process (as seen in the story of the family with the tax error) and educating the student regarding the long term implications of financial aid choices (e.g. calling students who are taking out alternative loans.) The other work style is alluded to in the second quote as those with the technical skills in computer programming.

The hands-on process of educating students regarding the commitment they are making when they take on loans could be heard in a number of interviews. This concern echoed the thoughts expressed in the internal annual report regarding the increased number of alternative loans being used by students. The idea of educating and empowering students within the financial aid process as a positive but time-consuming part of the NCC institutional financial aid environment was prevalent throughout the interviews. Interviewees reported that NCC uses many of the best practice techniques recommended for community colleges to increase their applications -- bilingual services and materials, evening and weekend hours, financial aid workshops for students and families, partnering with high schools and other community organizations (JBL Associates Inc, 2010). Interviewees never talked about these practices without linking it to the need to make sure that however one encourages getting students to apply, the actual application has to be completed and understood by the student.

The strong emphasis upon making the financial aid process itself an educative process as a guiding tenet within the NCC institutional environment was repeated numerous times. What usually elicited the most explicit detailing of this tenet came about when the interviewee was asked about whether the college could learn anything from the proprietary schools in terms of encouraging more students to apply for financial aid:
On financial aid I don't think they [the for-profits] do things as we would want to... the abuses are that they don't counsel families. They live off of financial aid and ... their students leave with these incredible amounts of loans that they can never pay off and we pick up the pieces half the time because then they come to us. (Cabinet member)

I do think the proprietary colleges have some great models. Lehigh Valley College [local for-profit] had 800 students and 24 recruiters. More staff in the front loaded services -- financial aid, academic advising -- more intrusive and earlier. When you look at LVC they closed because of their unethical actions. ... Not that all proprietary schools are doing that but it has happened. Not being truthful to students about loan debt. We have to talk about loans and different types of loans. We need students to be educated consumers. We are not just interested in you coming to college but in being viable in the long term. This is the financial literacy piece that is important. We want students to think about all these things. Loans are 7% and some are 25% what does this mean to a student? (Administrator)

I think if we teach the students how to be responsible we will have made them a better student and have done more for them. They are responsible for writing their own paper and taking their own exam and I think they should be filling out their own financial aid. I think we can help them understand the language, but they should do it. I think there is a double standard that if they came to us more would apply, but I don’t think that is the best way to prepare them. (Administrator)
My sense is that it is almost like at the proprietary schools that when you come in to inquire about the school the person who you sit down with is trained to get you through the whole process of getting your first set of classes and that's what I kind of sense the direction that we're headed to. I think there is a benefit in that except that I think we need to stop short of actually completing the FAFSA form for people like they do at the proprietary schools. I think we have to be a resource for them but let them do it so that they are empowered, so that they take the responsibility. Especially with student loans, it is one thing to take grants that money doesn't need to be repaid. But I think they need to take the responsibility and if they take a loan they have to repay it.

(Administrator)

Throughout these quotes, the themes of responsibility, empowerment, and educating for the long-term are repeated. During other parts of the interviews all three Administrators quoted also praised the "FAFSA Completion" workshops the college offers wherein students and their parents can bring their tax documents in and, using NCC workstations, complete their FAFSA with NCC staff available to assist. As all three administrators spoke they were very quick to draw a line between providing the staff as a resource while the family fills out the FAFSA and makes any decisions required and the staff actually completing the FAFSA for the family, a practice in which the administrators were clear they did not want NCC to become involved.

This theme of assisting the student and empowering them was echoed in comments made by the students themselves on the survey (for a full listing of comments see Appendix 4).
Amongst those comments were the following made about students’ experience with the financial aid office:

Knew not just one singular answer to a financial issue, but several options available.

They know their stuff, and thus are able to express very clearly the steps required to take to achieve financial aid. If any questions arose, they were very quick to solve them and very friendly and helpful in doing.

The person I spoke with was very helpful and took time to go over the paperwork with me to make sure I understood.

The lady I talked to was very polite and gave me a lot of information, and answered all of my questions.

These quotes describe a process in which students have the options and process explained to them, rather than completed for them. On the other hand, it was clear from the interviews and the student surveys that the financial aid office struggles with the paperwork and a lack of automation in the financial aid packaging process. Returning to the first quote in this section by the cabinet member who spoke about the dual role being played by the financial aid office, one can see in this quote the struggle between the skills required for personal interaction with the students and the technical skills that would facilitate a more automated packaging system. The frustration with the lack of automation and overwhelming workload of hand packaging the financial aid applications was continually expressed at all levels of interview.
Very little is automated in the packaging process. Up until this year financial aid was
going through PHEAA and they had a system where they would be our destination point
and now financial aid is going strictly between the feds and our software. So financial aid
is not doing anything automated. ... I think financial aid was so late in using software
(Jenzabar) because the office was relying on PHEAA but they just got out of the
business. They were convenient and supportive. ... A lot of Jenzabar does not work for
a community college. CARS was developed by full year private college. So they only
package for full-time students. We are going to automated packaging but I don’t think it
will be the great thing. (Administrator)

Students come in four days before classes start and want to enroll and can’t pay for it
and want to apply for financial aid. If it were more automated, financial aid could do
that. Financial aid writes... writes with lead pencils here. Why? I am not sure. I am
just amazed that financial aid doesn’t have an IT person. Last year financial aid thought it
would be more automated than it is. I am just amazed that a community college isn’t
focused more on automated system; the financial aid office would have far more time
with the hand holding. As it sits now financial aid spends an inordinate amount of time
[on packaging by hand]. I am not ignorant enough to think you push a button and it
happens, and it is always a work in progress. Here it is so antiquated for a school this
size. (Counselor)
The challenge is in finding the people who can do that work [packaging] and do the work effectively. And we've always had a history of financial aid officers where we would send them people, we'd take people from other offices and say go over there and work and the financial aid officers say no because you are hurting us more than you are helping us sending these people who do not know what they are doing. So the financial aid office always kind of has had highest priority for more people, more support, more systems. What I found was that some of the people had the "If I don't do it, it isn't right" and don't see the bigger picture of if you take the time to train the people and then you have more help. It is an absolute frustration because you see the stress and the angst and you hear from the families that it took too long and yet we have trouble at times figuring out how to give them more help. (Cabinet member)

Have we really looked at how they are doing? Don’t come and say we need three full-time FTE if you aren’t using the computer system. Do we go to another software for financial aid and then integrate with the rest of the college computer systems? I know that Jenzabar isn’t a great financial aid system, but I just don’t know if we have totally maximized the functioning of that system. (Cabinet member)

There are some technical reasons that we can’t be processing the financial aid applications as quickly as we should. Is getting more people the answer? I think first we have to work out the technology piece, we have to do more on the auto-packaging front. (Administrator)
I think the biggest hindrance is the amount of time that it takes overall. I don’t know how much of that NCC has control over. I know there are automated procedures that we have tried and they haven’t worked. I don’t really have all that information. I know that the sheer amount of time that it takes can delay a student by a semester.

(Counselor)

I think we need to improve how we process financial aid. We need to automate our system, people would have their awards much faster and that would mean people could be dropped from payment plans so they don’t have to pay for the fees. (Administrator)

While these quotes acknowledge that the amount of processing done by the college and the time it takes needs to be shortened, there is some disagreement about whether or not automation will ultimately fully facilitate the packaging process to the degree expected. This can be seen most clearly in the administrator who says, "I don't think it will be the great thing." Others clearly think it will be, like the counselor who says that automation would allow the college to respond effectively to the student who walks in four days before classes start. Two of the cabinet members and one administrator felt that a better use of the technology was the next step in addressing this issue, while another cabinet member felt that better training of other college personnel in financial aid would allow the college to be more flexible in deploying personnel during financial aid crunch periods. Regardless of the difference of opinion about how much the financial aid office can be automated, there was general agreement regarding the negative impacts of an institutional financial aid environment that does not package the financial aid more quickly and the need to address this.
This perspective is also supported by the student survey data (Appendix 4). Comments from the students, both negative and positive, reflected frustration with the amount of time it takes to have one's financial aid package processed and the sense that the financial aid office is overwhelmed.

I think because they have too many students to handle or to take care of, they try and answer questions as soon as possible but makes you feel like you always have to be in a rush with them.

Very kind but I will say that it would be more helpful if we are notified a bit faster when financial aid is available for this is my third time applying and finally have gotten the aid I need and can now go to school.

They were very informational in how to get things done. The phone definitely was ringing all summer, had two instances I had to drive to Bethlehem from NYC and East Stroudsburg just to ask a question or get answers.

She informed me of what she thought my situation was because I wasn't given the chance to fully explain my question. And she told me she would call me back, and I never received a call.

The woman from orientation at Monroe was very helpful. I thought the people from the Bethlehem campus were rushed and uninformative.
At times they were too busy to answer the calls, and it took some time before I received a reply.

These quotes from students confirm the view of an institutional financial aid environment that works to be helpful but at times is unable to adequately serve students. The student who applied three times before she was able to successfully receive aid, highlights the cost of the failure to respond efficiently when she says, "...and can now go to school" indicating that without the financial aid arriving in a timely fashion she was not able to attend college.

It is important to note here that according to the industry standard, NCC’s financial aid office is understaffed. According to the National Association of Student Financial Aid Administrators' staffing report, financial aid offices on average have four full-time equivalent (FTE) staff per every 1,000 financial aid applicants (National Association of Student Financial Aid Administrators, 2012). For public colleges, this number drops to two FTE staff per 1,000 applicants, while private, non-profit colleges employ five FTE staff per 1,000 applicants and for-profit colleges employ 16 FTE staff per 1,000 applicants (National Association of Student Financial Aid Administrators, 2012, p. 3). With over 13,000 applicants, if NCC were staffed at industry standards the college would have 26 FTE staff in the financial aid office. The college currently has 10.5 FTE staff. In addition, the report suggests that in not being more automated than it is the college falls outside the current norm:

Similar to 2006, nearly all respondents (95%) used computer software to automate financial aid functions. Administrators reported completely or partially automating many
financial aid functions. At least 40% of respondents have completely automated document tracking, awarding/packaging federal aid, electronic award notifications, view web access to student records, and batch processing of student records. (National Association of Student Financial Aid Administrators, 2012, p.4)

The institutional financial aid environment at this case study community college described so far in this analysis is one that plays a critical role in the enrollment of students in the higher education sector. The ethos in the office emphasizes hands-on, empowerment of students and the teaching of financial literacy over efficiency in the processing of financial aid packages. The (unwritten) policy and practice favors counseling students so that they make informed choices over expediting the award of financial aid.

*The NCC student circumstances that shape the institutional financial aid environment.*

If, as seen earlier, the industry standard has moved solidly into the arena of automation of financial aid functions, are there inputs unique to NCC that have led to NCC's institutional financial aid environment remaining so solidly in the realm of hand-processing? Interviewees talked extensively about the reasons that financial aid packaging at NCC, as a community college, has been far more complicated than it would be at a typical four year college. In turn, some of the interviewees made the connection between these complexities and the difficulty with automating the process.
Complexities took several forms but primarily fell into two categories: the dynamic interaction between financial aid award and enrollment status for low-income students, and students' personal lives not fitting the financial aid application regulations. All of these complexities contributed to an inefficient financial aid processing environment at the institution, according to interviewees.

The dynamic interaction between financial aid award and enrollment status for low-income students.

As discussed earlier in this case study analysis, the NCC financial aid office sends out a total of 2.34 award notifications for each of the 8,219 initial awards letters. This suggests there is a substantial amount of repackaging of financial aid packages, an impression confirmed by college financial aid officials in their interviews. One of the reasons cited for this constant repackaging is that NCC bills its students per credit, rather than on a full-time versus part-time basis. As students change the number of classes for which they are enrolled, their tuition costs change which changes the cost of attendance (COA), which in turn can change the amount of financial aid they receive. This dynamic interaction between financial aid and enrollment status and the difference between NCC and colleges in other sectors of higher education can be seen in the following interview quotes:

I believe at four year schools most students are full time. Here at NCC, students are constantly changing their enrollment status. Our costs are lower, so if a student goes from full time to part time, then not only Pell but their loans can change and go from
subsidized and unsubsidized… remedial classes bring their own complexities, you can’t take more than 50% for a state grant to pay for. The packaging problem is that students are constantly changing. If they drop during the refund period they are getting money back so then we have to recalculate their financial aid. Or they can add a class late and you have to recalculate. When you are paying so much more for a class at a four year school, you don’t tend to walk away from it like students do here. Or you see more traditional age students at four year schools, with the non-traditional students you get a lot of different financial aid and context issues. (Administrator)

I mean part of the challenge at community college is that in terms of financial aid it isn’t a neat little package like at a four year college. It isn’t like at a four year residential college where everybody’s costs are pretty much the same. (Cabinet member)

For sure we repackage more than I ever had to do at the four year college where I worked. These students drop and add and withdraw more than I ever thought you could! (Counselor)

We are not awarding financial aid until a student is registered and I think some students are waiting to see if they are going to have financial aid before they are signing up for classes. Kind of understanding and knowing and access, especially if you don’t have means to… even if tuition is $1,500 that could be a lot of money to somebody. Financial aid is determined after students register, after they pick classes. Even while
you and I can look at tuition and say “That’s manageable” it is a huge amount of money for some families, so do you take that plunge and register or don’t you? (Administrator)

This information suggests the added complexities to financial aid that enrollment status can play at a community college, and certainly plays at NCC. This was hinted at earlier in the technology discussion when the administrator points out that Jenzabar was developed for a private, four year college where students applying for financial aid had very similar costs. This was generally understood throughout the interviews as why so much modification had to take place in the software package in order for it to become useful to the college. As reflected in earlier quotes, how useful this software could ultimately be even after modifications was not necessarily agreed upon by college officials.

Students’ personal lives not fitting the financial aid application regulations.

Other influences on the institutional financial aid environment students experienced that were discussed by interviewees were the increased complexities of community college students’ lives that were not easily integrated into the financial aid processing environment. A number of references were made to those dependent students who had difficulty obtaining information or even understanding the information needed.

They don’t have parental cooperation for information from tax returns, we hear of that.

(Administrator)

Some of them their parents won’t provide the information for them, or say ‘no’ this is all on you”… I think the parents sometimes think that if they fill out the FAFSA they are
agreeing to pay for it, or they think it means that the bills will come to them, or they don’t want their kids to know what their income is or have their social security numbers. There are kids who have been kicked out of the house at 18. (Administrator)

The work is very intense, and that is when we encounter all the roadblocks, like, "My mom hasn’t given me all the information from the income tax return," or "My father doesn’t live here but they are still married does that income count," or "We don’t file income tax return because we are SSI, so what do we count what do we report because we are on assistance?" (Counselor)

A big, big thing with students is that they are on their own. A lot of these students are under 24, don’t live with their parents, but the federal government doesn’t see them that way and the federal government expects the parents to help them but the parents don’t. So therefore a lot of them aren’t eligible for financial aid. A lot of parents don’t want to provide financial aid information; a lot of these students have problems with their parents, and don’t communicate with them. I heard a lot of breakdown of communication with parents and children. There are a lot of students who come here with other issues besides financial aid. It could be that they haven’t seen their parents in years, for family issues but yet we still require the parents’ financial information and they can’t get it. Students may live with their grandparents. (Counselor)

The situations described in these quotes demonstrate the kinds of complicated issues that arise. Even as 'traditional' dependent students, these students bring with them non-traditional problems that then have to be integrated into the financial aid processing at the
institution. If students are going to successfully complete a financial aid form, the financial aid office has to provide the intensive and time-consuming hands-on work necessary to assist the student in sorting out these issues.

NCC has not implemented any hard deadlines for financial aid applications, which means they receive them year around and this is another factor that impacts the institutional financial aid environment.

With the high school student they have a guidance counselor telling them about their deadlines. If non-traditional students ... having to do financial aid in March for an August class is way far in advance. They are far more challenging because they don’t have a guidance counselor telling them. (Administrator)

I guess one of the other things, as I compare NCC and a four-year school, one of the differences is the amount of planning for education. If you were interested in a four-year school you think about it in your senior year. Here students come in four days before classes start and want to enroll and can’t pay for it and want to apply for financial aid. (Administrator)

When you look at transfer students, they may have not applied for financial aid. If a student is transferring in spring, they won’t qualify for state grant if they haven’t applied for financial aid by May 1st, that is up to $3,000 from state that they won’t get and that is a lot of money to them. (Administrator)
Students who register and apply for financial aid late are no less likely to have complicated lives than the general population that attends NCC. This compounds the issues which create a long processing time period for financial aid packaging. Since the financial aid office is accepting (and receiving) financial aid applications throughout the year, as can be seen in Table 11, there is little 'down time' for staff to stop and reflect and sort through processing issues, since processing is taking place through the year. However, changing this policy of accepting financial aid application packages throughout the year would be in direct conflict with the college’s open access mission.

_Simplification at the national level leads to complication at the institutional environment level._

The final theme that emerged from the interviews that is of particular interest to the research questions here is how the simplification of the financial aid process at the national level has made the process at the institutional level more complicated for NCC. As seen in the literature review, financial aid researchers called for a simplification in the FAFSA application theorizing that this would lead to an increase in the number of financial aid applications. In recent years the federal government did simplify the FAFSA. During interviews at NCC this simplification was brought up relatively frequently saying that while it has improved the initial application process it has been accompanied by an increase in the number of verifications the college is required to do by the federal government which has made the process more difficult to complete. This, in turn, has created a more difficult institutional financial aid environment for those students required to provide verification.
I think we have worked hard at helping people to do it [apply for financial aid]. The feds helped in simplifying the form, but the problem is that it has made the processing harder for the financial aid people. Everybody gets flagged for verification and you're chasing everybody around for more documents and more paperwork. And quite honestly the feds have made financial aid people IRS auditors; they have them questioning tax returns that aren't filled out correctly. And people get pissy about that and think the financial aid office is picking on them. It isn't fun being a financial aid person, but it [the simplification of the financial aid forms] has made it easier to apply which is a nice thing that the feds did. It did simplify it for people until they get flagged for verification and then life ain't so easy. Verification has become a big issue for financial aid offices. (Cabinet member)

Then you turn to the internal process of our own financial aid office. Which by nature and in order to comply with regulations we need to follow those procedures but again for our students it is a foreign language. So let's say for example they apply and submit their documents but they still have to fill out more documents so they get something in the mail saying "you still need to submit this and this and that" they come here with the letters and say "I don't even know what they are asking for." So it isn't just completing the application it is completing the process. So we've also found that students who start the process do not complete the process because they do not know how to.

(Counselor)
Something that I wish we had more personnel and intrusive so that we could call them and say ‘I see you started this and would like to help you complete it.’ This year there is a whole new regulation in getting the return transcript from the IRS and that has hindered some students. We do a lot of handholding here, but I think that is how we could be more intrusive, to help students complete what they start. (Administrator)

The simplification has meant a lot of edits on-line or that students are required to fill out certain items. I think for the student it has helped them quite a bit but it has put more onus upon the financial aid office. It will take a while for students to get used to the tax retrieval information. Maybe it is the financial aid office letting go of some things too. An example would be that you have a student with $0 income. So part of the social security income used to be part of the FAFSA. So now SSI isn’t even part of the application so we want to know “How do you support yourself?” (Administrator)

Well because sometimes I know the financial aid office is required to verify, for example, income. So students have to bring in a copy of their tax return. We get from "I don't even have a copy and I don't know how to get it" to students who have parents who are not willing to release that information because they are very concerned about the process they don’t understand the process, so opening finances is a big deal for our [Latino] community. It is the first time you are asked a lot of very private stuff, so requesting documents for example, um, and I think most of the time these are mandates that we are to follow because it is an imposition from government, so it is finding documents, it is doing the follow-up. Then for some reason our students do not
understand that if you do not complete the process you do not have financial aid. So they stop at some point, then it is time to pay for tuition and they are registered and the financial aid is not processed so the classes are cancelled because you are not able to show that you have the ability to pay. (Counselor)

The quotes here suggest that while simplification of the FAFSA form has made it easier to start the financial aid process, some students may be lost due to an increase in the number and complexity of the verification process. Because this issue was integrated into the already existing issue of paperwork, it wasn’t always clear when analyzing the interviews where the previously existing problem of a heavy paperwork load ended and the problem of the new paperwork created through the increased verification process began. What does come across in these quotes, however, is that the verification process has had a significant impact upon the institutional financial aid environment. Rather than the federal government application requiring particularly pieces of information from every one, the federal government requires the institution to college specific pieces of information from particular individuals.

The information gathered through the interviews about the verification process and its implications for the financial aid office could not be verified either through college documents nor the student interviews. The college has not tracked the number of financial aid verifications in its internal annual report metrics, nor did students directly comment on or provide any insight into their experiences with being audited or tagged for verification through the financial aid process. It is important to note here that the impacts of simplification are not reflected yet in the national data since NPSAS:08 was collected prior to federal simplification
was implemented. This suggests that if NCC’s experience is generalized and not unique to the institution, access to financial aid for some low-income students may become more difficult with simplification.

This concludes the description and analysis of the data collected for the case study. The case study suggests that the institutional financial aid environment and how it impacts financial aid application outcomes is determined in large part by the mix of student characteristics, institutional policy and practices as they are formed by institutional values, and outsider funder (i.e. federal government) regulations and requirements. The national level data have provided a broad picture of differences in financial aid outcomes by higher education sector, while the case study data have provided a powerful description of how a specific institutional financial aid environment influences financial aid application outcomes and some of the tensions and forces at play in this environment.

The four themes that emerged from the case study build upon the picture that the national level quantitative data provided. The national quantitative data showed that as a sector, community colleges have a very poor rate of financial aid applications. It also helped to describe the groups who had especially low rates – males, Asians, independent students and part-time students – and suggest the important role that counselors play in educating students to be better consumers of financial aid. The case study showed the critical nature of financial aid for community college students, and that for many it may make the difference in whether or not they attend a post-secondary institution. It also suggested some of the dynamics that may
be part of the public, two-year institutional financial aid environment that are either competing
with increasing application rates or complicating those efforts, i.e. the trade-off between
processing and educating students, student circumstances, and the extrainstitutional push to
simplify the financial aid process complicating the institution’s process.
CHAPTER 5: Conclusions, Implications and Future Research
The research presented here focuses broadly on identifying the factors and causes driving community college students' decision to apply for financial aid and the reasons community college students have for not applying for financial aid. More specifically, I ask what is happening within the institutional environment that leads to a student applying and if she does not apply how does the institutional experience impact why she does not apply. Analysis of national level data suggested that in addition to demographic factors there are factors associated with the institutional environment that made a difference in financial aid outcomes. The single case study described some of the mechanisms under the institution's control by which that difference happens. It also provided an explanatory model of how the broader financial aid environment impacts the institution and its financial aid outcomes.

I will begin this chapter with a brief summary of findings from the national level and case study data. This will be followed by a section on conclusions and implications. The final section will suggest areas of future research that would help to enhance the findings in this data.

**Summary of National Level Findings**

There were four important results in the national level findings to highlight here. First that speaking to a counselor positively impacts whether a student applies for financial aid. Second that males are at a high risk for not applying for financial aid and do not seek financial aid counseling. Third that Asians are also at a high risk for not applying in all sectors of higher education. Overall and in the public, four-year sector Asians are at higher risk for not applying due to a lack of information and a perception that the process is too much work. The factors
that impact the financial aid application choice for Asians in the community college sector remain unclear. The fourth result that ran throughout the national level data is that part-time students have the highest risk of not applying for financial aid and this is not a reflection of part-time students having no financial need.

**Summary of NCC Case Study Findings**

The NCC single case study examined an institutional environment that is relatively successful at getting students to apply for financial aid as compared to the national data. The policy, procedures and practices at NCC focused on eliminating financial barriers for students as an issue of open access. An analysis of the financial aid office found an environment struggling with its administrative burden that provides financial assistance in a very hands-on, consultative approach aimed at educating students both about the financial aid application process and the financial implications of their choices.

There were four important themes in the case study findings. The first was the importance of financial aid for NCC's target student populations. The data suggested that financial aid for many NCC students does not provide them with a choice of which institution of higher education to attend but a choice of whether to enroll in higher education at all. The second theme was the dual role the financial aid office plays that can hamper how efficiently it facilitates students' financial aid applications. The two roles are as managers of financial aid paperwork on one hand and educators about the financial aid process and decisions the students are making within that process while helping the students negotiate all the perceived
barriers. The third theme involved the NCC student circumstances that shape the institutional financial aid environment. It was this theme that most directly linked to the national data as it showed how different student demographics (like part-time status, a risk factor in the national data) could hamper their ability to complete the financial aid application process. It showed some of the mechanisms that created problems for specific groups of students (like financial aid deadlines and late enrollers). It also provided more depth to the national analysis as it showed the dynamic interaction between the instability of students’ lives and the strain that this put on the application process’ success. The final theme in the case study was how simplification at the national level has led to complication at the institutional environment level. While one cannot generalize from a single case study (Yin, 2009), NCC raises a red flag about the simplification of the FAFSA. The case study found that while the [albeit minimal] simplification to date helps students with the initial application process, it has caused complication for the NCC financial aid office and for the students who are subsequently audited. It is important to note that the NPSAS:08 data was collected prior to the simplification of the FAFSA, so the impacts of the simplification may become more evident from a quantitative analysis done on data collected after the simplification. It will be important to follow this trend both at the institutional and national level to ensure that the intent of the simplification policy – to improve access to financial aid – is the outcome.

Overall, the case study demonstrated that the national level data are inadequate to address a comprehensive understanding of what keeps students from applying for financial aid, how students perceive the financial aid process or the entirety of how students behave as
consumers of financial aid. The case study highlighted that some issues may be sector specific and that institutional mission may add complexity that is best captured and addressed through a combination of quantitative and qualitative work.

Conclusions

The conclusions are grouped in two subsets. One subset looks at the narrower set of conclusions regarding groups requiring closer analysis in the financial aid process. The second subset focuses on a broader set of conclusions addressing the need for fundamental shifts in institutional and extra-institutional policies.

Institutional practices have to target and emphasize practices that will address the needs of certain groups that may be at a higher risk of not applying for financial aid.

Part-time students have to have a reliable source of financial aid targeted to meet their needs.

The national and institutional data analyzed here highlight the difficulties of getting financial aid to part-time students. At the national level the data showed that part-time students are at the highest risk of any group for not applying for financial aid. At the institutional level the data showed the instability the part-time enrollment status causes in the application process as students drop and add classes causing fluctuations in the financial aid package. There was also the indication that part-time enroilers are also more likely than full-time students to come late to the process and miss crucial deadlines.

How the financial aid system as a whole can better serve part-time students needs to be addressed. It may be that an entitlement system for particular types of financial aid (like the
federal Pell grants) would eliminate the need for deadlines. Eliminating deadlines would also mean that a student who decided to enroll part-time starting the in Spring semester would be able to receive financial aid that she cannot at this time. Since we have seen that the community college sector has a high percentage of part-time students, address the part-time problem might help to boost community college application rates.

*Financial aid messages have to be tailored for males.*

The national level data also suggest that institutions may want to rethink how they promote financial aid to males who are at significant risk for not applying. Males, like females, reported not needing financial aid and not being eligible for financial aid as their top reasons for not applying. However, there were significant differences in how males and females reported these two issues. As compared to females, males are at a significantly higher risk for saying they do not need financial aid (regardless of income) and a significantly lower risk for believing themselves ineligible for financial aid.

The difference between male and female attitudes towards financial aid, and the lower rates of males either speaking to a counselor about financial or applying for financial aid, is reminiscent of the adage that males don’t ask for directions even when lost. Research work has been done on gender differences in seeking information for such diverse fields as technology usage (Venkatesh & Morris, 2013), preventive health care (Springer & Mouzon, 2011), counseling services (Hammer & Vogel, 2009) and peer math tutoring, and results suggest that males' perception of the efficacy of seeking information and their own understanding of masculinity ("macho-ness") may impact their willingness to consult with counselors on financial
aid. Perhaps at the national level, males did not see the efficacy of speaking to a counselor about financial aid or felt that to ask for financial assistance was not a "manly" way to finance college. Financial aid messages for males should consider addressing their issues around financial aid directly.

Better outreach and education for Asians has to be developed for distinct groups within the Asian community.

At a national level, Asians were also at a significant risk for not applying for financial aid. Asians at two-year schools were at the highest risk of not applying of any ethnic group, and a higher risk than Asians at four-year schools. There were two specific reasons they were significantly more likely to cite for not applying: the application process was too much work and they did not have enough information about the application process. For Asians, the work and information issues were combined with the lowest rate of any racial/ethnic group of speaking to a counselor about financial aid. Colleges, and especially two-year colleges, need to look at the outreach programs carried out with local Asian communities and ensure that the need for these students is being adequately met. The national level data suggest that Asians as a group could benefit significantly from efforts to help them better understand the financial aid process. The limitation may arise from the perception that this group may not suffer from access issues because of the monolithic conception of the ethnic classification, when in reality the diversity of languages, groups and socioeconomic backgrounds may make Asian subgroups highly susceptible to access issues.
However we again run into a limitation with the national level data. To refer to “Asians” and then try to address them as a monolithic group quickly becomes problematic. Within the data the term “Asians” covers a wide variety of people from a diversity of languages, backgrounds and cultural values. The national data does not provide insight here, nor am I sure it would be a helpful topic at the national level since the variety and backgrounds of this group varies widely across the country from community to community.

**Broad Institutional and Extra-institutional conclusions**

*There needs to be a shift in the perceived role financial aid plays in higher education and in the goal counselors should have with regard to counseling students.*

The very clear conclusion of this study is the strong role that counselors play in the students’ financial aid decision-making. In addition, the academic research on financial aid advocates financial aid counseling that includes helping students fill out the FAFSA application (Bettinger, et. al., 2009; Rosenbaum, Deil-Amen & Person, 2006). However, the NCC case study suggests that a more complex model needs to be considered. NCC staff who had worked at the NCC FAFSA completion workshops described a process whereby families brought their information, sat down at computers and filled out the FAFSA, calling over NCC counselors to assist when there was a concept or issue they did not understand. In addition the process also included a translation of the 'financial aid' language for applicants, and talking to students about the implications of accepting different types of financial aid, in particular, high-cost private loans, and getting students to sign off on financial aid packages that the student fully understands. These are practices endorsed by the practitioner research (JBL & Associates, 2010; Reed, Asher, Frotman, & Cochrane, 2011). This study indicates that there is a qualitative
difference in what takes place in this type of environment and an environment in which the staff themselves fill out the FAFSA while the student or family watches.

Hence, there is a need for a shift in how financial aid is perceived. Currently counselors and even the process is viewed more akin to the income tax preparation model with the goal being the completion of paperwork (e.g. the income tax form check box). While what the pressing for simplification to improve access is a worthwhile goal, the NCC example suggests that the financial aid application process is not just about the goal of getting paperwork done, but that the process has to include education and self-efficacy. The financial aid application process should therefore be more akin to the current mortgage counseling model in which the borrower is educated and empowered about the process, making sure that she makes her decisions regarding financial aid herself and understands the long-term commitment she is making in signing her financial aid paperwork. Paralleling the financial aid process solely with the tax return model favors the short-term benefits and discounts the long-term costs.

*Institutional sector and mission have to be considered in the literature and federal policy-making.*

The NCC case study provided evidence that financial aid application rates at a community college can rival those at institutions in other sectors of higher education while maintaining a financial aid environment that is strongly coupled with the open access mission of the institution. As indicated above one of the conclusions that came out of the case study is that community colleges may have to be especially careful about the need to educate their
students regarding financial aid and not to give that goal up in pursuit of increasing financial aid application rates.

The analysis of NCC's policies, procedures and practices described a financial aid environment that does not shy away from emphasizing outreach to encourage students to apply as a way to address financial barriers to access. Interviewees were able to enumerate efforts to increase the rate of financial aid applications -- FAFSA completion nights, outreach to the Latino community, workshops at schools, etc. -- and barriers to increasing applications -- low turn-out for financial aid workshops, continued confusion over financial aid language -- but kept coming back to the point that removing barriers to completing applications had to be done in an environment that left the student in control of the process and decision-making. A particular strategy practiced is the pushing of students to apply earlier for financial aid, therefore providing support that allows students to complete the application early are always present.

Unfortunately, there are extrainstitutional factors (that have not been explored in the literature) such as the FAFSA deadline that negatively impacts the community college mission of open admission. While there are good bureaucratic efficiency reasons for the FAFSA deadline for federal and state aid, the practice directly conflicts with the open admissions model and keeps students who decide to attend college at the last minute, or start in the spring, from successfully applying for many types of public financial aid. There seems to be a disconnect between the effective implementation of the goal of public, need-based financial aid -- providing access to education for those who otherwise could not afford it -- and the practice of favoring
efficiency of the administration of the FAFSA. The financial aid data collected and analyzed often measures efficiency over effectiveness, and the bureaucratic process favors efficiency over effectiveness, while access and completion will best be improved with systems that emphasize effectiveness.

In addition the reverse is also true. The simplification process of the FASFA has increased the monitoring burden on institutions serving populations with lower levels of financial literacy. The simplification has meant that the limited financial aid personnel resources available at community colleges are now geared toward compliance issues instead of outreach efforts and access. Federal and state level policies should include reciprocal interventions to help institutions that may be negatively impacted by the policy changes.

For broad institutional change to occur future research has to better integrate national data with institutional level qualitative and quantitative data.

One of the recurring motifs in this study has been some the limits of the national-level, quantitative data. These limits have fallen into two general categories. The first is that there are dynamics within institutional financial aid environments that need to be understood which cannot be adequately measured by quantitative data. The second is that there are some correlates in response rates that make it difficult to interpret the data without the insight that qualitative data provide.

One example of institutional dynamics that are best identified through qualitative data was seen in the documenting of how the national level simplification of the FAFSA had created complexity at the institutional level. The policy push to simplify the FAFSA has been based on
important quantitative data work by researchers and national level policymakers (Dynarski & Wiederspan, 2012). While the NCC case study cannot be generalized, it does suggest that there are unintended consequences of the simplification that may differ by institutional type and differentially impact particular groups of students. It may be that simplification addresses issues for one set of students, while creating more complexity for others.

An important example for this study of the correlates in the data could be seen in the non-applicants’ responses regarding why they did not apply. First, work and information were correlates in the data. The rates of reporting these two factors were similar for each of the demographic characteristics (e.g. dependents reported that it was too much work at about the same rate that they reported a lack of information as a reason for not applying). After analyzing the data, I have concluded that these two categories overlap in the information they are collecting from respondents. In other words, a student who was overwhelmed by the financial aid process was likely to respond to either or both of these two prompts on the survey. It was the qualitative data at the institutional level that shed light on how these two data elements might be impacting one another. During the case study, several of the counselors and administrators commented that they felt the application was not nearly as much work as students anticipated, but that because students did not understand the vocabulary or were unfamiliar with some of the forms required to fill out the FAFSA, they overestimated the amount of work it was.

The other two responses for non-applicants that seemed to overlap in their meaning were eligibility and need. The financial aid literature treats ‘eligibility’ as meaning a student felt
that her household income was too high (Advisory Committee on Student Financial Assistance, 2008; Kantrowitz, 2009a, 2011). ‘Need’ is seen as meaning that a student has the financial wherewithal to fund college without having to resort to ways of funding her college education that are detrimental to her college success, e.g. she can fund college without working full-time (Advisory Committee on Student Financial Assistance, 2008). If students interpreted eligibility purely as a financial matter and they felt they had did not ‘need’ financial assistance, than presumably they would automatically check both of these answers without meaning two different things by them, although researchers would interpret the two answers differently.

Students also might believe they are ineligible for a wide variety of reasons, some correct and some incorrect. In the case study this problem was highlight when students mentioned a wide variety of issues – including immigration status, grade point average, timing of the application and income -- when they were allowed to expand on their notion of ‘eligible’.

A final reason the national level data provide limited understanding of the financial aid application environment and its impact on students is that the results are primarily only applicable at the national level. While the data collected can tell policy-makers at a federal level a great deal about the program and how federal policies, procedures and practices might be impacting the financial aid system, it masks what is happening at both the state- and institution-level. Both the states’ and the institutions’ policies, procedures and practices can vary widely from one location to another and have very different outcomes (as seen in research work like that of Frankle Cochrane & Hernandez-Gravelle (2007), and in these cases the national level
data can only be used as a benchmark, with limited explanatory value for application to a particular situation.

This future research needs to explore the differentiation regarding the unique opportunities and barriers that may exist for different higher education sectors. The national level data have long been telling us that there is a problem with application rates for financial aid, that many of those who apparently would qualify do not apply, and that this has a negative impact on students’ ability to choose the best college for themselves, and to persist and succeed in college. Community colleges have been identified as the sector with the lowest rates of application, while also having some of the highest rates of low-income students. Research has not largely differentiated between reasons that those in the public, two-year sector apply compared with other sectors, nor has it looked closely at some demographic differences, like gender. To understand the full nature of the public, two-year environment, it has to become an accepted unit of analysis in the academic research

The NCC single study provided valuable insight into a two-year college environment that has been very successful at encouraging students to apply for financial aid, while also suggesting barriers unique to community colleges when it comes to improving rates of application. In keeping with the national level data, the role of the financial aid office counseling appears to be critical to NCC’s high rate of financial aid applications. The next step in this research would be to conduct other case studies of a diverse group of two year colleges in order to compare and contrast the outcomes of different policies, procedures and practices.
According to the Higher Education Act of 1965--

"It is the purpose of this part, to assist in making available the benefits of postsecondary education to eligible students ... in institutions of higher education." ("Higher Education Act of 1965," p.1)

It is estimated that 43 percent of students in institutions of higher education attend community colleges and if the laudable goal of the HEA is to be achieved the research on financial aid must cast a greater import on this sector. Research that identifies the differentiated needs found in the diversity of our nation’s college population is not only morally laudable solution but operationally laudable solution as well. The current context in which higher education finds itself, makes the need to understand the subtle yet critical contours of the college student decision-making process a national imperative.
Appendix 1. Student Survey Informed Consent

I am writing to ask you to fill out a survey on the experience NCC students have trying to finance their education. Your participation in this survey is completely voluntary. You must be at least 18 years old to participate in this survey.

If you did fill out the full survey you will be entered into a raffle. The raffle prizes include three $50 gift cards that you can use at any of the cafeterias or bookstores on our NCC campuses.

Rachel Frick Cardelle is doing a research project. She is very interested in getting opinions from students like you. It should take you about 10 minutes to complete her survey.

There is no harm that could come to you by participating in this survey. All information is completely anonymous. No personal information will be collected and no one will be able to identify your responses. Once you have finished the survey you will be redirected to another website to register for the raffle. Neither Rachel nor anyone else will be able to link your name and information to your survey answers. If you wish to withdraw at any time during the study, simply stop filling out the survey.

Please feel free to contact Rachel Frick Cardelle, at (570) 236-8664 if you have any questions about this study. Or, for other questions, contact Dr. E. Jill Hirt (610) 861-5421 or jhirt@northampton.edu, Northampton’s Director of the Office of Planning, Assessment and Institutional Effectiveness.

If you want to fill out the survey, click on the site below. By clicking on this site you are agreeing to the terms above and are certifying that you are 18 years or older. If clicking on the link does not take you to the survey, just copy and paste the link directly into your browser window. Thank you for your help!

http://www.zoomerang.com/Survey/WEB22GA2YO6RDQ

Margaret McGuire-Closson

Vice-President, Student Affairs
Appendix 2. NCC Students and Financial Aid Survey

NCC Financial Aid and Students Survey

Page 1 - Question 1 - Choice - One Answer (Bullets) [Mandatory]
Did you apply for financial aid for college?

☐ Yes [Skip to 3]
☐ No

Page 2 - Question 2 - Choice - Multiple Answers (Bullets) [Mandatory] [Up To 6 Answers]
Why did you not apply? (Please mark all that apply.)

☐ I thought the financial aid forms were too long and confusing. [Skip to 4]
☐ I did not want to take on any debt. [Skip to 4]
☐ I did not know how to apply for financial aid. [Skip to 4]
☐ I did not think I would qualify for financial aid. [Skip to 4]
☐ I did not need financial aid. [Skip to 4]
☐ None of the above [Skip to 4]

Page 2 - Question 3 - Open Ended - Comments Box [Mandatory]
To help us better understand, please explain in your own words why you did not apply for financial aid:

________________________________________________________________________________________________________
________________________________________________________________________________________________________
________________________________________________________________________________________________________

Page 3 - Question 4 - Choice - One Answer (Bullets) [Mandatory]
In order to apply for financial aid, did you fill out the federal form known as the FAFSA?

☐ Yes
☐ No
☐ I am not sure.

Please explain what kind of forms you filled out to apply for financial aid:
Page 4 - Question 5 - Choice - One Answer (Bullets) [Mandatory]

Did you speak to anyone who works at NCC about financial aid?

☐ Yes
☐ No [Skip to 7]

Page 5 - Question 6 - Choice - One Answer (Bullets) [Mandatory]

You said you spoke to someone at NCC. To whom did you speak? (PLEASE MARK ALL THAT APPLY.)

☐ An admissions office person
☐ A financial aid counselor
☐ A professor
☐ Other: (Please explain) ________________________________

Page 6 - Question 7 - Rating Scale – Matrix [Mandatory]

How satisfied were you with the assistance you received? (Please mark your answer on the scale where "1" means very satisfied and "5" means very dissatisfied. You must reply to all categories. If you did not speak to anyone in any of the categories, mark N/A for that category.)

Very Satisfied  Satisfied  Neither Satisfied nor Dissatisfied  Dissatisfied  Very dissatisfied  N/A

NCC Admissions office

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ N/A

☞ Please explain your rating

NCC Financial Aid office

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ N/A

☞ Please explain your rating

NCC Professor

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ N/A

☞ Please explain your rating
Other person at NCC

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ N/A

☑ Please explain your rating

Page 7 - Question 8 - Choice - Multiple Answers (Bullets) [Mandatory]

Other than talking to people who work at Northampton Community College, how did you find out about financial aid? (PLEASE MARK ALL THAT APPLY).

☐ I did not find out about financial aid from anyone or anywhere.
☐ I only spoke to people who work at Northampton Community College about financial aid.
☐ I spoke to someone at a college or university other than Northampton Community College.
☐ I spoke to a counselor or teacher at my high school.
☐ I spoke to family members and/or friends about financial aid.
☐ I researched financial aid on my own.
☐ Other, please explain:

Page 8 - Question 9 - Choice - One Answer (Bullets) [Mandatory]

Did you receive financial aid?

☐ Yes [Skip to 9]
☐ No [Skip to 10]

Page 9 - Question 10 - Choice - One Answer (Bullets) [Mandatory]

What kind of financial aid did you receive? Mark all that apply.

☐ A scholarship but not through NCC
☐ A scholarship through NCC
☐ A grant, financial aid that you do not have to repay
☐ A loan, financial aid that you have to repay
☐ Work-study, financial aid that requires I work a job
☐ Other, please specify

Page 10 - Question 11 - Choice - One Answer (Bullets) [Mandatory]

In high school, did you take any college (dual enrollment) courses, and/or honors courses, and/or AP (Advanced Placement) courses?

☐ Yes
☐ No

Page 11 - Question 12 - Choice - One Answer (Bullets) [Mandatory]

For this school year, what is your dependency status?:

☐ Dependent, my parents or someone else claims me on their tax forms
☐ Independent without dependents (I do not have any children or others who I claim on my tax forms)
Independent with dependents (I have children or others who I claim on my tax forms)
Not sure

Page 11 - Question 13 - Choice - One Answer (Bullets) [Mandatory]
How many of your household members are currently in college?
- Just me
- Me and one other person
- Me and two other people
- Me and three other people
- Me and four or more other people

Page 11 - Question 14 - Rating Scale – Matrix [Mandatory]
What is the highest level of education your parents/guardians have received? You must respond to all three categories. If one does not apply (for example, you do not have a guardian), please mark N/A:

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<th>Some High School</th>
<th>High School</th>
<th>Some College</th>
<th>2-Year College Degree</th>
<th>4-Year College Degree</th>
<th>More than 4-year degree</th>
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Page 11 - Question 15 - Choice - One Answer (Bullets) [Mandatory]
Is English the primary language spoken in the home where you lived growing up?:
- Yes, English was the primary language spoken at home
- No, English was not the primary language spoken at home

Page 11 - Question 16 - Choice - One Answer (Bullets) [Mandatory]
How many semesters have you been a student at NCC?
- One
- Two
- Three
- Four
- More than four
Question 17 - Choice - One Answer (Bullets) [Mandatory]

Are you attending NCC as a...

- Full-time student
- Part-time student
- I don't know... please specify # of credits you are taking this semester:

Question 18 - Choice - One Answer (Bullets) [Mandatory]

Do you take most of your NCC classes at the Main, Monroe, or Southside Bethlehem campus?

- Main
- Monroe
- Southside Bethlehem

Question 19 - Choice - One Answer (Bullets) [Mandatory]

What type of high school degree did you receive?:

- High school diploma
- GED or other equivalency
- High school completion certificate
- Attended foreign high school
- No high school degree or certificate
- Home schooled

Question 20 - Choice - One Answer (Bullets) [Mandatory]

Current employment status?

- I do not have a paid job
- I have paid employment, work less than 10 hours per week
- I have paid employment, work 10-20 hours per week
- I have paid employment, work 20-30 hours per week
- I have paid employment, work more than 30 hours per week

Question 21 - Choice - One Answer (Bullets) [Mandatory]

What is your marital status?:

- Single, divorced or widowed
- Married and living together OR living with my partner
- Married but separated

Question 22 - Choice - Multiple Answers (Bullets) [Mandatory]

What is your Race/Ethnicity (please mark all that apply):

- White, non-Latino
- Black, non-Latino
- Latino/Hispanic
- Asian
- Native American/Pacific Islander
- Enter an answer
- Other, please specify
Page 11 - Question 23 - Choice - One Answer (Drop Down) [Mandatory]

**Year you were born**

- ○ 1995
- ○ 1994
- ○ 1993
- ○ 1992
- ○ 1991
- ○ 1990
- ○ 1989
- ○ 1988
- ○ 1987
- ○ 1986
- ○ 1985
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- ○ 1925
- ○ 1924
- ○ 1923
- ○ 1922
- ○ 1921
- ○ 1920

Page 11 - Question 24 - Choice - One Answer (Bullets) [Mandatory]

**Please mark your gender:**

- ○ Female
- ○ Male

Thank You Page

- Standard

Screen Out Page

- Standard

Over Quota Page

- Standard

Survey Closed Page

- Standard
Appendix 3: Full list of 'Other' reasons for not applying for financial aid

I am an international student and I didn't know anything about the financial aid

A relative provided me with the money

Based on income wouldn't qualify

Because I can afford this college

Because I am a financial student I can’t fill FAFSA

Because I have the financial means to pay for community college

Because I would only qualify for loans and I don’t want any debt.

Because neither of my parents cooperated with the income information

Did not need

Financial aid isn’t offered for International Students.

I already had a fund that my parents bought for me that is paying tuition

I am a veteran using the 911 GI Bill.

I am an international student and everything was new for me and I didn’t know anything about financial aid

I am fortunate enough to have my parents support me with my education and did not need financial aid.

I am hoping my workplace will reimburse me for the tuition.

I am listed as a dependent and my parents' information is listed on the form. I have tried in the past and it's been declined.

I am using my VA education benefits

I applied late and did not think I could still receive financial aid. Also I didn’t know how to do it.

I couldn’t apply it. Because I'm an international student.

I couldn’t get my parents tax information/records and was unsure of how to file on my own.
I did apply but I wasn't qualified for it.

I did not apply for financial aid because I felt that I did not need that money as much as someone else struggling with money would have.

I did not apply for financial aid because the form was too long and confusing but I will probably apply when I get to the university of my choice.

I did not feel I would qualify due to the financial status of my family.

I did not need financial aid.

I did not understand and it was confusing to read tax documents. The codes like IRS... What is that anyway?

I didn't have my parents around to help me.

I didn't know how to apply for it. Because am new here and I don't understand so much things about the college and I didn't know if internationals student are able to get a financial aid!

I didn't know if I qualified.

I didn't think I would get anything out of it if I did apply.

I didn't think I would qualify for financial aid; my mom is a single parent but has a good job.

I do not need it.

I don't know what financial aid is and I'm not sure if my parents would let me apply.

I don't need it.

I had the ability to just pay out of pocket.

I have a college fund.

I have enough money saved up that I did not need financial aid.

I have previously applied for financial aid, along with other members of my family that attended college and we did not qualify.

I have two older sisters who attended Northampton and neither one of them for financial aid because my mother makes too much money.

I just recently decided to enroll and I am a fulltime employee elsewhere and attending school.
in the evenings, therefore I am only taking one class this semester.

I knew that if I did apply I wouldn't get close to no aid because my father makes too much money. Also my dad paid in full.

I simply did not need financial aid.

I thought it would be too long of a process and even though my mother is single with only one income coming in, our family usually is not considered broke enough to receive any help.

I thought that the financial aid process was too long and confusing. I also do not want to be paying off debt when I am thirty.

I was lazy.

I'm an international student so that I cannot apply for the financial aid in States College or University.

Missed due date.

My family owns their own business and I didn't think I had the grades to get any financial aid.

My father said he would cover the costs of school here at NCC, plus I didn't want to accumulate any personal debt.

My sisters both applied for financial aid, and never got anything. So I didn't think I would either.

Not necessary for me.

Not to informed on Financial Aid.

Only taking one class, total balance was paid at one time.

Parents make too much money for me to get financial aid.

Paying for it myself.

Saved money for college did not need financial aid.

Since I still live with my parents, they make too much money to qualify for financial aid.

The whole process seemed unnecessary since this is a cheap community college.

When applying for college here, money wasn't an issue. Therefore I did not need it.
Appendix 4. Explanations of Satisfaction Rating on Student Survey

The NCC Financial Aid office gave me the run-around with forms.

Said what was needed and didn’t beat around the bush.

Those people are very friendly and helpful!

Very helpful gave me all the information I needed.

I thought that the women I talked to in the financial aid office were very friendly and helpful. They helped eliminate my freshman stress about questions I had.

Helped me with the mistakes that I made on my FAFSA

I was getting the run around about my financial aid was told different things that had to be done and therefore was unable to attend classes in the summer.

Not helpful at all

Good

They were able to help me with my financial papers.

I think because they have too many students to handle or to take care of, they try and answer questions as soon as possible but makes you feel like you always have to be in a rush with them.

helped me find information needed to complete form

The lady explained the refund policy and made sure everything was in order for me. --Gave me a copy of my documents & assisted me in faxing a request to have my refund sent to my personal bank account

Was very helpful and understanding

The Financial Aid office was friendly with me and was concern about my welfare.

Helpful.

They were very helpful and made me understand how financial aid worked

Applying for financial aid & figuring out how the process works can be very confusing! I recall multiple occasions when I needed to call in for help or had to pay a visit to the office.
Instead of being fed up, the counselors guided me through each step & were always willing to make a phone call or go online for answers if they didn’t have them.

Haven't used yet

I came into their office very unprepared and lacking the necessary paper work. However, I left with all the information I needed and a smile on my face.

Everyone I went to gave me the structure/tools that where very helpful to me in order to get all the financial aid me needed for college.

Financial Aid staff was excellent in providing needed information about the application process and status of my grant awards.

They helped me understand financial aid fully.

Very kind but I will say that it would be more helpful if we are notified a bit faster when financial aid is available for this is my 3 time applying and finally have gotten the aid I need and can now go to school.

No problems whatsoever.

They were very helpful.

They answered all of my questions.

Also very helpful

Very helpful in explaining the loan process

Everyone was helpful

They were very informational in how to get things done. The phone definitely was ringing all summer, had two instances I had to drive to Bethlehem from NYC and East Stroudsburg just to ask a question or get answers.

They answered my question to help me get a good understanding of the status on my financial aid.

Very nice, helpful and sincere.

I was informed on how to fill out the FAFSA correctly, and I had no problems along the way.

I haven’t spoken to them

I never had to wait on long lines, or stay on the phone very long before someone helped me.
They were patient and very helpful. One lady stayed on the phone with me and helped walk me through the process. At the end of the call she gave me her number to call her back if something went wrong. I will be forever grateful for that because without her help I do not believe I would be in school currently.

Quick service, easy to talk to, very kind

Everyone was very informative and knowledgeable.

This office really worked with me to help make sure I got my aid!!

I didn’t like their answer to my question.

Did not know what try were talking about and messed up my account twice.

They helped me understand exactly what to expect.

The financial aid office answered all my questions and was able to guide me in the right direction.

Didn’t talk to them.

They answered all my questions and even more.

Also, very helpful and friendly

The lady I spoke with was very helpful

Let me know my status.

Had no personality.

I spoke with a really nice woman about my finical aid, and the whole entire process itself. She walked me through everything the first time I called which was awesome. The second time I called to try and confirm things and make sure my documents were getting received I spoke with another nice woman and she told me awesome news which made my experience great I guess?

Always answered all my questions to the best of their ability

They were very clear and they explained everything to its fullest.

The lady I talked to was very polite and gave me a lot of information, and answered all of my questions.

I very much so enjoyed talking to this person, because they helped me with completing my
financial aid paper.

They helped me right away and answered all the questions I had.

The financial aid office stayed on top of me to get my paperwork sent in.

She informed me of what she thought my situation was because I wasn’t given the chance to fully explain my question. And she told me she would call me back, and I never received a call.

They helped explain the whole financial aid process and answered all of my questions.

They gave me decent assistance and at the end I felt satisfied.

The person was able to answer my question

Everyone is very nice and was always very helpful

Very informative and guided me in right direction

Helped me receive the information needed.

I could not qualify for financial aid because my parents make too high of a salary. Therefore they could not help me.

They explained how it works and was very polite and professional

They’re very friendly and helpful; they’re very informed and will help you with anything you need.

Very unfriendly and rude. I had simple questions about financial aid and they made it seem like I was dumb and they did not have time for me

Ann is a very nice person and she was actually trying to help me as much as she could.

Couldn’t help that much.

Michelle was very nice and gave great information.

She was able to answer my questions and help me

I had a better understanding when it came to my financial aid.

The financial aid lady was very helpful.

The person I spoke with was very helpful and took time to go over the paperwork with me
to make sure I understood.

They did their job

The woman from orientation at Monroe was very helpful. I thought the people from the Bethlehem campus were rushed and uninformative.

Knew not just one singular answer to a financial issue, but several options available. They know their stuff, and thus are able to express very clearly the steps required to take to achieve financial aid. If any questions arose, they were very quick to solve them and very friendly and helpful in doing.

They could not help me but they directed me to talk to someone

It was difficult to get information on financial aid at the Monroe campus.

They were so nice especially knowing they have a lot going on. And they were at our service great fully

They gave details about what had to be done when questions were asked.

They were a great help and answered all my questions.

Everything was explained and they were very helpful also

I went to the people who work in the financial office multiple times, and each time they did everything they could for me. They were very helpful.

Answered all questions fully.

They were very helpful because they were always available to answer any questions I had.

Very informative

Did not really look into depth of my financial aid

I only received $800 and some for financial aid when my dad hasn't worked 9 months and no one else works in the house.

I am familiar with the financial aid process but was hoping to gain assistance with regard to my specific situation. I was simply told to fill out a form. I was looking for a more personal response and a plan to action.

At times they were too busy to answer the calls, and it took some time before I received a reply
They are very helpful when you need somebody.

Answered question politely.

Never was able to receive full, clear information on how the FAFSA worked. My financial aid information was incorrect and I had to continually correct them on it.

Financial aid seminar was very beneficial.
### Appendix 5: List of NCC Interviews

<table>
<thead>
<tr>
<th>Position held at NCC</th>
<th>Years at the College</th>
<th>Referred to in text as</th>
</tr>
</thead>
<tbody>
<tr>
<td>Former President</td>
<td>36 years</td>
<td>Cabinet member</td>
</tr>
<tr>
<td>Former Vice President of Institutional Advancement</td>
<td>37 years</td>
<td>Cabinet member</td>
</tr>
<tr>
<td>Vice President, Student Affairs</td>
<td>26 years</td>
<td>Cabinet member</td>
</tr>
<tr>
<td>Vice President, Finance and Operations</td>
<td>7 years</td>
<td>Cabinet member</td>
</tr>
<tr>
<td>Director, Financial Aid</td>
<td>18 years</td>
<td>Administrator</td>
</tr>
<tr>
<td>Associate Director, Financial Aid</td>
<td>4 years</td>
<td>Administrator</td>
</tr>
<tr>
<td>Director, Admissions</td>
<td>10 years</td>
<td>Administrator</td>
</tr>
<tr>
<td>Senior Associate Director, Admissions</td>
<td>27 years</td>
<td>Administrator</td>
</tr>
<tr>
<td>Bursar</td>
<td>28 years</td>
<td>Administrator</td>
</tr>
<tr>
<td>Associate Dean, Student &amp; College Services</td>
<td>10 years</td>
<td>Administrator</td>
</tr>
<tr>
<td>Financial Aid Officer</td>
<td>17 years</td>
<td>Counselor</td>
</tr>
<tr>
<td>Professor, Counseling</td>
<td>20 years</td>
<td>Counselor</td>
</tr>
<tr>
<td>Enrollment Services Manager</td>
<td>2 years</td>
<td>Counselor</td>
</tr>
</tbody>
</table>
Appendix 6. Staff and Administrators’ Informed Consent

I, Rachel Frick Cardelle, am conducting a case study research project on the institutional factors that determine community college students’ ability and willingness to apply for college financial aid. A key component of this process is obtaining important input from staff and administrators at NCC, and tapping their experience and expertise. As an NCC employee, you are being asked for your voluntary participation in an interview designed to seek your perspective.

The case study is being completed for my dissertation being conducted through Penn State University with the intention of publishing the results. You may decide to exit this interview at any part of the interview. You can stop the interview or skip any question at any time.

This interview consists of about 1-4 sets of questions and should take about an hour. The information you provide will be kept confidential within the study. You are one of 13 key informants who are being asked to complete the interview; and I’ll combine the information you give with their information in the final study. However, since you are a prominent member in a relatively small group of experts on this topic, it may be that someone will be able to figure out your input.

By completing this interview you are not exposed to any risk other than what you normally are exposed to in everyday activity. This case study offers benefits. This study will contribute to the body of literature on financial aid and community college students.

The only mandatory question is at the end of this page which asks that you provide evidence of your consent.

If you have any questions you can contact Rachel Frick Cardelle, who is the Principal Investigator at (570)236-8664 with questions about this research study. This project has been approved by Northampton Community College’s Institutional Review Board for the Protection of Human Subjects. You may contact the Office of Planning and Institutional Research Director of Planning, Assessment and Institutional Effectiveness, Dr. E. Jill Hirt at telephone 610-861-5421, or email jhirt@northampton.edu. This project has also been approved by the Penn State University’s Institutional Review Board for the Protection of Human Subjects. You may contact the Office of Research Protection Director, at telephone 814-865-1775.

Signed consent: __________________________________________________________

Date

PI Signature: __________________________________________________________

Rachel Frick Cardelle Date
Appendix 7. Qualitative Interview Questions for Current Administrators and Staff

1. Background
   1.1. Administrator information: position, number of years working at institution, job description

2. Historical Perspective
   2.1. How do you think NCC administration has viewed financial barriers to college historically? When do you remember conversations about ‘open access’ including financial concerns beginning? How has that view evolved or changed over the years?
   2.2. Given that finances were viewed as a potential barrier for students, how did NCC administration envision addressing this concern? Where do you think the college succeeded? Where do you think it wasn’t successful?

3. Perspective on Financial Aid for Students
   3.1. How critical do you think financial aid is for the students at your college today?
      3.1.1. Probes: Does it make a difference in whether or not they attend? How many hours they work? How well they do in college? Whether they persist? Whether they succeed?
   3.2. Do you believe there are a significant number of students at your institution who would qualify for financial aid (other than loans) who do not apply?
   3.3. Why do you think some students do not apply for financial aid?

   4.1. How do you think the institution’s policies/procedures/practices facilitate students filling out the FAFSA?
      4.1.1. Probes: Any programs in the high school? Programs for non-traditional students? Programs for ESL students?
      4.1.2. Probes: Are there formal or information institutional structures or rules that facilitate students filling out the FAFSA? Formal? Informal?
   4.2. How do you think the institution’s policies/procedures/practices hinder students filling out the FAFSA?
      4.2.1. Probes: Specifically what are the biggest barriers at your institution?
      4.2.2. Probes: Are there formal or informal institutional structures or rules that create a barrier for students? How would you suggest overcoming these barriers?
   4.3. Do you think there are competing demands that keep these barriers from being addressed?
      4.3.1. Probes: Is this an issue of money? Connections outside the institution? Willingness to see this as a priority?
      4.3.2. Probes: Have there been programs that were tried in the past and abandoned, and if so why were they abandoned?
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VITA
RACHEL A. FRICK CARDELLE

EDUCATION

EXPERIENCE
The Pennsylvania State University, Center for the Study of Higher Education,
Graduate Fellow and Graduate Assistant September 2009 to present
Northampton Community College, Grants Specialist October 2004 to July 2009
Independent Consultant,
Program development, management and evaluation with health care, education, and social services clients 1999-2004
Housing and Services of South Florida, Asst. Director, HUD-funded SHARE Project January 1997 to August 1999

PUBLICATIONS AND PRESENTATIONS
Frick Cardelle, R., Whitaker, H., Connell, M., Ulana, J. “We Made Them An Offer They Couldn’t Refuse… But They Did: Getting Local Funding for a New Branch Campus” American Association of Community Colleges, San Francisco, CA, April 2013 (pending).

. Frick Cardelle, Rachel. SHARE Policy Briefing Papers #1 and #2


ELECTED AND APPOINTED POSITIONS
Appointed County-Wide Board Member, Miami-Dade HIV Partnership, 1997-1999

ADDITIONAL PROFESSIONAL EXPERIENCE
Florida International University, Conference Coordinator/Visiting Faculty January 1996 to June 1996
Inter-American Foundation, Program Coordinator, Southern Cone & Brazil July, 1993 to December 1995
Aesculapius International Medicine, Project Administrator, August 1991 to September 1992
Ford Foundation and Oxfam America, Researcher, Summer 1992
Aesculapius International Medicine, Project Coordinator, Guatemala, January, 1990 to July, 1991

Center for Information and Consulting Services on Health, Program Trainer, Nicaragua, July to December, 1989

Other Positions Held:
Lecture Series Coordinator, Johns Hopkins University
Fund-raising Program Assistant, Oxfam America
Research Assistant, University of Colorado
Teaching Assistant, University of Colorado
English tutor for Mexican youth at halfway home for juvenile delinquents.

SERVICE POSITIONS
Committee Member, Pennsylvania Advocates for Nutrition and Activity: Keystone Health Zone
Committee Member, United Way Allocations Committee
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