

EDUCATIONAL OPPORTUNITY PROGRAM (EOP): A REVIEW OF THE  
LITERATURE AND IMPLICATIONS FOR THE DISADVANTAGED

A Thesis

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## ABSTRACT

Opportunity Programs such as Educational Opportunity Programs (EOP) have been institutionalized for over forty years. Emerging out of the Civil Rights movement, EOP and similar programs have helped to compensate economically and academically disadvantaged students to not only gain admission to colleges and universities by providing them with a leg up, but to also academically and financially support them through college completion. In New York, for example, it has been reported that over 100,000 students have been served since the statutory adoption of HEOP, one of four Opportunity programs founded in the late 1960's. Despite the numbers served, only one third to one half of enrolled students have completed their college degree. In an era of accountability this doesn't bode well, especially in light of New York's \$1.2 billion budgetary gap. Thus, to inform public policy of the impact of Educational Opportunity Programs, a more systematic examination of program effectiveness is essential. Through a comprehensive review of empirical literature, this thesis utilizes Astin's Input, Environment, and Output conceptual model for assessment (1993) to identify individual student factors (Input) and programmatic factors (Environment) that contribute to EOP effectiveness (Output). While the EOP literature left much to be explored, the thesis was supplemented with studies from both college access and college student retention. Together, they provided a comprehensive perspective on the challenges and opportunities EOP students encounter on their way to and while enrolled in college that affects their college outcome.

## BIOGRAPHICAL SKETCH

Sivilay S. Somchanhmavong was an Educational Opportunity Program student at SUNY Buffalo from 1989-1993. Upon completion of his undergraduate degree in Urban and Public Policy Studies, he worked as a Counselor in the State Programs Office, serving Higher Education Opportunity Program and Educational Opportunity Program students at Cornell University. In that capacity he worked with economically and academically disadvantaged students who, once deemed “inadmissible”, graduate from Cornell at two to three percentage points higher than the University’s overall 92% graduation rate. Recognizing that institutional culture and resources do matter in affecting student achievement, he transitioned to undergraduate admissions with responsibilities for communicating the advantages of a Cornell education to a diverse population of prospective students with particular focus on underrepresented minority students.

Sivilay is one of six children to Laotian parents. He came to the United States in 1980, at the age of 10, as a result of a refugee resettlement program. Most of his siblings benefitted from New York State’s Educational Opportunity Programs of either SUNY Buffalo or Binghamton University. He’s now a proud parent to two boys, Morgan and Ryan, 6 and 4 years of age respectively, who are products of hybridity between a 1.5 generation Taiwanese American mother and their Laotian American father.

His personal and professional experience combined provided the foundation for his initial research. He wholeheartedly believes in the purpose and value of EOP and looks forward to a strong program of empirical research that strives to enhance program effectiveness to benefit enrolled EOP students.

## ACKNOWLEDGMENTS

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I want to thank my committee chair and friend, Dr. John W. Sipple, who took a risk and believed in my potential to succeed. His encouragement to read widely exposed me to the breadth and depth of the social forces that recursively shape individuals and institutions. I thank him for giving me the freedom to explore, knowing that I would sooner or later return to the burning questions I initially came to graduate school to pursue. Dr. Mark A. Conostas was equally vital to my development as he, like Dr. Sipple, saw my multiple research interests ebb and flow over time yet somehow managed to draw me back into focus. His sage words and explicit recommendations to situate myself in a program of research that will continue to challenge me provided reassurance that what I'm doing matters on two fronts; contributing to research and impacting public policy.

I would be remiss if I didn't acknowledge my colleagues and friends, who have been exceptional classmates and a constant source of mutual support. The challenges and opportunities we experience, as graduate students will forever be etched in my fondness for Cornell.

Lastly, I want to thank Elizabeth Butler and William Morris for providing me with an opportunity to escape from the daily routines of life to finally focus on putting my thoughts in writing. The “cottage” allowed me to reflect, digest, and ultimately synthesize the works of numerous researchers into something of my own. This thesis is the genesis of my future research for many years to come.

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## LIST OF ABBREVIATIONS

|      |  |
|------|--|
| EOP  | Educational Opportunity Program. Administered by State University of New York, EOP can be found at SUNY campuses such as SUNY Albany, Geneseo, Stony Brook, Cortland, Buffalo, etc. that serves academically and economically disadvantaged students.                |
| HEOP | Higher Education Opportunity Program. Sponsored and administered by private and independent colleges and universities of the State of New York, i.e. Cornell University, Columbia University, Syracuse University, Colgate University, University of Rochester, etc. |
| SEEK | Searching for Education Elevation and Knowledge. Sponsored at City University of New York, can be found at institutions such as Hunter College, Baruch College, City College, Queens College, Staten Island, etc.  |
| CD   | College Discovery. Hosted by City University of New York's Community Colleges, serves students enrolled at Bronx Community College, Hostos Community College, LaGuardia Community College, Queensborough Community College, etc.                                     |
| SES  | Socioeconomic Status. Refers to parents' social and economic background with particular references to parents' educational and occupational attainment.  |
| TAP  | Tuition Assistance Program. Provides grant money to assist low-income New York State students with defraying the cost of college tuition.  |
| FWS  | Federal Work Study. A monetary allowance that eligible students can earn in wages when they work while enrolled as a full time student.  |

- URM Underrepresented Minority. Refers to historically underrepresented racial and ethnic groups in higher education. They include African Americans, Hispanics or Latinos and Native Americans.
- CUNY City University of New York. A system of higher education that consists of 23 institutions located in metropolitan New York, ranging from two year community colleges to four year college and research universities.
- SUNY State University of New York. A comprehensive system of higher education offering Associates degree at its two year community colleges, Bachelors and Masters at its four year colleges and doctoral granting institutions at the SUNY centers of Albany, Binghamton, Buffalo, and Stony Brook.

## PREFACE

*“What matters, then, isn't what you do or where you live, but what you know. When two-thirds of all new jobs require a higher education or advanced training, knowledge is the most valuable skill you can sell. It's not only a pathway to opportunity, but it's a prerequisite for opportunity. Without a good preschool education, our children are less likely to keep up with their peers. Without a high school diploma, you're likely to make about three times less than a college graduate. And without a college degree or industry certification, it's harder and harder to find a job that can help you support your family and keep up with rising costs.”*

*(Obama Campaign Speech in Ohio, September 19, 2008)*

## **Introduction**

Opportunity Programs provide economically and academically disadvantaged students a leg up. Through a modified admissions standard and generous financial and academic support, Opportunity Programs provide students and families with limited means, an “opportunity” where they otherwise would not have. To date, more than 100,000 New York State students have had the opportunity to obtain access to higher education. In all corners of the state of New York, enrolled students participate in one of four Opportunity Programs. In the public sector of higher education, Educational Opportunity Program (EOP) is offered at the State University of New York while Searching for Education, Elevation and Knowledge (SEEK) and College Discovery (CD) can be found on the campuses of the City University of New York. A parallel program, Higher Education Opportunity Program (HEOP) can be found in the private and independent colleges and universities of the state of New York. Collectively, New York’s offerings to students of disadvantaged background are expansive, providing opportunity to over 4500 economically and academically disadvantaged students in each entering cohort (State Wide Graduation Rate, New York: Opportunity Programs, ORIS retrieved 2/23/2009)

Despite the multiple avenues for educational opportunities across all sectors of higher education in the state of New York, only one third to one half of enrolled students have completed their opportunity for higher educational attainment system wide. For example, CUNY’s six-year graduation rate is 33.5%, a rate well below that of SUNY and Independent sectors of 50.4% and 60% respectively (SUNY ORIS, 2006). The fact that one third to one half of the entering student cohort failed to graduate should be a source of concern for the program, the institution, and the state. For the tax

paying public, concern over how nearly \$100 millions is spent on all New York State Opportunity Programs may be forthcoming. Nationally, the growing pressure of public accountability and fiscal responsibility has risen to the foreground of conversations in higher education, where for examples, states like Tennessee and California, have implemented performance funding that ties financial support with learning progress or college outcome (Carey & Aldeman, 2008).

For New York State's Opportunity Programs, evaluation of educational impact is long overdue. Increasing the effectiveness of Opportunity Programs to graduate its enrollees should not have to wait another 40 years. As a program intended to support student success, as measured by college completion, its performance must be reviewed and held accountable. Identifying factors of program effectiveness and success may be the first step towards understanding the revolving door of attrition, where Tinto (1993) stated that "Of nearly 2.4 million students who in 1993 entered higher education for the first time, over 1.5 million will leave their institution without receiving a degree" (p.1). This is where understanding the characteristics of enrolled students and their interaction with the resources of the institutions provides a richer prognosis of shaping college outcome (Astin, 1993). Moreover, it's often more realistic to assess programmatic progress relative to institutional context (Kulik, Kulik & Shwalb 1983, Thomas et al., 1998, Astin, 2002) in which "not enough is known about the relative influence of institutional context on college persistence" (Titus, 2004, p.674).

I argue that not enough is known of **how** the college environment affects low-income students in Opportunity Programs. The fact that Opportunity Program students arrive on campus at a greater disadvantage than their entering college cohort, yet managed to succeed especially at the independent sector suggest that the influence can be directly

or indirectly tied to the environmental factors of the program and/or the institution, whether it be structural or cultural in nature.

### **Aim**

The goal of this thesis is to review a set of literature that may provide insight on the various factors that inhibit college completion for EOP students. As a comprehensive program that provides college access and college student support in terms of academic and financial support to ensure college completion, a review of literature that extends into the college access and college student retention arena was necessary. Together, the thesis serves to illuminate the factors at the individual and institutional levels that confound the problems of college completion for academically and economically disadvantaged students. The research questions below guided my interrogation of the literature in addition to providing context for understanding the forces that contribute ultimately to program effectiveness and college success.

*What does the empirical literature say about the factors that may contribute to the effectiveness of Educational Opportunity Programs? Specifically,*

- a. What are the *individual student variables* contributing to college completion for academically and economically disadvantaged students?
- b. What are the *programmatic/institutional factors* limiting or enhancing student achievement and degree attainment?

The findings from the literature are expected to provide a richer context for discussion on the state of Opportunity Programs in New York with possible recommendations for policies and practice. New York State was selected because of my familiarity, as a former student of EOP and a practitioner, with both EOP and HEOP in the state of New York. More importantly, it was selected because New York was the pioneering

state to adopt opportunity programs into their Educational Law known as NYS ED Law 6451 (HEOP) and 6452 (EOP, SEEK, CD) (Smoot, 1973; Martel & Richman, 1985; Glazer, 1985).

### **Significance**

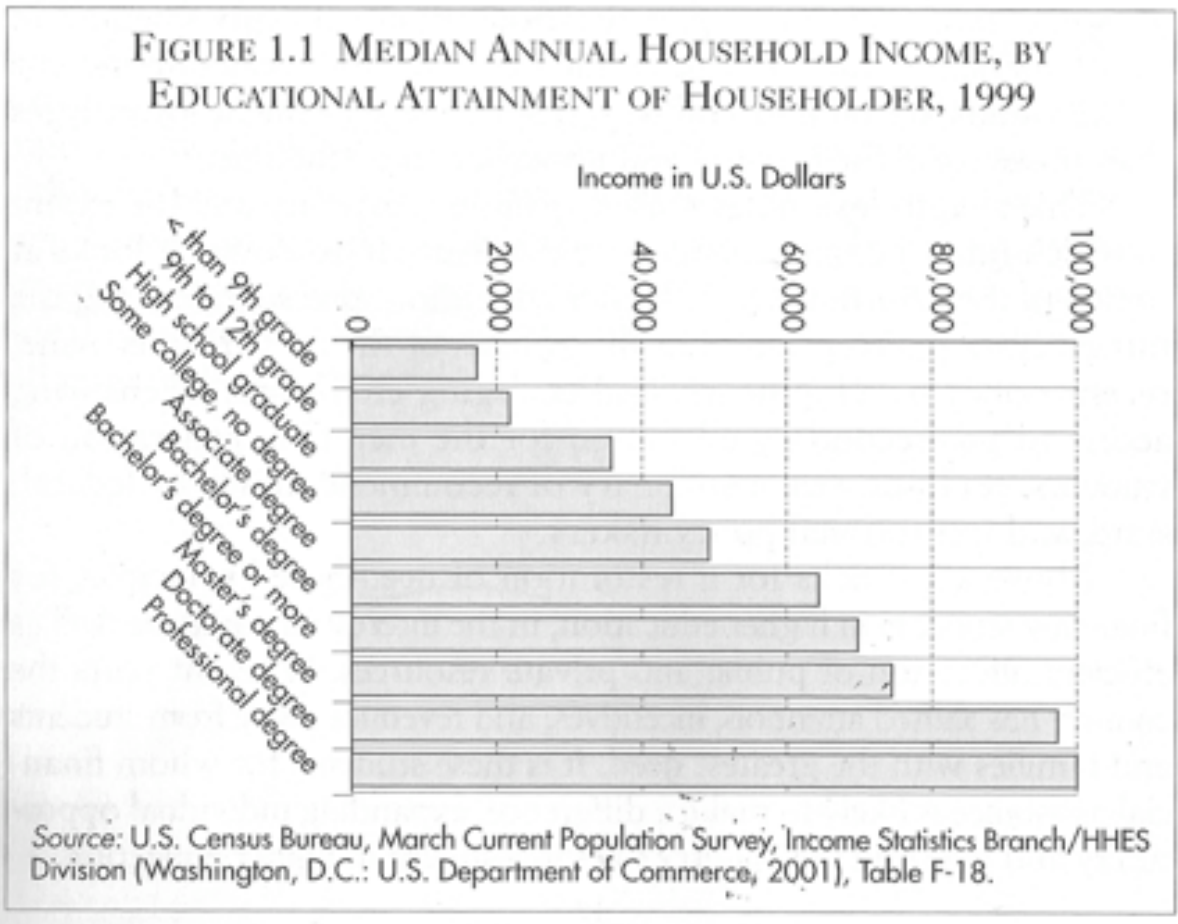
Understanding the nuances of Opportunity Programs intended to provide educational and ultimately occupational mobility to students of low-income background is vital to the state and nation. According to the National Center for Children in Poverty at Columbia University, over 7.2 million children in the United States live in low-income families (Douglas-Hall & Chau, 2008). Twenty six percent of these children have parents who have less than a high school diploma. Among all American children of parents with less than a high school education, 82 percent are considered low-income. Addressing issues of equity and equality of opportunity is a public concern as access to educational resources remains stratified across race and class where the “most privileged individuals or families enjoy a disproportionate share of power, prestige, and other valued resources” (Grusky, 2001). What is clear is that family socioeconomic status, inclusive of education and income, is a consistent predictor of educational and occupational outcome (Bourdieu, 1984; Coleman, 1966).

At present, our nation’s secondary schools are graduating three out of four students and failing a quarter of America’s future (NCES, 2007). At 55.3% and 57.8% respectively for Blacks and Hispanics, the picture looks even worse when compared to a high school graduation rates of all students at 70.6% (Swanson, 2008). Additionally, a Dropout Prevention campaign launched by the America’s Promise Alliance and funded by the Bill and Melinda Gates Foundation amplifies this further, where “every 26 seconds...a teen drops out”, which amounts to 7,000 students each day of school



and 1.2 million students a year (Swanson, 2009). The systematic loss of 25% of students from the nation's educational system is indicative of a bigger challenge ahead for the state and the nation as the social benefits of a high school education to the student and the public is enormous. Belfied & Levin (2007) posited that we as a nation could save \$45 billion annually by cutting the high school dropout rate in half. Additionally, compared to an average of lifetime earnings of high school graduates at \$1.2 million to college graduates of \$2.1 million; the difference is nearly a million dollars in incentive and motivation for college (McClanahan, 2004). An improved quality of life is also another individual benefit as important as social and economic benefits, accruing with increasing educational attainment (Belfied & Levin, 2007; Watts, 2001 as cited by McClanahan, 2004). Per figure 1.1, without a high school diploma, the median annual household income is two thirds of the earnings of high school graduates, which in 1999 was only half of the earning power of those with bachelor's degree or more. The reality is that a high school diploma is not what it used to be and that college degrees have become the new standard for competition and participation in the "flat earth" (Aronowitz, 2008; Darling-Hammond, 2007; Wagner, 2008).

FIGURE 1.1 MEDIAN ANNUAL HOUSEHOLD INCOME, BY EDUCATIONAL ATTAINMENT OF HOUSEHOLDER, 1999



Robert Reich (1991), the former Secretary of Labor under President Clinton, confirms the shift towards a global society, a flat earth, where the symbolic analysts (4 year college educated) -who solve, identify and broker new problems—are successful and capable of crossing borders and boundaries. The routine producers (community college graduates) or in-service providers (high school graduates) on the other hand will not be competitive in the global economy, as today’s economics know no borders (Friedman, 2005). The United States competitiveness was and remains a growing and national priority. In 2008, the U.S Secretary of Education, Margaret Spelling, invoked the infamous statement issued by the 1983 Nation at Risk Report, "If an unfriendly foreign power had attempted to impose on America the mediocre educational

performance that exists today, we might well have viewed it as an act of war” recalls and reminds us that we have not progress, but rather regress while the world advances (Gardner, 1983).

For economically and academically disadvantaged students aspiring for college attainment, the hurdles and challenges ahead are great. The cumulative deficit, since birth, affects later achievement (Lee & Burkham, 2002). From unequal opportunities in early childhood to differentiated learning tracks in middle and high school, the odds of transitioning to higher education works against low-income students (Lareau, 2003; Coleman 1966; Gamoran, 2008). Defying the odds has been attributed to qualities of resilience met with varying degree of success (Goodwin 2002 & 2006, Clauss-Ehlers & Wibrowski, 2007). To have greater impact, it is then necessary to identify ways in which effectiveness of compensatory programs such as EOP can be enhanced to benefit students, programs, institutions, states and nation (Astin 1984, 1991, 1993 & 1999; Bean 1980 & 2000, Kuh et al., 2005).

### **Conceptual Framework**

Retention research has long examined the factors that contribute to college success. Pertinent to assessing program effectiveness, especially of EOP, is Astin’s (1991 & 1993) talent development model that examines Input, Environment, and Output. Astin (1991) defines “*outcomes* as the talents we’re trying to develop in our education programs; *inputs* refer to the personal qualities student brings initially to the educational program; and the *environment* refers to student’s actual experiences during the educational program” (p.18). Together the model provides a framework for assessment “correcting or adjusting for input differences in order to get a less biased estimate of the comparative effects of different environments on outputs”. As such,

examining one component in isolation presents an incomplete picture of the factors and conditions that impact student development. For example, outputs such as graduation rates of the institution or program don't tell us much about the educational impact or effectiveness in developing talent. "The fact that inputs are related to both outputs and environments means that inputs can, in turn, affect the observed relationships between environments and outputs" (Astin, 1991, p.19). Thus, determining impact or effectiveness of programs, such as EOP, requires a closer examination of both factors of input and environment. Student input characteristic such as SATs and GPAs are correlated with institutional selectivity, where Tinto's structural prerequisite for academic and social integration affirms the nature of college selection process (1993). While at the same time, it's the system of selective admissions that has been the principal obstacle to equity and access for low socioeconomic status and underrepresented students (Astin & Oseguera, 2004; Dowd, 2008). Clearly, the types of institutions can have a positive influence on student completion as institutional culture plays an important role in enhancing or inhibiting persistence (Astin, 1993; Bean, 1980; Berger, 2001; Kuh 2001; Kuh et al, 2008; Tinto, 1975 & 1993). Culture is defined as "the collective, mutually shaping patterns of institutional history, mission, physical settings, norms, traditions, values, practices, beliefs and assumptions that guide behavior of individuals or groups in an institution of higher education and which provide a frame of reference for interpreting the meanings of events and actions on and off campus" (Kuh, 2001, p.25). As Berger (2001) reminds us, "organizations don't behave, but rather it's the people in organization that do behave while acting in the service of collective organizational interests" (p.4). As such, EOP faculty, staff and students are active participants in maintaining or shaping of institutional culture, where culture is something an institution has and does, in which institutions have an opportunity and responsibility to

impact both student and institutional performance. Berger (2001) asserts that, “becoming more intentional about the ways in which they act on behalf of the organization, campus leaders can become more intentional about the ways in which the campus organizes for better retention of valuable organizational members-students” (p.19). Moreover, colleges and universities can make the implicit explicit so that colleges can eliminate the social know-how prerequisite demanded of students to be successful (Deil-Amen & Rosenbaum, 2003). In doing so, the priority of college outcome can be better aligned with institutional values and structures, as well as financial expenditures (Gumport & Bastedo, 2001).

It’s been more than forty years since the inception of the Opportunity Programs. In light of the growing financial constraints coupled with challenges of producing EOP graduates institutionally and system wide, now is the best time to examine the EOP literature for better understanding of the constraints that limit as well as enable economically and academically disadvantaged students to succeed. In doing so, this thesis may contribute to extending the frontier of EOP research as well as affect policy and practice.

## **Methods**

To comprehensively address the multiple intent of EOP, one of which is college access and the other college success, three literature reviews of EOP, College Access and College Student Retention were gathered for this study. The collective works provided a more robust examination of the literature especially as very little empirical studies have examined EOP. Using library search engines of three database of ERIC, Academic Search Premier, and Social Science Citation Index (Web of Science), I used the key words of *educational opportunity programs, low-income students AND*

*college persistence* to identify literature on EOP. For college access, keywords of *low-income students AND college access OR college transition* were used. Similarly, literature search under *college completion AND educational opportunity program OR low-income* helped narrow the retention literature.

Specifically, in ERIC, I found 343 hits on Educational Opportunity Programs. After checking the box for to limit the search to only journal articles, a more realistic volume of 24 records emerge. Subsequently, of the 24 records, checking the box for only articles of peer-reviewed quality produced two articles from ERIC for examination. Thus, articles from the *Chronicle of Higher Education*, *Journal of Education Opportunity*, *Journal of Equal Educational Opportunity*, and *Journal of Student Financial Aid* are a few of the examples that were excluded because they did not meet the inclusion criteria for peer-reviewed quality. In the end, only 2 articles from ERIC met the requirement of relevance and rigor of peer-reviewed quality.

Social Science Citation Index produced eight journal articles in which seven were used, excluding only the literature in *Nurse Education Today* due to lack of relevance. Otherwise, the remaining seven articles satisfied the inclusion criteria of relevance, scholarship, and empirical quality to be discussed.

Academic Search Premier produced a wealth of information with over 100 articles on all three foci of the literature review of EOP, College Access, and College Persistence, but after sifting through the content of the title and the abstract for relevance, approximately 59 articles satisfied my inclusion criteria. Book chapters relevant to EOP, low-income students and college success surfaced from a snowball sampling

expect found in the literature. Below is a breakdown of the sources and origins of the reviewed literature.

Table 1. Distribution of Sources and Origins of Articles & Book Chapters Used

| Topical Areas          | ERIC  | Soc.Sci.Cit.Index | Acad.Search<br>Premier | Books&<br>Sections | Reviewed<br># |
|------------------------|-------|-------------------|------------------------|--------------------|---------------|
| Ed.OpportunityProgram  | 24(2) | 19(2)             | 61 (5)                 | 1                  | 10            |
| College Access         | 49(7) | 2 (2)             | 13 ( 7)                | 2                  | 19            |
| College Std. Retention | 6(5)  | 5 (5)             | 52 (16)                | 5                  | 30            |

Numbers in ( ) represent the final set of literature reviewed after satisfying selection criteria

Specifically, due to a narrowly tailored search for only peer-reviewed articles, the three databases produced a very limited volume of literature on EOP. While there are numerous reports to and from monitoring agencies as promulgated by state education law, they confirmed my hunch that more empirical research on EOP is needed.

Goodwin’s *Resilient Spirit* (2002) and *Graduating Class* (2006) are two books that specifically illuminate the “lived” experiences of Higher Educational Opportunity Program students. Both should prove to be canons in this field and great sources for future researchers interested in qualitative works that documented the trials and tribulations of disadvantaged students navigating the college process at a private and elite institution of higher learning. Walpole’s (2008) electronically published book, *Economically and Educationally Challenged Students* provided a general context and overview of the hurdles disadvantaged and at-risk students must overcome to obtain access and succeed in college. Edited volume of *America’s Untapped Resources* by

Kahlenberg (2004) and several original works by retention and evaluation researchers such as Tinto's *Leaving College* (1993), *Student Success in College* by Kuh, Kinzie, Schuh & Whitt (2005), Bean's edited volume of *Reworking the Student Departure Puzzle* (2000) along Astin's *What Matters in College? Four Critical Years Revisited* (1993) and *Assessment for Excellence* (1993) rounded out the review.

Despite the limited used of books and book chapters, the primary targets for this literature review are refereed articles that provided context for understanding opportunity program students, program components and overall program effectiveness. A combinations of research on opportunity programs that include Educational Opportunity Program, typically administered at the state level, but also those supported at the federal level proved useful. Research report related to TRIO's Student Support Services (SSS), a federal program designed to help disadvantage students complete their college education at over 700 two and four year colleges throughout the country, for example, was exempt from the peer-reviewed criteria and thus included in this review as the report mirrors that of its state counterpart of EOP. Books and book chapters were also used, especially if multiple researchers repeatedly cited the empirical works leading to the utilization of snowball sampling method.

Following the review of teacher recruitment and retention by Guarino, Santibanez, and Daley (2006), the three criteria of *relevance*, *scholarship*, and *empirical quality* were used to identify articles for inclusion. To determine *relevance*, I limited the literature to a population of low-income and first generation college students enrolled in Opportunity Programs of EOP, HEOP, SEEK and CD as well as its counterpart in the Federal Trio Program of Student Support Services. Titled search and search in the abstracts along with in-depth read provided insight on issues related to college access,



college retention and persistency of low-income, disadvantage, and at-risk students proved especially valuable for inclusion in the review. For EOP, I sought to capture the historical and contemporary perspectives to provide readers with breadth and depth of research stemming from program inception in 1967 to 2009. The forty-two year time span was intended to accommodate as much research on EOP as possible. However, findings remain limited. Thus, the EOP literature was complimented with literature on college access and college student retention/persistency where the population of disadvantaged, low-income and first generation college students remained central to the selection and inclusion criteria. While a wealth of literature runs deep in the areas of both college access and retention/persistency, I limited the search by placing a temporal confinement of the literature to within the last ten years going back to the late 1999. Additionally, I deliberately excluded the majority of the literature on community college retention and persistency to focus on the experiences of four-year institutions with particular attention towards public institutions of higher learning. Keeping only those that had findings applicable to EOP student success and program effectiveness was another variable that helped to narrow my review.

Inclusion and exclusion criteria required the literature to be of peer-reviewed quality. On the issue of *scholarship*, I only included literature published in peer-reviewed journals. Thus, research from policy centers or think tanks was therefore excluded because there was no indication of vetting process via peer-reviews. Books and book chapters that provided pertinent empirical analysis were considered, especially when prominent researchers and scholars consistently cited them (Guarino et al, 2006). *Empirical quality* by way of qualitative and quantitative evidence guided the inclusion criteria for most, if not all, of the literature reviewed. An exception may be found in the review of literature on EOP, as the body of research on the subject was very

limited. However, for the other areas of college access and college student retention and persistency, empirical quality that demonstrated evidence of effect at the individual and institutional level was demanded of the literature. Consequently, those lacking empirical data were not included. Excluded, on the hand, were articles were of theoretical and philosophical nature that did not provide empirical evidence nor speak to policy or practice.

Combined, the literature presents a basic yet comprehensive understanding of the challenges and opportunities low-income, first generation college students and families face when trying to realize their aspirations for a college (access) and the challenges for attainment (completion). Per Krathwolh (1998), one of the goals for literature review is “to determine the major variables of importance to the phenomenon” (p.103). The research question presented earlier remains central to identifying the student input and environmental characteristics that contribute to the phenomenon of effectively graduating EOP students. In turn, the success of students should reflect the relative success of the EOP program.

### **Limitations**

Reviewing three distinct sets of literature proved to be a major undertaking yet rewarding. Simplifying the keyword search may have helped to reduce the complexity of the tasks. As such, this thesis is a limited review, rather than an exhaustive review, of the literature related to EOP. It’s limited because I initially sought to identify literature that had EOP programs or students as a target population of interest and the principal unit of analysis. To compensate for the limited studies on EOP student characteristics, I supplemented the literature with works from the college access studies that focused on low-income students. While college access literature provided

a greater understanding of the attributes of low-income high school students and their college transition, this thesis would have been strengthened had it been more situated in the retention literature. The reason for this afterthought is that the retention studies are more aligned with the aim of examining student success and program effectiveness as measured by relative graduation rates of EOP program. Including more evaluation and assessment studies would have been beneficial for policy implication purposes. Nevertheless, Astin's assessment model kept me focused, permitting me to have a more holistic and panoramic view of the student development process. Lastly, expanding my search parameter to include grey papers, thesis and dissertations, as well as reports specific to opportunity programs may have provided greater breadth and depth of literature as the qualification for peer-reviewed used in this thesis was too narrowed in scope. However, had I not limited to such a strict qualification, I would not have known about the limited empirical works produced on EOP since the late 1960's and that more research is needed on EOP.

### **Opportunity Programs in Context**

As stated previously Opportunity Program such as EOP, HEOP, SEEK, and CD originated during a time of immense change. Nationally, the Higher Education Act of 1965 was amended to include the establishment of TRIO programs in 1968 to increase the postsecondary persistence and graduation rates of low-income, first generation college students (Zhang & Chan, 2007). Concurrently in 1967, New York instituted Opportunity Programs targeting its low-income residents. To qualify for New York State's EOP, students must first be a New York State residence at least 12 months prior to matriculating and meet both the economic and academic guidelines. Per the 2009 guidelines below, a family of four (two parents and two children or one parent and three children) for example, must have a combined parental & household income

not to exceed \$37,240. For a family of six, the allowance is greater at \$48,060 for intact family and \$50,770 for single earner with two jobs. While there are three exceptions to the economic guideline, including students who are wards of the state, students living in foster home where no college support is provided, and students who's family is on Social Services, the guideline represents how New York defines economic disadvantage.

Table 2. NYS 2008 EOP Economic Guideline

| Household Size | Category A<br>Income from Social Security | Category B<br>Combined income of one or more workers | Category C<br>One worker w/two or more employers |
|----------------|---|--|--|
| 1              | \$15,590                                  | \$21,000   | \$23,710   |
| 2              | \$21,000                                  | \$26,410   | \$29,120   |
| 3              | \$26,420                                  | \$31,830   | \$34,540   |
| 4              | \$31,830                                  | \$37,240   | \$39,950   |
| 5              | \$37,240                                  | \$42,650   | \$45,360   |
| 6              | \$42,650                                  | \$48,060   | \$50,770   |

Source: NYSED 2008. [http://www.suny.edu/student/academic\\_eop.cfm](http://www.suny.edu/student/academic_eop.cfm)

Once financial eligibility is met, academic consideration then becomes the final arbiter for college admissions. First and foremost, to be academically eligible the student must be inadmissible under regular admissions. What that means is that a student applying to SUNY Binghamton, for example, must not have SAT scores higher than 1100 and not lower than 700. Additionally, per Table 2 below, high school GPA also must fall within the range of 78-88, where any higher or lower would eliminate students for EOP consideration. While the cut off seem crude, it is within the

academic eligibility measures that institutions have a great deal of flexibility and choice in the quality of students they admit. The table below (Table 2) illustrates the differing institutional admission standards by SATs and high school GPAs.

Table 3. NYS 2008 EOP Academic Eligibility Guideline (as of Fall 2008)

| SUNY Centers | EOP SAT Range<br>(diff. from high and low) | EOP HS GPA Range<br>(diff. from high and low) |
|--------------|--|---|
| Albany       | 800-950 (150 pts)                          | 78-89 (9pts)                                  |
| Binghamton   | 700-1100 (400 pts)                         | 78-88 (10 pts)                                |
| Buffalo      | 850-1150 (300 pts)                         | 78-90 (12 pts)                                |
| Stony Brook  | 910-1100 (190 pts)                         | 78-85(7 pts)                                  |

Source: NYSED 2008. [http://www.suny.edu/student/academic\\_eop.cfm](http://www.suny.edu/student/academic_eop.cfm)

What's not reflected in the guideline, however, is the rigor of high school programs such as honors and AP classes taken that often distinguishes and differentiates candidates beyond what the cumulative GPA indicates. Also not reflected in the guideline, however, and where great discretion is afforded to college admissions officers is in the non-cognitive measures that suggest evidence of demonstrated potential for college success. Qualities such as leadership skills, work and volunteer experiences along with motivation and aspirations for college are a few examples of non-cognitive factors considered. Thus, affirmatively admitting disadvantaged students is not a new phenomenon. In fact, accommodating students who have overcome adversity has been practiced in New York's public and private institutions of higher education since the founding of Opportunity Programs such as HEOP, EOP, SEEK and CD in 1967, and perhaps even longer.

## **Components of EOP**

Once EOP students are admitted, students are provided with a comprehensive array of services. Required are summer bridge program, personal and academic counseling and advising, financial aid counseling, tutorial support, and supplemental courses such as College Study Skills and Time Management. Where needed, developmental courses are also required. Additionally, EOP students are afforded an additional year of funding support beyond four years. Instead of completing a 120 credit baccalaureate study in four years where 15 credit hours per semester at 8 semester is the norm, EOP students are offered additional time so that they may take a lighter load of 12 credits per semester for 10 semesters to complete their program of study; another way of compensating and accommodating disadvantage students.

In New York State, as previously indicated, opportunity programs exist at all types of postsecondary institutions ranging from CUNY, SUNY, and independent colleges and universities. More than 40 years later, New York's opportunity programs serve over 27,000 economically and educationally disadvantage students across all four sectors of HEOP, EOP, SEEK, and College Discovery. The public sector of SUNY and CUNY enroll a loin share of opportunity programs students. SUNY through EOP enroll 10,384 students across 29 baccalaureate degree programs only to be surpassed by CUNY's SEEK/CD by 623 enrollees at 11,007. Despite having graduated considerable number of opportunity programs students to date, 55,000 students since the inception of EOP in 1967 and 29,600 graduates for HEOP since 1968, its potential for greater impact to the state of New York and the nation is unimaginable. Increasing its effectiveness institutionally and system-wide beyond the current graduation rates of 35.6% for CUNY, 51.25% for SUNY and 55% for independent colleges and universities deserves greater attention. With so much invested at the state,

institutional and student/family level, improving opportunity for success is not just an economically sound decision, but also a morally responsible one. However, to propose policy without consulting the literature is counter productive.

### **Literature Review on Educational Opportunity Program (EOP)**

Spaight and Hudson (1971) produced the first literature review on Educational Opportunity Program. They sought to extend research by reviewing studies on the three components that would bring uniformity to structuring educational opportunity programs (p.4). The three areas they reviewed were Admissions, Counseling, and Instructional Support, which remain integral to student success to this day. In admissions, they found that SAT and high school GPA is not an accurate predictor for disadvantaged students. They asserted colleges in effect are engaging in discriminatory practices if they used SATs as criteria for admissions. In the area of counseling, Spaight and Hudson found counseling beneficial to disadvantaged students on multiple fronts. Counseling helped foster the development of self-esteem in addition to mediating understanding of the expectation of the university (Spaight & Hudson, 1971). Furthermore, counseling proved to be an important factor in college student retention. As did tutoring, especially one-on-one as well as in group, when used in conjunction with a reduced course load had an effect on improving GPA (Spaights & Hudon, 1971). They concluded with a call for more “properly conducted research in order to avoid continued student failure and frustration” (1971, p.11). Thus, the early 1970’s saw a small flurry of research on EOP.

Mack’s (1974) research was one of the first to address the relative success of EOP students. Specifically, Mack examined EOP student persistency and college completion. Startled by the overwhelming number of non-graduates, 433 out of 502

that entered the University of Illinois Urbana-Champaign's Special Educational Opportunities Program in the fall of 1968, Mack sought to understand whether there were preregistration variables that distinguished EOP graduates from non-graduates. After conducting a means comparison test between the two groups using 14 variables derived from 6 sources (ACT scores taken in high school, Cooperative School and College Ability Tests administered to freshmen, high school percentile rank, Cooperative English Test to determine reading skills, AP English Composition administered freshmen year to determine writing placements and Selection Index that predicts first semester grade) Mack concluded that Educational Opportunity Program graduates exhibited "no significant difference in preregistration cognitive measures when compared to non-graduates"(p.46). Thus, suggesting, "there may be non-cognitive factors affecting success" (Mack 1974, p.46). Other researchers have challenged Mack's premature assertion and conclusion, as his findings were based on four-year graduation rates, which at the time of the study were deemed inappropriate because the EOP program entitled students to five years, a total of 10 semesters, to complete their degree program (Allen, 1976). Challenging the validity and predictability of the SAT on college achievement, Allen's (1976) essay was in response to an article by Arthur Jansen (1969) who claimed that "scholastic ability was a result of innate intellectual ability which is not remediable" (p.70). Citing successes of earlier "risk-gamble" students at Harvard and Stanford along with the University of California's success with the increasing volume of EOP students matriculating and achieving at levels comparable to regularly admitted UC students, Allen asserted that scholastic achievement can be boosted. She challenged the validity of SAT/ACT's predictability for "culturally different" students in light of its ineffectiveness to predict for norm students, articulating further that the "weakness in specific educational skills is neither synonymous with lack of intelligence nor ability"



(p.77). Lastly, she proclaims that “the success of EOP lies not in the hands of White patriarch but in the design of the program, directed by Black people who recognize and build upon the strengths and weakness of the Black students” (p.77). Similar to Mack, Allen’s conclusion seem to suggest that institutional and environmental factors of programs specifically and college in general contribute to student growth and development, ultimately affecting college completion.

Allen’s claim of program effectiveness centered on culturally sensitive staff may not be far fetch, as Thomas, Farrow and Martinez (1998) attributed the strong graduation rate of their federally subsidized TRIO Program of Student Support Services to their well-coordinated and integrated network of federal, state, and university support services. Using Rutger’s institutional data from 1980-1992 freshmen cohorts of first-time, full-time freshmen, Thomas et al. (1998) proudly boasted their success of beating their target graduation rate of 50% for SSSP participants in 11 out of 13 cohorts with a mean graduation rate of 56.2%. While Rutger’s SSSP graduation rates “compare favorably with national graduation rates of similar students” (p.401), the authors acknowledge their efforts fall short of an impact study. They too called for an on-going evaluation of program effectiveness,

A meta-analysis completed by Kulik, Kulix, and Shwalb (1983) took stock of evaluation research of college programs for high-risk and disadvantaged students that span from early 1930’s to late 1970’s. They took 60 evaluation studies out of a possible 504 articles that met the three parameters of 1.) Population being high-risk college students, 2.) Measured outcomes with control group and 3.) Sound methods. The studies found a small program effect on achievement and persistence in college. Quantified by Effect Size (ES) of .27 with standard deviation of .32 and standard error

of .04; and Cohen's *h* of .19 where 30 studies had a mean of .23 and standard error of .04, they concluded, "special programs devised for high risk students have had basically positive effects on students" (p.407). Whether programs involved reading or study skills, guidance sessions and comprehensive services such as Student Support Services or Educational Opportunity Programs, they help raised GPA and improves persistence. Specifically, as academic success is correlated with persistency, Kulik, Kulik and Shwalb observe, "an increase in persistence from 52% to 60%, means that 60 students rather than 52 out of 100 will be able to stay in college—an increase of 15 percent (1983 p.408). Despite a few percentage point gain, the policy implications are clear that "effectiveness of higher education would represent a great savings because of the vast size of the educational enterprise" (p.408). Nevertheless, they urge the close examination of individual programs for high-risk students and suggest that evaluations be a basic and indispensable part of any program.

Using correlations and regression analyses, Grant-Vallone, Reid, Umali, and Pohlert (2004) tested their hypothesis to determine the effects of self-esteem, social support, and participation in student support services on student's adjustment and commitment to college. Grant-Vallone, Reid, Umali, and Pohlert (2004) sent 400 surveys to yield 118 responses from students of EOP, Academic Support Program for Intellectual Rewards and Enhancement (ASPIRE) and Faculty Mentoring Program of California State University-San Marcos. A survey on student experience with university-wide services was administered along with a survey on student adaptation and support networks. A lower than expected response rates of 18-30% between the two surveys may have presented a sampling bias. Nevertheless, using pre-established measurements for self-esteem from the scale of Rosenberg (1965), student adjustment measured from Student Adaptation to College Questionnaires developed by Baker &

Siryk (1989) and the Perceived Social Support and Family Measure by Procidano & Heller (1983), the study by Grant-Vallone et al., (2004) set out to test the relationship of predictor variables to outcome. With five hypothesis formulated, Grant-Vallone et al. (2004) found hypothesis one to be true where Rosenberg's scale proved reliable with ( $\alpha=.83$ ) indicating that "self-esteem was significantly related to students' social ( $r=.36$ ,  $p<.01$ ) and academic ( $r=.35$ ,  $p<.01$ ) adjustment on campus". (Grant-Vallone et al., 2004, p.264). Using the Student Adaptation to College Questionnaire developed by Baker & Siryk (1989) hypothesis two was somewhat true where family and peer support predicted higher levels of social ( $\alpha=.78$ ) and academic ( $\alpha=.83$ ) adjustments. Social support scale by Procidano & Heller (1983) also showed high internal consistency ( $\alpha=.94$ ). Statistically significant was the effects of peer support over family support on social and academic adjustment ( $B=.46$ ,  $p<.001$ ) which is consistent with Tinto's theory on separation, enabling students to become more committed to their institution (Tinto, 1993). Moreover, students who felt integrated into the academic ( $B=.23$ ,  $p<.05$ ) and social life ( $B=.21$ ,  $p<.05$ ) of their institution were more likely to persist. The big surprise to their findings in relations to utilization of program supportive services is that it only "significantly predicted social integration ( $B=.27$ ,  $p<.01$ ) and not academic adjustment" (2004, p.267). Thus, their hypothesis that program utilization would predict students' commitment to college and attachment to their university were not statistically significant. Unraveling the components of the program to identify the factors contributing to student persistency is vital, as the study by Grant-Vallone et al.(2004) concluded that "students who are more involved in support programs adjust better socially to the campus, and as a result, have a higher likelihood of staying in school" (p.269). They recommended helping students develop and expand their social networks on campus will yields

positive long-term effects on retention. However, they fail to identify ways to academically engage students in the learning process (Kuh et al., 2005)

Summer Institute, a critical component of the Opportunity Program, serves to acclimate students to the academic and social milieu of college. Clauss-Ehlers & Wibrowski (2007) sought to isolate the effect of the Summer Institute of Educational Opportunity Fund Program on its students. They conducted a pre-post test using 95 students in the 6-week academic institute of Educational Opportunity Fund Program, who upon successful completion would begin their first year at college. Multiple measures such as the 25-item scale to assess resilience (CD-RISC), the MDSS scale to assess availability and adequacy of social support, a 14-point measurement of identity (MEIM), and Measurement of Counselor Impact were administered prior to and after program completion. The findings indicate that EOF students arrive at the summer institute with a strong sense of resiliency and ethnic identity. Additionally, they validate the role of program staff, administrators, and faculty as stakeholders or cultural brokers who can further enhance participants' cultural and social capital (Claus-Ehlers & Wibrowski, 2007). Adding further to the notion of providing social support, the summer institute was found to facilitate the formation of peer cohort "becoming a source of both social and cultural capital to one another" (p.583). Despite the overwhelming success of the Summer Institute, the impact of summer academic courses on preparing students academically for their first semester was not explored. Of significance is the fact that research has found that academic success leads to greater persistency (Adelman, 1999 & 2006). Turning our attention to retention literature may shed greater light on the factors that contribute to student retention and college persistency.

## **Landscape on College Student Retention**

According to the 2006 ACT report, institutions of higher education are retaining on average 68.7% of students from freshmen to sophomore year. When disaggregated, rates are lower at 52% for two-year public and 82% at four-year Ph.D granting private institutions. Carrying the trend forward translates to a low completion and graduation rate of 26.6% for two-year public and 63.5% for four-year private doctoral granting institutions. This 'leak' calls greater attention to the need for examining the educational persistence of low-income students who are at greater risks of not completing their degree.

Broadly defined, retention refers to a network of services available to ensure that all students succeed (Tinto, 1975). Summer programs, freshmen orientation, counseling, advising, career placement, residential life, and social opportunities represent what Kuh (2001-2002) calls a "web of interlocking initiatives which over time shape institutional culture that promotes student success". It has been argued that the more integrated or engaged a student is in the life of college; he/she stands a greater chance of persistence and graduation. In his seminal work, Vincent Tinto (1975) in the footsteps of Spady (1970) who equated his theoretical conception of dropout to Durkheim's work on suicide, specified "the likelihood of suicide in society increases when two types of integration is lacking-insufficient moral integration and insufficient collective affiliation" (p.91). Building on Spady's work, Tinto formulated the notion that academic and social integration are critical to hedge against dropping out. In Tinto's work, he sought to expand on the initial theory to be more inclusive of other explanatory variables (1982). He elaborated on constraints of finance and the potential effect on attrition. He insisted that the definition of dropout be disaggregated, clarifying the transfer choice from the choice of permanently leaving higher education.

He also observed the need to be more inclusive of the differing experiences of students by race, gender, and social status while also acknowledging that his initial model does not apply to two-year colleges, as most are not residential. While acknowledging that college is not for everyone, he asserts, “ the unavoidable fact is that dropout is as much of a reflection of merits (or weakness) of the educational system as it is a reflection of persistence” (Tinto, 1982, p. 699).

In the case of low-income students, this may speak to his indictment of the failing of the public school system that permits students to graduate having only a 10<sup>th</sup> grade education (Adelman, 1999). The stages of transition from youth to adulthood along with the ritual for participation in society led Tinto to conceptualize the stages of departure to include separation, transition and incorporation (1982). Separation refers to the disassociation or parting of ways, of old habits of the home and the community prior to entering college; transition speaks to the ability of students to cope with change and their willingness to commit to institutional goal; incorporation involves formal and informal integration in the lives of college via social interaction with peers or contact with faculty. The degrees to which students are able to move through the various stages indicate the probability of persisting or dropping out. Seeking further to strengthen persistence research, Tinto (1997) sought to connect the classroom experience as a medium for engagement, which may in turn contribute to persistence. He posits that “the view of the role of classrooms in student academic and social involvement leads us to the recognition of the centrality of the classroom experience, the importance of faculty, curriculum, and pedagogy to student development and persistent (p.617)”.

While Tinto's Integration theory provides a sociological and anthropological orientation, Astin's (1984, 1999) theory of Involvement is rooted more in psychological and educational orientation, resonating well among student service providers. Simply put, Astin (1999) defined "student involvement as the amount of physical and psychological effort that the student devotes to the academic experience" (p.518). From the amount of time spent studying, participating in student organizations, engaging in conversation with faculty or time spent on campus or in residence halls are few of the variables used to gauge high or low level of involvement. Ultimately, the theory posits that the greater the student involvement the greater the rewards of student learning and development thus impacting student success. However, Astin (1991) doesn't evaluate success based solely on its output (O). Rather, he argues that it's incomplete without considering the qualities of the input (I) and the environment (E) that shape and affect outcome. Thus, the conceptual I-E-O model of assessment in higher education was born. On matters of retention, Astin stated, "by far the most important college characteristic affecting the student's chances of completing the baccalaureate degree is institutional selectivity (2005, p.11). He attributes the combination of superior resources of the environment (E) and the motivating effects of its academically prepared peers (I) as sources of high completion rate at elite institutions. Thus, concluding that it "makes little sense to examine any institution's "retention rate" without also taking stock of the level of academic preparation of the students who enroll". He suggested that policy and practice should be appropriately tailored to actively involve students in the learning process.

### **Evolving Application of Retention Theory**

Extending learning beyond the classroom, George Kuh (1990) incorporated Astin's theory of involvement and attempts to test the impact on persistence. Recognizing the

contributions of previous research, he distinguished his research by attempting to account for the outcome of the relationship between out-of-class experiences to student learning and development. He posits that “learning and personal development are a function of reciprocal influence among such institutional characteristics, as size and control and such student characteristics as sex and ethnicity, and enacted perceptual and behavioral environments produced through contacts with peers, faculty, staff, and others including the types of activities in which students engage” (p.127). His qualitative exploratory study of 12 institutions and its out-of-class experience identified interactions (in ranked order) with peers, leadership responsibilities, academics, other activities, work, faculty, and travel as contributing to student development. Kuh later goes on to examine outcomes by institutional types. On Research University, he sought to examine learning productivity as measured by their “engagement in educationally purposeful activities and gains made on the desired outcomes of college” (Kuh & Hu, 2001, p.3). They suggested, “different types of institutions have differential effects on student quality of efforts and engagement in good practices and gains from college” (p.17). In studying the effects of diversity on student outcome at Liberal Arts Colleges (LAC), Kuh found statistically significant gains in understanding diverse people (at LAC) when compared to other types of institutions. “Students who participate in diversity-related activities report higher levels of academic challenge, participate more frequently in active and collaborative learning, report greater gains in personal and educational growth, and report greater satisfaction with their college experience” (Umbach & Kuh, 2006 p.181).

Similar to Kuh, many retention scholars have gain traction from building upon or expanding on Tinto and Astin’s works. John Bean and Shewan Eaton believed that the factors affecting the foundation for retention decisions rest in the psychological



orientation of the student (2001). Using four psychological theories of attitude-behavioral theory, coping behavioral theory, self-efficacy theory and attribution (locus of control) theory, they postulate that academic and social integration are outcomes of psychological processes. Meshing the psychological concepts to organization theory, they offered that “programs are effective when they assist students in gaining positive self-efficacy, approaching rather than avoiding social and academic activities, developing an internal locus of control with regard to social and academic matters, and developing positive attitudes towards being at school” (Bean & Eaton, 2001, p.78). Braxton, Milem, and Sullivan (2000) have also sought to tease out the sources of influences on student departure. Testing Tinto’s integration theory specifically, they posited that active learning is “antecedent of integration” and sought to elaborate on the impact of discussions, debates, role playing, cooperative learning and faculty query in class and on quizzes as precursors to integration, and subsequently retention (p.571).

### **Diversity & Retention**

Relatively new, in only the last decade, research has begun to explore the effects of college on persistence for students of color. Nora and Cabrera (1996) sought to document the role that perceptions of prejudice and discrimination play on minority and non-minority college persistence. Using nine constructs to measure direct, indirect, and total effects on persistence, they found four (parental encouragement, social integration, academic and intellectual development, and grade point averages) of the nine to have statistically significant effect. They assert and conclude that despite entering college with significantly lower academic readiness, the direct effect was not significant, but had an indirect effect on persistence. Additionally, they found contrary evidence to Tinto’s separation stage. Instead of cutting ties with home, friends, and

families, Nora and Cabrera (1996) found ‘attachment to significant others as a key for the successful transition to college’ (p.140). Perhaps it’s the support and motivation from families and friends that allow students of color to be the success others see in them as well as they see in themselves. Whether is guilty pressure placed against dropping out or the sense of responsibility students has to their families to succeed, “family and the home environment can be effective retention tool” (Hernandez, 2000 cited in Hernandez and Lopez, 2004 p.41). Hence they suggest that colleges utilize families more in the learning process by engaging families in the life of the college. From bilingual literature to orientation programs such as those that include parents to acquaint them with the people they entrust their children to, these measures will enhance retention benefiting both parties (Hernandez & Lopez, 2004).

Creating a campus climate that welcomes Blacks and other people of color overcomes barrier that can increase college access but also genuinely supports success (Lang, 1992). Hurtado and Carter (1997) confirm the essential need of a supportive campus climate. They posit the student’s sense of belonging or membership can influence their social and academic adjustment. Additionally, a climate and environment sensitive to the diverse students can reduce undue stress (Sedlacek et al., 2003 as cited by Hernandez & Lopez, 2004). It can also create a sense that diversity is appreciated and not ignored or marginalized. For students of color at a predominantly white institution, they need to feel that they “matter” (Pewewardy & Frey, 2002; Scholssberg, Lynch and Chickering, 1989 as cited by Hernandez and Lopez, 2004). Using a national representative sample, Museus, Nichols, & Lambert (2008) found that racial minorities (Asian American, African American and Latino), despite having different perceptions and experience with campus racial climate, remain the least satisfied. They assert “institutions of higher education have a long way to go with

regard to creating and sustaining a welcoming campus racial climate for minority undergraduates of whom they serve” (p.127). The responsibility for creating an environment conducive for learning falls in the hands of the institution. Per the theory of Input, Environment and Output, Astin (1993) was critical of the role college and universities can play in creating an environment that augments and enhances student experience for the greatest satisfaction. Simply put, the most satisfied students are the ones most likely to persist.

### **Quality of Resiliency on Persistence**

Defying extraordinary odds such as overcoming hardship at home and at school has captured many researchers’ interests. Accounting for their perseverance has been what some researchers have called resilience. Goodwin’s ethnographic studies of 23 HEOP students at Ivy University highlight the tenacity of educationally and economically disadvantaged students’ ability to defy the odds (Goodwin, 2002 & 2006). She defined resiliency as the ability to withstand and become strengthened from crises, adversity, and risk factors known to produce negative outcomes” (2006, p.13). From the ‘pleasers’, ‘searchers’, and the ‘skeptics’, she shared their roller coaster ride of emotions and experiences stemming from when they first set their feet on campus for the Prefreshmen Summer Program until graduation. Their success is due to the fact that “these students have used their position of marginality to create their own methods of surviving and even excelling in what might be called strategic resistance. They resist assimilation into the status quo systems and strategically, through their alliances and accommodations, turn their locations at the margins of campus life to places of strength” (Goodwin 2006, p.58). Seeing resilience as a “continuous interactions between the individual and characteristic features of the environment”, Wang, Haertel & Walberg (1997), assert “resilience can be fostered

through interventions that enhance children's learning, develop their talents and competencies, and protect and buffer them against environmental adversities" (p.119). Helping students adapt and adjust to changing conditions and environment is a collective interest of students, family, and institution where resources and efforts can be combined to encourage a healthy academic and social development. In a study of impact of student emotional health and social health on GPA and retention, Pritchard and Wilson (2003) found that both are significantly related. Specifically, students with perfectionist mentality were more likely to have higher GPA compared to those students who experience a great deal of stress. Fatigue and low self-esteem predicted intent to drop out, as did poor coping skills. Acknowledging there are multiple factors that contribute to learning and persistence, Reason, Terenzini & Domingo (2007) sought to examine students' psychosocial development in their first year of college. Using data from 24 institutions of private liberal arts colleges and public comprehensive universities, including surveying 5,024 faculty and 6687 students, they found that student level variance accounted for 93.7% of the variance, with institutional variance making up only the remaining 6.3%. Moreover, "all seven measures of student perceptions and engagement were statistically significant, with perceptions of supportiveness of institution's environment as the strongest force related to increase in social and personal competence" (p.294). Additionally, they added that "increased social and personal competence seem to be shaped positively by campus peer environment, particularly one characterized by peers' collective perceptions that their institution's faculty and staff support students' academic, personal and social needs" (p.294). Thus, they concluded that what institutions *do* is more important than what institutions *are* in affecting student outcome. As such, being explicit about program expectation and desired outcome such as a culture of graduating students in 4 years, for example, is environmentally controllable. However,

the tradition of earning a bachelor degree in four years has passed. Many students take five or six years to complete their degree, some even longer. As such, reporting of graduating rate now includes 3, 4, or 5 years after their first year of entry (Titus 2004 & 2006). Other researchers have suggested an alternative model with longer period to fully capture all students who may have “stopped out” temporarily then returned to finish (Robinson, 2004; DesJardins, Ahlburg & McCall, 2002). In a climate of increasing accountability, Scott, Bailey & Kienzl (2006) justified the use of a six-year graduation for three reasons. The primary reason cited was that it was “one important measure of institutional performance”, followed by its “availability by large number of institutions”, and lastly, “much of the controversy over public colleges involves the language of graduation rate” (p.250). Therefore, using a six-year graduation rate in comparing the relative success between multiple institutions is a practical matter.

Findings related to degree completion reveal a complexity of forces that influence college outcome. Ryan (2004) examined the impact of expenditures on degree attainment. His conceptual framework centered on a hypothesis that “financial resources devoted to various functional and program areas within a college or a university, in part, reflects institutional priorities, purpose, history, culture, and budget constraints” (p.100). His findings reveal that SAT scores, institutional control (such as private vs. public), instructional expenditures, institutional size, living on campus along with academic support expenditures had positive and significant effects on institutional graduation rate. Percentage of minority and average age was found to have negative effect on graduation rates (2004, p.109). As such, he suggested that institutions shift resources to areas with greatest potential for impact such as instructional and academic support. Scott, Bailey & Kienzl (2006) found similar findings in their study of 1676 four-year institutions. Among the three institutional

variables of in-state tuition, instructional expenditures per student and student faculty ratio, instructional expenditures per student was statistically significant where raising the expenditure by \$1000 is associated with a .44% increase in graduation rate among private colleges and 1.74% increase for public institutions. Institutional selectivity via students SAT scores also yielded significant effect whereby an increase of 100 points in the upper quartile of students SATs had net effect of 7% in graduation rate.

Unfortunately, the effect did not contribute to differential graduation rate for highly selective public colleges and universities. What was astonishing was the impact of non-traditional age students on graduation rate. At public institutions they found that “if they were to compare the public college that is 90% full-time to one that is 50%, then the former should have a 13% higher graduation rate; this is about three times the comparable effect at private colleges” (Scott, Bailey & Kienzl, 2006, p.269). Scott et al., (2006) therefore concluded that the differential graduation rate between public and private colleges and universities is largely driven by differences in student inputs.

Subsequently, they suggested that evaluation of public colleges based on raw graduation rates is inappropriate” (p.277). Titus (2004) expressed similar sentiments.

Using student level data from a longitudinal database of Beginning Post-secondary Students (BPS:96/98) and institutional level data from the 1995 Integrated Postsecondary Education Data System (IPEDS) with 5151 students attending 384 institutions, Titus (2004) found more student level variables than institutional level variables that contributed significantly to predicting persistence. Of greatest significance were gains of 13% and 16% respectively for students living on campus and declaring institutional commitment. Additionally, a near 8-point gain was predicted for every one standard deviation gained in college GPA. Institutional level variable of structural-demographic, on the other hand, illustrate small but significant predictability of 4%, 5%, 6% gains in persistency related to institutional size,

residential nature, and selectivity factors respectively. As such, Titus (2004) concluded “when predicting the chance of college persistence, differences between institutions may not be as important as differences between students in educational goals, college experiences, and institutional commitments” (p.693). Of great relevancy to the study of EOP student/program completion is Titus’ most recent work. Titus (2006) examined the financial context of four-year institutions to further understand their effects on persistence to degree completion for low SES students. Using Resource Dependency Theory (of Pfeffer, 1997 and Scott, 1995), Titus claim “organizations strategically make choices so as to manage their dependency on vital resources” (p.373). Similar to his 2004 piece, he uses student and institutional level data with an updated database of BPS (96-2001) and IPEDS (1995 & 1996) for data on institutional characteristics, revenue and expenditure data. Of 5776 students enrolling in 400 colleges and universities, he finds that 46% first-time full-time freshmen in the lowest SES quartile completed college within six years, results that were consistent with other findings (2006, p.382). Similar to the 2004 research, Titus found major influences of degree completion to be college GPA, degree major, campus residence, and student involvement. Being a member of underrepresented minority, having unmet need, and working more than certain hour per week had negative impact on degree completion which is consistent with Astin’s findings (1993). When student level characteristics are controlled for, Titus posits that chances of college completion remains tied to SES. In fact, he believes that the “institutional average SES has positive effect on college completion over and above individual SES effect” (Titus 2006, p.383). Since higher education is stratified by SES, Titus concur with Rose and Carnevale (2004) that a disproportionate number of low SES students are enrolled in institutions with lower levels of financial resources and high dependency on tuition revenue (2006). Implications of Titus’s findings suggest an adoption of class-based admissions policy,

similar to that of the Rose & Carnevale's (2004) study, to increase opportunities for low SES students to attend private selective institutions where their probability for completing a degree is higher. As completion is positively related to financial aspects of institutional context such as tuition revenue as a percent of total revenue and education and general expenditures per FTE students, Titus suggested that aid from all sources be made available and dedicated to ensure low-income student who matriculate persist (2006).

Admitting students without supporting their educational needs by default is setting students up for the attrition line (Tinto, 1993). Therefore, understanding the context of low-income students participation in higher education warrants further insight not just of services to provide, but also understanding their origins that impacts their potential college success.

### **Conditions of Access by Socioeconomic Status**

Access to college, especially elite colleges and universities, has historically been reserved for the affluent (Kerr, 2001; Soares, 2007; Bowen and Bok, 1999). Peter Sack's 2007 recent book, *Tearing Down the Gates: Confronting Class Divide in American Education* and Kahlenberg's 2004 book titled *America's Untapped Resources* both validate the pervasive economic inequality in K-12 and higher education. Adam Gamoran's (2008) prediction that social class inequality would outlive most of us (Weis 2008, p.169) means more needs to be done to provide greater educational opportunities for low-income and high-risk students who are often first generation college students. For many low-income students, the idea of college is solely an abstraction. Not knowing where to begin the college preparation work can be a hindrance. Through ethnographic study of two small NYC schools, Bloom (2005) encountered students with very rudimentary understanding of college. From the



admissions process to the overly complex and convoluted form of the Free Application for Federal Student Aid (FAFSA), students found themselves “struggling their way to its doorstep only to find another staircase to climb” (Bloom in Weis & Fine 2005 p.76). Thomas and Bell (2008) attenuate the point further by suggesting that the twin structural barriers of unequal opportunity for academic preparation coupled with rising tuition costs prohibits low-income students participation in higher education, thus contributing to the maintenance of class status (Thomas & Bell in Weis 2008, p.274). Evidence of persistent inequality exists, whereby 74% of students at the nation’s elite institutions hail from the top quarter of the socioeconomic status scale while 10% are from the bottom half with the very bottom representing only 3% (Carnavale & Rose, 2004, p. 106). On the other end of the collegiate spectrum, Dowd and Melguizo (2008) point to the unequal opportunity at Community Colleges asserting that “despite the rhetoric of the community college as the central postsecondary access point for the poor, community colleges provide access to the baccalaureate for much greater numbers of affluent students, potentially diminishing the sector’s capacity to focus on the needs of its poorest students” (p.393). The fact that elite colleges and universities prefer transfer students from 4-year institutions than two-year institutions suggests maintenance of inequality or what Lucas (2001) refers to as effectively maintained inequality (Dowd, Cheslock, and Melguizo, 2008). Other research evidence indicates that attending a 4-year college or university, especially elite ones, increases the odds of low-income students succeeding (Mortenson 2004, Adleman 1999, 2004; Carnevale & Rose, 2004). Even in graduate school, students from well to do families continue to enjoy their advantages in which SES remains a predictor of graduate school attainment (Walpole, 2003).

## **SES and Pre-College Preparation**

Access to college depends so much on students' high school academic preparation. A scan of the transcript reveals demonstrated ability and motivation for higher learning. Combined with scores from standardized exams, class rank, teacher recommendations, personal essays, grades and rigor of curriculum not only suggest admissibility but also predict bachelor degree attainment (Bowen & Bok, 1999; Karabel, 2006; Bowen, Kurtweil & Tobin, 2005; Adelman, 1999 & 2006). Specifically, Adelman (1999) in reviewing high school transcripts confirmed that the quality of high school resources and strength and rigor of academic program accounts for 41% of resources students bring to higher education; 11% more than test scores and 12% more than grade point averages. Predictive models for bachelor degree attainment also showed a stronger correlation with rigor of academic curriculum than any other variables (Adelman, 1999). Thus, it is well-accepted knowledge that low-income students have limited access to resources of the home, school, and community. Resources that can benefit them academically are in short supply. Lacking are high quality and certified teachers, adequate learning facilities, books, quality curriculum, and a safe learning environment (Darling-Hammond 2007, Adelman 1999, 2006). Much can be blamed on the lack of resources in the community which reflects the schools resources and much can be said about the return to segregated communities that further exacerbate inequality (Orfield & Lee 2005, Massey et al. 2003). As such, it's not uncommon to see low income students concentrated in neighborhood schools perform poorly in the academic arena. Evident by the high proportion of students on Free and Reduced Price Lunch, some school, especially in urban centers, have as much as 90%-95% low-income students enrolled (Orfield & Lee, 2005). It's also not a coincidence that charter schools seeking to reform education are concentrated in urban centers with the majority of charter schools serving disadvantage students (Esposito & Cobb, 2008).

## **Educational Reforms for Improving Achievement**

Evidence by NCLB of 2001, school reforms is becoming more tightly aligned to student performance. Accountability for performance of all students regardless of race, class, and disability is being disaggregated and assessed (Gamoran, 2008). Even teachers, the dispensers and facilitators of knowledge and their curriculum are under closer scrutiny. Evidence of teacher effect on student achievement is growing, contributing to a recent call for the overhaul of the traditional 'normal school' to ultimately improve the quality and production of new teachers in the 21<sup>st</sup> century (Darling-Hammond, 2007). With adequate supply of quality teachers directed to high need areas, the effect of achievement may thus be improved, especially for those with greatest needs (Ladson-Billing, 2001; Darling-Hammond, 2007). In the 2008 reauthorization of the Higher Education Act, Secretary Spelling proposed for the injection of more resources to schools of Education with the expectation for the improvement of the supply and output of more quality teachers.

Another area of reform is higher education. Much of the recent attention has been a result of rising tuition cost and declining value of financial assistance at both the federal and state level (St. John et al. 2005, Kane, 2003). Other issues such as admissions brought before the Supreme Courts pushed the affirmative action debate to the foreground. Much remains to be done for advancing low-income student progress. The work of Carnevale and Rose (2004), simulating effects of economic affirmative action in addition to preferential treatment by race in the admissions process, showed promising results for potentially improving access. They discovered if admissions officers acted affirmatively on correcting injustice of race and class, the admitting institutions stand to benefit from the increases racial and economic diversity without

sacrificing high academic integrity and standards (Kahlenberg, 2004). Heeding the results of their research as well as needing to improve existing conditions to avoid possible state or federal legislation, institutions have initiated financial incentive programs to target financially needy populations. Many elite private colleges and universities have led in this regard (see table below). State universities, on the other hand, remain vigilant about minimally increasing their tuition because in doing so would compromised their mission of affordability and access.

### **Government Intervention and College Access**

College access programs at all levels have expanded higher education opportunities over the last 40 years. Students from low-income backgrounds as well as historically underrepresented minorities have benefited from learning opportunities which were traditionally unavailable and privilege only to those that could afford it (Kerr 2001, Bowen & Bok 1999, Soares, 2007). The G.I bill, introduced in 1947, was the first major legislation that sent returning WWII soldiers to college, signaling the beginning of government intervention to provide college access (Mumper 2003; Thomas & Bell, 2008). The program was a success, expanding participation in higher education. While the GI Bill benefitted Whites, the Civil Rights Act of 1964 was the catalyst for African American participation and integration in to higher education (Gelber 2007, St. John et al, 2005). The Higher Education Act of 1965 ushered in the Basic Educational Opportunity Grant providing federal money to higher education institutions. Less than a decade later in 1974, the BEOG was renamed, giving birth to the Pell Grant that remains to this day. This grant puts money in the hands of the students with the greatest need (Mumper 2003, p. 103). According to the 2006-2007 reports, Pell Grants were awarded to 5.1 million students at the total cost of close to \$13 billion to the government (US Dept. of Education OPE). While today's maximum Pell award is

at its highest level at \$4,050 per student, its relative purchasing power, however, is no longer what it used to be. At a time of rising tuition and attendance cost, Pell grants in 2000-2001 covered only 39% of an average public university tuition according to Mumper (2003), a 30 point drop from 1980-1981 when Pell defrayed 69% of tuition cost (p.103). Below, Figure 1.9 (taken from Kahlenberg, 2004) graphically illustrates the declining impact of Pell. At their peak in the mid-1970's, Pell covered roughly 85% of the cost of attendance at public colleges and 40% at private colleges. Now, they barely cover the cost of attendance at 30% and 10% respectively at public and private colleges.

The diminished value of Pell led to the expansion of government-backed loans in the form of federally subsidized and unsubsidized loans. Figure 1.3 illuminates the flip-flop of loans in place of grants starting in the early 1990s. As a consequence, the substantial share of loans in student's financial aid package could be a source of deterrence for low-income students to enroll (Carnevale & Rose, 2004). In fact, researchers have documented that minority and low-income students are averse to taking loans (Kane 2003, St. John et al. 2005) and reducing financial barriers is one of the strongest factors in college access as well as student persistency (Kane 2003; Kahlenberg 2004; Carnevale & Rose, 2004). Aside from direct aid for college, the Federal government also has had a long-standing history of over 40-years of supporting the academic enrichment of low-income students and their preparation for college. These opportunities include the Title I programs of the Elementary and Secondary Education Act and Title IV of TRIO -Upward Bound, Educational Talent Search, and Student Support Services, Ronald McNair, Upward Bound Science and Math, and recently GEAR UP. Combined, the 2007-2008 TRIO Report indicated an existence of 2886 TRIO Programs serving 844,889 participants at a cost of nearly

\$872.9 Million. Of greater promise is the GEAR UP program. Gaining Early Awareness and Readiness for Undergraduate Program (GEAR UP) was introduced in 1998 to connect all the pieces of the puzzle to ensure preparation and access to colleges and universities. Per the Department of Education along with citation by Ward (2006) “this discretionary grant program is designed to increase the number of low-income students who are prepared to enter and succeed in postsecondary education” (p.60). Through partnership with school districts, community, and higher education, GEAR UP takes a comprehensive approach working with students in middle school to align their curriculum with those expected by colleges and universities. In the end, GEAR Up expects to take the mystery out of the college access pipeline (Perna et al. 2008).

While there are limitations to all of the Federal initiatives as articulated by Ward (2006 p.58), the impact or effectiveness studies on these programs, with exception to Upward Bound and Student Support Services have not been done. Considering how long they been in existence, the question of effectiveness measured against articulated program objectives warrants a regular assessment and evaluation. As tax dollars are utilized to support programs that fund low-income students’ opportunities for mobility, programmatic roles in moving students through the educational pipeline must be better understood. Additionally, since the majority of Opportunity program participants are students of color, knowing their experience prior to and during college may shed light on eventual college outcome.

### **College Access by Race/Ethnicity**

Access to colleges and universities remains constricted and in need of expansion to better accommodate a diverse and growing nation. The 2008 National Population

Projection estimated that “ minorities, now roughly one-third of the U.S. population, are expected to become the majority in 2042, with the nation projected to be 54 percent minority in 2050. By 2023, minorities will comprise more than half of all children” (US Census). Since the educational expansion of the 1950’s and 1960’s, bachelor degree attainment for Blacks went from 3% to 16.5% as of 2000. Similarly in the 30 year time span from 1970 to 2000, Hispanics have experienced gains; from 4.5% to 11% in earned college degrees (Roska, Grosky, Arum, & Gamoran, 2007). Looking at 146 of the nation’s top institutions, Carnevale & Rose (2004) found students of color, i.e. African Americans, Asian Americans, Hispanics, and Native Americans comprise 22% of the student body (Kahlenberg, 2004, p.106). Specifically, only 6% of African American and 6% of Hispanic students were enrolled in the nations top 146 institutions of higher education (p.106). Students of color remain largely underrepresented when compared to their sizable demographic presence nationally of 12-14%.

Affirmative Action policy remains a critical tool for enhancing college access for minorities (Mumper, 2003, Perna, 2008). Colleges and universities use it to promote their democratic values and ideals, while also signaling the desired to provide for a redress for past injustices. As a result, elite colleges and universities open their doors to Blacks in greater numbers in the mid-to-late 1960’s (Bowen and Bok, 1998; Massey et al, 2003). However, this justification has recently been challenged on multiple occasions. From *Bakke* to *Hopwood* and recently *Grutter* and *Gratz*, the constitutionality of maintaining affirmative action policy is continuously tested. As recent as this past election on November 4, 2008, the state of Michigan has now joined California, Florida, Texas, and Washington in banning affirmative action in admissions practices at their public institutions of higher education. Michigan was also

the site of the last Supreme Court decision (*Bollinger v. Gratz*, 2003 and *Bollinger v. Grutter*, 2003) that deliberated the dismantling of awarding of extra points to students on the basis of race at the undergraduate level while retaining the comprehensive evaluation of students inclusive of race at the Michigan Law School (Yosso et al, 2004).

Asian American experience in the admissions process, especially to elite institutions, is one evident of the increasing challenge to Affirmative Action. Because of their overrepresentation in colleges and universities, Asian Americans have experienced hidden barriers or quotas resulting in negative action (Kang, 1996; Espendshade & Chung, 2005). A law professor, Kang defined negative action as “unfavorable treatment based on race, using the treatment of Whites for comparison: Negative action against Asian Americans is in force if a university denies admission to an Asian American who would have been admitted had that person been White” (Kang, 1996). Previous lawsuits to Harvard in the 1980s and a 2006 case now being investigated at Princeton by the Office of Civil Rights, seek to determine whether Asian American students have been systematically denied equal opportunity at Princeton (Jascik, 2008). It is thus clear that the affirmative action policy that was intended to provide greater access for minorities needs to be “fixed” per former President Bill Clinton. It was also echoed by Justice O’Connor that Affirmative Action might no longer be needed in 25 years. One alternative that has gained wide appeal is economic affirmative action that takes into consideration low-income students cumulative disadvantage in the admissions process (Carnevale & Rose in Kahlenberg, 2004) as previously discussed. Below is one example of how institutions have applied research to practice, taking responsibilities for improving the economic diversity of their students and institutions.



## **Elite Education for Free**

In announcing their respective financial aid policy, several university presidents recommitted themselves to the democratic and fundamental value of the universities being open and accessible training center essential to leadership and nation building. At University of Pennsylvania, "Low- and middle-income students are underrepresented in enrollment at most of the nation's highly selective colleges and universities, both public and private, including Penn. It is our responsibility to ensure that we help educate future generations of leaders, regardless of economic background. The excellence of the education we offer on our campuses also depends on our attracting students with varied economic and cultural backgrounds and contrasting life experiences who live and learn together". Amy Gutman, President of Pennsylvania ([www.penn.edu/pennews](http://www.penn.edu/pennews) retrieved November 23, 2008). At **Harvard University**, "We want all students who might dream of a Harvard education to know that it is a realistic and affordable option". Education is fundamental to the future of individuals and the nation, and we are determined to do our part to restore its place as an engine of opportunity, rather than a source of financial stress. With no loans, no consideration of home equity, and a dramatic increase in grant aid, we are not tinkering at the margins, we are rebuilding the engine. Excellence and opportunity must go hand in hand" President Faust (Harvard Gazette, December 10, 2007). Echoing unconditional support, David Skorton of **Cornell University** stated, "In the current volatile and difficult economic circumstances, many current and prospective college students and their families are concerned about the affordability of a university education. Particularly at this unsettling time, Cornell University must open its doors even wider," (Cornell Daily Sun, November 14, 2008). Table 2 below illustrates the values elite institutions place on having an economically diverse class and thus is aggressively recruiting students from family income of less than \$60,000. While

\$60,000 cutoff includes poor and middle class families, the initiative of these institutions to economically diversify their student body would provide a free education with essentially no strings attached; No more loan indebtedness, in addition to the elimination of parent contribution (PC) for families with income of less than \$60,000.

Table 4: New Financial/Merit Aid Targeting Middle & Low-Income Families

| Ivy Plus Institution | Target Pop. | Incentive                   | Loans                | Date Announced          |
|----------------------|-------------|-----------------------------|----------------------|-------------------------|
| Harvard              | <\$60K      | No Tuition,<br>Room & Board | No Loans<br>No PC    | 12/10/2007              |
| Yale                 | <\$60K      | No Tuition,<br>Room & Board | No loans             | 1/14/2008               |
| Princeton            | <\$40       | No Tuition,<br>Room, Board  | No Loans             | 1/1998                  |
| Pennsylvania         | <\$40K      | No Tuition,<br>Room & Board | No loans             | 3/18/2008               |
| Columbia             | <\$60K      | No Tuition,<br>Room & Board | No Loan              | 3/11/2008               |
| Cornell              | <\$60K      | No Tuition,<br>Room & Board | No Loans,<br>No PC   | 1/21/2008<br>11/14/2008 |
| Dartmouth            | <\$75K      | No Tuition                  | Replaced w/<br>Grant | 1/22/08                 |
| Brown                | <\$60       | No Tuition,<br>Room & Board | No Loans<br>No PC    | 2/22/2008               |
| Stanford             | <\$60K      | No Tuition,<br>Room & Board | No Loans<br>No PC    | 1/20/2008               |
| MIT                  | <\$75       | No Tuition                  | No Loans             | 3/7/2008                |

Sources: Compiled by the author from Institutional Websites as of November 15, 2008

In addition to free tuition, room and board along with the promise of no student loans of any type is guaranteed. Parent contribution will also be waived, leaving the entire

financial responsibility to the institution. By reducing economic barriers, more talented students will have an opportunity to not only gain access to higher education, but will be almost ensured to graduate (St. John et al., 2005). The degree to which the outpouring of incentives to draw talented and gifted low-income students to elite institutions is to be determined, but a recent study of the impact of the new aid policy on Harvard's initiatives shows promise. Avery et al. (2007) found that the Harvard financial aid initiative had significant effect on class of 2009. They saw an increase in overall application of 15% with corresponding increase in applications from low-income increase from (below \$60K) from 12.3% to 14.5%. Ultimately, the policy had a positive effect, yielding 20% increase in enrollment of low-income students with \$40K or less (Avery et al 2007, p.15). More important than its direct effect is the significant ripple effect that these elite institutions have had on changing the conversation and focus on low-income students. Many other institutions have thus followed suit. According to *Shifting the Gold Standards*, institutions like University of Virginia, Tufts University, Washington University in St. Louis, LaFayette, and Carleton are taking notice and adopting similar policies on their respective campuses in order to affect demographic change (Inside Higher Education, March 24, 2008). Regardless of the rationale, the impact of aid has been found to have a huge effect on students' decision to enroll and persist (Kane, 2003). The unfortunate, yet realistic, nature of such policies like the ones mentioned above only affect a small number of low-income students and offered only at institutions with substantial endowment resources. Thus, for most public institutions faced with budget shortfall, effectively serving low- and middle-income students remain limited and deserves greater attention.

### **Findings from the literature: What we Know**

The factors that contribute to the student success and effectiveness of Educational Opportunity Programs are mixed. Below are findings organized according to the research questions asked of the literature on individual and institutional factors that contribute to overall effectiveness of EOP. Specific aspects of program components and their effects are also highlighted as they serve to inform practice as well as contribute to a comprehensive assessment model advanced by Astin's (1993) Input, Environment, Output model of assessment. Organized according to the research questions asked, below are findings at the individual and institutional level barriers that contribute to low student outcome at graduation.

#### **Individual Level (Input):**

At the individual level, academically and economically disadvantaged students of EOP arrive to college campuses with a lot more “baggage” than the majority of their respective classmates (Goodwin, 2002 & 2006). They are admitted in part because they're poor and as a consequence of their economic position, their academic works are weaker than most students in their entering cohort. To compensate for their disadvantage, EOP provide students with demonstrated potential, not just of academic nature, but also of personal qualities such as leadership skills, work and volunteer experience as well as involvement in extracurricular activities, the opportunity to obtain higher education. As such, their pre-college characteristics such as SAT scores and high school GPA are nowhere predictive of student persistence (and thus are not heavily used in the admissions of EOP students (Abrams & Jernigan, 1984; Allen, 1976; Chaney et al., 1998). In fact, the relative success of EOP students who were by definition “inadmissible” yet managed to graduate challenges the findings that pre-college characteristics affect college attendance and persistence

(Adelman 1999 & Tinto 1993). In particular, the success of EOP students may represent an anomaly as Adelman (1999) through a national represented sample found that high school GPA and the rigor of course work represents 41% of the variance in predicting college success. Defying the odds have been a test of resiliency, a quality all too familiar for economically and academically disadvantage students (Goodwin 2002 & 2006; Clauss-Ehlers & Wibrowski, 2007; Walpole, 2008). Resilience refers to “students who despite economic, cultural, and social barriers still succeed at high levels” (Cabrera & Padilla, 2004, p.152 as cited in Clauss-Ehlers & Wibrowski, 2007). Related quality of resiliency such as high level of self-esteem is also predictive of college adjustment and performance (Grant-Vallone et al., 2004). Consistent predictor of college outcome is SES (Titus, 2006). All together, student characteristics accounted for 93.7% of the variance with institutional level variance accounting for the remaining 6.7% (Reason et al., 2007). However, for EOP students, the findings above don’t seem to apply as the combination of peer, family, program and institutional resources have been found to mediate and influence their eventual college success (Kulik et al., 1983). To this, EOP programs and institutions play a key role in influencing student outcome.

### **Program/Institutional Level**

Predictive of college persistence is the degree of academic and social integration into the culture of college (Astin, 1985 & 1993; Kuh 2001; Kuh et al., 2005 & 2008; Tinto 1993 & 2008). The extent to which EOP and its array of services effectively facilitate student adjustment and acclimation remains to be seen. What is clear is that financial support especially in grants, reduce barriers to college attendance and persistency (Gladieux, 2004). Institutional selectivity and control such as public or private also contributes to college outcome. Specifically, low-income students enrolled in selective

and highly selective colleges and universities have a higher probability of graduating in 4, 5, or 6 years than their counterparts at less-selective institutions (Scott, Bailey & Kienzl, 2006). Motivation provided by college peers (with modest ES of .38) also leads to increase college persistency of EOP students, as they “became sources of social and cultural capital to one another” (Claus-Ehlers & Wibrwoski, 2007, p.583). All of which begins with the summer bridge program, a component of all EOP, where student’s social integration begins. Tutorial services, another component of the EOP, when combined with lighter course load improves college GPA (Alford, 1997). Counseling services, integral to EOP, facilitate mentoring and modeling role while providing understanding of college expectations (Claus-Ehlers & Wibrwoski, 2007; Bernhardt, 1997). Faculty contact also improves academic and social integration (Tinto, 2000) as well as living on campus increases commitment to college (Kuh, 1990, Kuh et al., 2001). Thus, activities that engage students in the college process serve the student and the institution well. As such many researchers call for a more explicitly intrusive services and support structures that closely monitor their effect on EOP student achievement and overall college outcome (Deil-Amen & Rosenbaum 2003, Chaney et al, 1998, Clauss-Ehlers & Wibrowski, 2007, Thomas et al., 1998). Of special concerns are institutions with high percentage of minority and low-income students, where their presence was found to have a negative effect on institutional graduation rate (Titus, 2006). Creating campus culture sensitive to diverse students increases satisfaction with undergraduate experience thereby potentially impacting college completion (Pewewardy & Frey, 2002; Kuh et al, 2008)

### **Gaps in the Literature**

The limited research on EOP indicates that the program or program similar to EOP provides a supportive environment for learning that leads to persistency (Kulik, Kulik

& Shwalb, 1983, Chaney et al., 1998, Thomas et al., 1998). As confirmed in the literature on access and retention, lacking the college “know-how” can be difficult for disadvantage students to transition and ultimately persist in college (Del-Amen & Rosenbaum, 2003). Fortunately, through programs such EOP, they were able to find modes of social and academic incorporation from the start via the required summer institute as well as through EOP staff who serve as cultural brokers (Clauss-Ehlers & Wibroski, 2007). Once enrolled they are supported through a network of resources that include tutoring, advising, personal, academic, career counseling along with financial assistance to defray cost of college attendance, not to mention a wider social network of friends (Grant-Vallone et al., 2005, Clauss-Ehlers & Wibroski, 2007).

Missing are research that employ a mixed method approach combining quantitative and qualitative analysis. Comparing the relative success of EOP students with students of similar programs, for example EOP (State) compared with Student Support Services (Federal TRIO program) is not sufficiently studied. Moreover, research has yet to be conducted using comparative case study of EOP at similarly selective public Research I institutions, as previous studies focused primarily only on Opportunity Program participants at private colleges and universities. Since EOP program staffs are cultural brokers and role models for EOP student achievement, very little research has investigated the demographics effect of EOP staff on student outcome at a singular institution let alone system wide. While longitudinal study has recently been qualitatively conducted of the HEOP population of one private institution, there is no system wide study documenting the effect of EOP as a whole. An evaluation study, similar to ones conducted of Federal TRIO program of both Upward Bound and Student Support Services, is needed for EOP along with all other Opportunity Programs to legitimize its continued existence.

**Building on Past Studies:**

How much of the findings from earlier research still holds true in 2009? Given limited volume of research spanning the four decades since inception of EOP, are claims by Mack (1974) or Allen (1976) still valid in 2009? Specifically, if we were to look at pre-registration characteristics of “persisters” and compare it to “leavers”, are there still no significant pre-registration differences between the two groups? Updating Mack’s research may contribute to greater understanding of the different forces that affect EOP students’ educational progress. Similarly, claims made by Allen (1976) of “black student success is due to black administrators” warrant an empirical investigation. The findings may require applying a cultural congruency theory or organizational demography perspective that investigate the effect of race and ethnicity of staff and their length of service on impacting EOP student and program outcome. Subsequently, this type o research may contribute to EOP hiring practices sensitive to the increasingly diverse student population to be served. These are a few examples of research needing to be refreshed and substantiate with new theory and data. In the mean time, additional questions remain about the future direction for EOP research.

Contextualizing research in the state of New York, and in particular within SUNY, provides opportunity for impacting public policy. Based on the preponderance of research indicating that student characteristics are a major predictor of persistence, it’s no surprise that the independent and private sector, namely HEOP, is outperforming its counterpart at public institutions. Based on entering cohort of 2000 (Table 3 below), opportunity students at HEOP institutions outperformed opportunity students at EOP sponsored institutions by nearly 10 percentage points. As previously discussed in the retention literature, much of the differential in completion can be attributed to



entering student characteristics, peer cohort, financial assistance, faculty and staff support as well as the overall institutional resources and wealth that enable opportunity program students to succeed at New York State independent colleges and universities. As the literature on EOP suggest, program support is essential to student success.

Table 5: Comparison of All Opportunity Programs' Graduation Rate

| <b>Sector</b>  | <b>Student Enrollment</b> | <b>4-yr Grad. Rate</b> | <b>5-yr Grad. Rate</b> | <b>6-yr Grad rate</b> | <b>Total # of All Grads</b> |
|----------------|---------------------------|------------------------|------------------------|-----------------------|-----------------------------|
| <b>HEOP</b>    | 1313                      | 38.4                   | 56.8                   | 60.0                  | 29,600<br>(spring '04)      |
| <b>EOP</b>     | 1555                      | 23.6                   | 45.7                   | 50.4                  | 55,000<br>(sum. 2008)       |
| <b>SEEK/CD</b> | 1777                      | 6.8                    | 24.9                   | 33.5                  |                             |

Sources:

Graduation Rates for First-Time Students Entering a Baccalaureate Program Full-Time (in Year Minus 6) and Earning a Degree Through Spring of the Year Shown at the Institution First Entered: Opportunity Programs Baccalaureate (2000 Entering cohort, graduated in Spring 2006).

<http://www.highered.nysed.gov/oris/gradrates/nys/page6.htm>

However, in 40 years, very little study has documented what account for EOP student success i.e completion from college. While the broader literature points to pre-existing conditions and student characteristics having a positive or negative impact on retention and persistence, very little study has isolated the independent effect of the EOP program on completion from institutional effect. Additionally, studying relative success of institutions with similar student characteristics may yield new insight on college completion for economically and academically disadvantage students (Horn 2006; Titus 2004 & 2006; Scott et al., 2006).

Heeding their advice, I propose to exam student and institutional experiences at SUNY centers of Albany, Binghamton, Buffalo, and Stony Brook. Given similar input characteristic i.e similar volume of EOP students matriculating at the SUNY centers,

- What accounts for the differing EOP graduation rates of similarly selective institutions? Specifically, per Table 4, can Stony Brook's relative success or Binghamton's low graduation outcome for EOP students attributed to the organizational structure of its program? If so, what constitutes their implicit and explicit organizational structure? Or is it attributed to its organizational culture or behavior?
- Are some EOP more institutionalized into the life of the university than the other? Subsequently, does institutionalization affect how EOP students are socialized into the life of the university? Does the explicit socialization via cultural brokers of EOP staff enhance EOP student development and ultimately impacting college completion?

All four institutions are Research I institutions with high degree of selectivity.

However, 6-year graduation rate of EOP students tell a different story. Per table 4 below, the range spans from 45% to 70% graduation rate. SUNY Stony Brook's success in graduating 70% of its cohort far exceeds the institutional rate by 16.5%.

Understanding what they *do* at Stony Brook may help others to mimic their success.

Conversely, the 22% graduation gap between Binghamton's EOP students and all their graduates is alarming. Given similar admissions criteria of GPA and SAT

requirements for the four Research I SUNY centers along with similar socioeconomic status by virtue of being in the EOP program, what then accounts for the differing rate of success? Do student characteristics such as the percentage of part-time versus full-time, non-traditional vs. traditional, residential vs. commuter contribute to the

variability in graduation rate among similar institutions? Are there institutional differences in resources, expectations, and experience that are differently structured? Perhaps, it's the way students are socialized or incorporated into the culture of the EOP program and ultimately the culture of the university that shape student outcome? Parceling program effects of EOP from institutional effect ought to be explored, as limited works have been done to fully study the effectiveness of a single EOP program let alone a comparative and multisite study.

Table 6: EOP Graduation Rates in Relations to Institutional Graduation Rate

| SUNY-Doctoral | EOP Grad. Rate* | Institutional Grad. Rate** | Diff. of EOP & Institutional |
|---------------|-----------------|----------------------------|------------------------------|
| Albany        | 63.38           | 62.1                       | 1.28                         |
| Binghamton    | 56.58           | 79.4                       | -22.82                       |
| Buffalo       | 45.66           | 55.3                       | -9.64                        |
| Stony Brook   | 70.34           | 53.8                       | 16.54                        |

Sources:

\*Successful Educational Outcomes of First-time Full-time students at SUNY Baccalaureate Degree Program in Fall 2001 for Post Secondary Opportunity Students, as of Fall 2007.

\*\* Four, Five and Six Year Baccalaureate Degree Graduation Rate for First-time Full-time students for Fall 1992 through Fall 1997 entering cohorts (F'97 cohort as of F'03).

Performances at the comprehensive 4-year SUNY colleges are also not as impressive as one would expect given a relatively smaller student population and smaller cohort size. Nevertheless, a wide range of successes evident the need for further investigation. The polarity, for example, between the rates of completion of EOP students for SUNY Geneseo (55%) and SUNY Potsdam (25%) and Old Westbury (15%) is disturbing.

EOP program remains a program for economically and educationally disadvantage students irrespective of race. While African Americans were the initial population served, over the course of 40 years, the program has broadened to meet the needs of the increasingly heterogeneous student populations. Table 5 below illustrates the diversity of students served in the state of New York and their relative completion rate at 4, 5, and 6 years after entering postsecondary study. Minority student success, specifically those of African American, Latino and Asian American background, bodes well for the EOP program. Of concern, however, is the low production of White/Caucasian students enrolled in EOP. The 6-year graduation rate for low-income White students is 40.3%, suggesting that more attention is needed to ensure their relative success. Based on Allen's claim of cultural congruency where success for minority students (specifically Black students) is due to the EOP program run by Black administrator and staff may in fact be incongruent for White students (1976). At the present time, not much is know about the characteristics and demographics of staff that work with EOP students. Whether the diversity or lack of diversity within the EOP program staff makes a difference on students' social and academic support remains to be seen and explored. For future research, I suggest including a variable on staff characteristics such as race/ethnicity and/or their length of service to the EOP retention model. EOP program staff is often seen as the "transmitter of social and cultural capital" for economically and academically disadvantaged students. In doing so, this study looks to contribute to research and practice that may help to reduce persistent and pervasive struggles opportunity programs face in serving New York's low-income students.

Table 7: EOP Graduation Rate by Race/Ethnicity

| Race/Ethnicity<br>(2000 Entering) | Volume<br>(SUNY) | 4-year rate | 5-year rate | 6-year rate |
|-----------------------------------|------------------|-------------|-------------|-------------|
| Black/Afr.Am.                     | 503              | 25.4        | 46.7        | 52.3        |
| Hispanic/Latino                   | 440              | 25          | 49.1        | 53          |
| Asian Am.                         | 168              | 29.0        | 55.4        | 60.2        |
| Native Am.                        | 6                | 33          | 33          | 33          |
| White                             | 370              | 15.9        | 35.9        | 40.3        |

Source: Graduation Rates for First-Time Students Entering a Baccalaureate Program Full-Time (in Year Minus 6) and Earning a Degree Through Spring of the Year Shown at the Institution First Entered: Opportunity Programs Baccalaureate (2000 Entering cohort, graduated in Spring 2006).

<http://www.highered.nysed.gov/oris/gradrates/nys/page6.htm>

### National Landscape on Opportunity Programs

Studies that compare EOP program success by state may also shed light on the role states play in addressing issues of equity. Per table 6 below, variations exist by sector and by state. For example, EOP's six year graduation rate when disaggregated from HEOP, SEEK, and College Discovery indicate a higher rate of completion at 50.4% when compared to California's EOP program of 48%. While the percentage differential may be small the relative volume may be more significant where hundreds or thousands more may have benefitted.

Table 8: Opportunity Program Performance for Selected States

| State      | Volume              | 6-Year Grad. Rate |
|------------|---------------------|-------------------|
| New York   | 4665 (all sectors)  | 46.7 (50.4% EOP)  |
| New Jersey | 12371 (all sectors) | 48                |
| California | 27953 (Cal. State)  | 47                |

Source: State websites

## **Conclusion**

Educational Opportunity Programs have arguably served America's economically and educationally disadvantage students well. States like California, Colorado, Florida, New Jersey, New York, Illinois, Pennsylvania and Texas all have EOP programs or similar. The degree to which they achieve their statutory goals outlined in their state education law or charter is to be determined. For certain, program of its kind has provided educational opportunity for students who otherwise would not have had the chance to pursue higher education. Their relative successes demonstrate to a certain degree that the program works! However, the question of potential for greater impact and effectiveness leaves much to be explored. Compensatory programs such as EOP are not often the subject of research, but often object of annual and idle threats to funding cuts. Enhancing programmatic success is a proactive response to future threats, but more so, it's a response to moral responsibility and priority for development of disadvantage students for college success. As education economist reminds us, and recently affirmed by newly elected President Obama, society stands to benefit from a more educated workforce.

Thus, an assessment of program effectiveness must be consciously and deliberately executed, preferably proactively, beyond required reporting of numbers related to enrollment, persistence and services rendered (Astin, 1993; Banta, 1993). In light of increasing fiscal constraints, colleges and universities need to pay more attention to its students and families as consumers. Whether it's the full payer or the fully subsidized students, colleges have a responsibility to stop the revolving door and provide it students a quality postsecondary education that ensures college completion. Admitting students to only graduate half of them is an expensive endeavor for the institution and society. Colleges and universities must serve a public good by providing the

opportunity for educating and preparing more students for participation in the world economy. Stopping the “revolving door” of student departure and re-centering priorities ensures that all students that are given the opportunity to attend college graduate. Self-audit is one way of assessing current conditions while also providing insight for improving effectiveness (Astin, 1993; Banta, 1993). Investing in talent development as Astin suggested might be another way of prioritizing student needs that ultimate will yield positive institutional outcomes of higher graduation rate (1993). In grave economic times, colleges or in this case EOP programs need to be more responsive to its constituents (Tierney, 1998). A potential consequence of neglect may be detrimental to the future existence and survival of EOP. That’s why researchers like Tierney along with many assessment scholars like Trudy Banta, George Kuh, John Bean challenges programs and institutions to be proactive and vigilant for their own sake. It’s been more than 40 years since the inception of the EOP program. Now, may be the best time to re-examine the constraints limiting programs from fully realizing their programmatic goal beyond the college for all mantra and more of a diploma for all attendees. In the words of John Adam,

*A memorable change must be made in the system of education and knowledge must become so general as to raise the lower ranks of society nearer to the higher. The education of a nation instead of being confined to a few schools and universities for instruction of the few must become the national care for the formation of many.*

*---John Adams (1735-1826) President of US*

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