

RECONCEPTUALIZING STUDENT DEVELOPMENT THEORY THROUGH
UNIVERSITY-SCHOOL PARTNERSHIPS

By

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ABSTRACT

College student development theories are often limiting in that they often do not consider the totality or context of an individual or the intersection of a student's multiple experiences and identities. While the years a student spends in higher education are developmentally significant, college student development theories ought to consider development as part of a larger continuum or pipeline. The educational pipeline in the United States largely operates as disparate self-contained silos between primary, secondary, and higher education. However, in order to support transitional and developmental processes, universities and local school districts can develop collaborative partnerships in order to create a more continuous educational and developmental pipeline from high school through vocation, and to ensure students can dedicate greater energies to learning than to aspiration, transition, and persistence. This reconceptualization can enable college aspiration, allow for higher education access for underserved students, ease college transition, and augment persistence and completion.

In reconceptualizing Student Development Theory, and in understanding the efficacy of university-school partnerships, this study examined how students experienced the Rutgers Future Scholars program, and what aspects of the program best helped them prepare for the college experience (from the application and transition processes, through persistence), and how they perceived their likelihood of achieving success in college. Structured interviews were conducted with 21 participants at Rutgers University who completed the Rutgers Future Scholars program and are currently in their first or final years of college. The data showed that the students perceived benefits from the pipeline model that provided, among other things, academic preparation, skills development, mentoring, financial assistance, admissions counseling, and transition assistance.

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One of the respondents in this study was pondering her future. Having identified as a student for much of her life, she found her upcoming graduation and the life after that awaited after to be nerve-wracking. She was faced with the prospect of having to discover a new identity, one that did not involve a classroom or homework, but one that included new “real world” challenges such as finding a job and “adulting.” As this phase of my life comes to a close, I find myself in a similar dilemma. I have identified as a student for more than two decades of my life and I am unclear what life will look like when I no longer have that identity. What is clear though is that the completion of a dissertation and achievement of a degree is not an individual achievement, but a collective one. None of this would be possible without the support, guidance, and perhaps most importantly, patience, of so many people. They also should be celebrated. I have had to confront my own self-doubts, crises of confidence, and even at times, the very will-power to persist through any number of challenges. Had it not been for the following people, I would not even be in a place to write an acknowledgements page at this point.

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With all due respect to my dissertation committee, my first thanks goes to my immediate family for their love and encouragement. They each make cameos in my dissertation in the form of pseudonyms. My son, Braden, was five *months* old when I first started on my degree and now he is five *years* old. In the time I have learned about and applied scholarly research, Braden has

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learned the English language, how to get himself dressed, how to feed himself, how to make every electronic device in our house work...and all about dinosaurs. Par for the course for a five-year-old. My daughter, Tessa, now eight, has learned how to read and do math, though it will be years before she will have the capacity to read what I have written here, as her interests lay closer to *The Owl Diaries* and *Pokémon* than to Student Development Theory or qualitative analysis. I hope that Braden and Tessa may themselves be inspired, as they have inspired me, to value education and knowledge and even pursue it in vast quantities.

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“What are the sources of educational inequality and how can schools and universities work to reduce inequality and foster social justice?” The questions were part of a class discussion, but to me it was much more than that. These were the questions to which I had been seeking answers, but I had not yet articulated that at that time. Dr. Justice taught me that when studying education, we must consider not just the interplay between student and teacher but also the interplay between school and community. With that class discussion, Dr. Justice put in me in touch with the truth I would be seeking. I learned from him that school reform isn’t just change, nor does it have to be a revolution. I thank you for your inspiration and for your incredible role in helping me discover my scholarly path.

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As a committee, they have taught me, both consciously and unconsciously how good research is done. It has been a privilege to be associated with such an exemplary group of scholars and practitioners. I am forever grateful for their willingness to serve on my committee. I have truly enjoyed the doctoral process from beginning to end and while I am to be no longer enrolled as a student, I consider myself a scholar-practitioner, and I will forever draw inspiration from the scholarship and practice of Drs. Tomlinson-Clarke, Justice, and McCormick. No, I do

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not know what my future holds, but I have taken a challenging path, one in which everyone here played a significant role and helped me leverage challenges into successes and triumphs. And for that, I say again, and with finality, thank you.

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CHAPTER 1: INTRODUCTION

College student development theories are often limiting in that they often do not consider the totality or context of an individual or the intersection of a student's multiple experiences and identities. As a result of a lack of coordination between colleges and high schools, or the offering of skills courses or other preemptive strategies by colleges including motivational and time-management strategies, students were never taught, nor ever taught themselves, how to work through challenging issues in college (Baldouf, 2009).

A guiding philosophy of college student affairs is that understanding student development is crucial to effective practice. Student development theory has four essential uses: description (what is happening), explanation (causes of behavior), prediction (ultimately, the goal of student development theory, though few theories achieve), and control (student development theory has yet to accomplish this) (Evans, Forney, Guido, Patton, Renn, 2009). Student Development Theory has always existed in some form in higher education, but what development theory consists of and what factors contribute to it has evolved over the past half millennia. However, the 1960s saw the beginning of significant changes in higher education in light of the turmoil of the Vietnam War, civil rights and women's rights movements, and greater diversification of college student populations (no longer just predominantly upper or middle-class white males) (Evans et al., 2009). Those changes included incorporating psychology and sociology in understanding student development, and, eventually, campus ecology.

Despite how it has changed over time, one shortcoming is that Student Development Theory did not effectively evolve beyond the college campus, thereby perpetuating a fragmented approach to understanding how students develop. This is significant because theory not only informs personal practice, but it may have also informed and perpetuated the siloed structure of

our K-16 education system. In this way Student Development Theory not only reflects, but only perpetuates the institutions and structures of our education system.

Student Development Theory is rooted in understanding how students gain knowledge in and make sense of post-secondary education. The very nature of Student Development Theory suggests a siloed, compartmentalized education system. Those silos separate primary, secondary, and post-secondary education. As a result, there are structural barriers such as high school curricula remaining unmoored from college curricula, and a lack of any consistent vision of liberal arts education that can prepare students for college coursework, as well as developmental barriers, including prospective college students not developing the temperament for college.

While the years a student spends in higher education are developmentally significant, college student development theories ought to consider development as part of a larger continuum or pipeline. The educational pipeline in the United States largely operates as disparate self-contained silos between primary, secondary, and higher education, what Meyer and Rowan (2008) referred to as a tight focus on the ritual classification of education. In light of the increasing costs of education (at all levels) and a growing demand for educational services, the chasm between secondary and post-secondary education becomes more critical. Student development becomes impaired since many students do not enter into college with the requisite sense of self-sufficiency, self-advocacy, or critical thinking skills (Baldouf, 2009). This impairment impacts all students including high achieving students, but disproportionately impacts underserved and underrepresented students (Baldouf, 2009).

There is a fair amount of literature citing the unique challenges faced by underserved populations, including first-generation and minority students (Pulliam & Gonzalez, 2018;

Roscoe, 2015). As college campuses continue to become more diverse, research focused on recruitment, retention, and completion efforts for underserved students has become increasingly critical. Indeed, there has been growth in research focused on high-achieving first-generation and minority students over the past two decades (Harper, 2015). Student Development Theory may be more useful if it is reconceptualized to better understand and account for the connections between secondary and higher education rather than treating them as unconnected buckets in a student's educational/vocational trajectory. Student Development Theory ought to model a continuous (and more developmentally appropriate) pipeline. In doing so, it may inform more effective practices such as intensive pre-college immersion programs that will modernize the educational system. Rather than considering school systems, we need to consider systems of schools in order to bring secondary and higher education into the twenty-first century.

In order to support transitional and developmental processes, universities and local school districts can develop collaborative partnerships in order to create a more continuous educational pipeline from high school through vocation, and to ensure students can dedicate greater energies to learning than to aspiration, transition, and persistence. This reconceptualization can enable college aspiration, allow for higher education access for underserved students, ease college transition, and augment persistence and completion. Reconceptualizing Student Development Theory into a pipeline model ideally modernizes our education system, but more importantly, enables educators to create counter-narratives, particularly for underserved and first-generation students—who may not be exposed to a college-going culture—with regards to college aspiration and completion. Factors such as poor academic preparation, lack of resources, poverty, and systemic and institutional barriers have widened the educational attainment gaps

between the nation's underserved students and more "advantaged" students (Dyce et al., 2013), leading to significant class-based frustrations (Stuber, 2011).

Providing access to higher education is critical for social mobility, particularly for socially or economically disadvantaged, marginalized, and disenfranchised students, as well as for promoting national economic interests. Despite this, college access and attainment remains unequal and stratified particularly along racial and socioeconomic lines (Dyce, Albold, & Long, 2013). In addition to racial minority (particularly African-American and Latinx students) and economic statuses, first-generation students also fall into a category that can broadly be described as "underrepresented" or "underserved," terms that can be used interchangeably.

Access to and attainment in higher education, while a challenge for all prospective students, disproportionately challenges underserved students. Moreover, relative to more advantaged students, underserved students, such as minoritized or economically underserved students, are less likely to attend college. From a sociological lens, schooling is central to stratification in modern societies, as the obtainment of higher paying jobs is typically associated with increased attainment in education. In this way higher education tends to serve as a meritocratic mechanism of social mobility (Stevens, Armstrong, & Arum, 2008). Indeed, social background may play a role in predicting college admissions (Stevens et al., 2008). Social stratification occurs long before students enroll in college, which impacts college readiness. That stratification continues throughout the college-going process, which reproduces social inequalities (Stevens et al., 2008). Thus the education system operates, in part, as a systematic barrier to college for many minorities who finish high school unprepared for college and also limits educational and career opportunities for many minority students who actually may be well prepared for higher education (Carnevale & Strohl, 2013). For that reason, increasing higher

education access, ensuring an effective transition process from high school to college, and providing students with the tools to succeed in the first year is crucial, particularly since attrition is highest during and immediately after the first year.

Institutions of higher education are making a more concerted effort to reach underrepresented and marginalized students for the purposes of recruiting, educating them about, and preparing them for higher education. This has contributed to underrepresented students seeing the largest gains in college aspirations; however, they still have not had similar gains in access and attainment (Venezia & Jaeger, 2013). Moreover, underrepresented and underserved students are less likely to meet readiness benchmarks (Larimore & Sidhu, 2015). This suggests that reaching these students, especially at earlier ages, increases the pool of students who are actually prepared for college and also enable the students to attend institutions that are the best “fit,” which refers to the perceived congruence between the student and the institution (Chavous, 2000). Pre-college and early-intervention programs that are borne out of collaborative partnerships between universities and local school districts are identifying students and following them through high school and college, providing a suite of support systems to prepare them for college including mentoring, college visits, summer programs, and scholarship funding.

As socioeconomic needs proliferate among people and institutions, school districts have been increasingly looking for institutional partners with whom to collaborate to address complex issues related to aiding underserved students with regards to college access and completion (Leiderman, Furco, Zapf, & Goss, 2002). Subsequently, institutions of higher education have become more engaged in their local communities (Bringle, Officer, & Grim, 2009). Purposes of such collaborations include increasing higher education access for marginalized students through the implementation of pre-college enrichment programs, the promotion of “pro-college” attitudes

among middle and high school students, and admissions pathways. Collaborative programs may also include access to college advising, mentoring, and other supports to which underserved students may not otherwise have access. Students enrolled in and successfully completing such preparatory and access programs may then be provided with either a guarantee of college admission, or scholarship support, or both. Recent examples of formalized partnerships include University of Chicago's Urban Education Institute partnership with Chicago Public Schools (Patterson, 2018), the Port Richmond Partnership Leadership Academy that works with local schools in Staten Island and Wagner College (Wagner College, n.d.), and the Houston Independent School District and Rice University forming the Houston Education Research Consortium (Rice, n.d.).

Reimagining our academic structures through cross-sector partnerships and academic system alignment is essential to helping students prepare for college and useful when local school districts have clear guidance, objectives, and strategies (Ajinkya, Brabender, Chen, & Moreland, 2015). Thus, as we reconsider structures, we need to reconsider how we understand students as well, as the two are interrelated. Ajinkya et al. (2015) identify seven best practices that communities are implementing to improve academic system alignment and support college-readiness for all students. These practices are listed as: (1) developing student aspirations for college, (2) offering high-quality college-readiness curricula, (3) delivering learning outside the classroom, (4) increasing financial awareness and readiness, (5) guiding students through the admission process, (6) assessing student progress and readiness and, (7) easing the transition to college.

In the interest of promoting equity, social justice, and diversity, and for national economic interests as well, it is important to ensure that underserved and underrepresented

students have access to higher education and are able to maximize their ability to learn about college preparation and readiness prior to enrolling, and about content, critical thinking and other skills upon enrollment. Moreover, as the commercialization of higher education becomes more apparent, it becomes necessary to formulate initiatives to not only ensure students are immersed in favorable academic environments but to also target specific student populations when molding those environments. The combined impacts of globalization and increasing demand for college access have necessitated new initiatives for ensuring access and assuring academic quality (World Bank, 2002). These factors have required institutions of higher education to become more responsive to rapidly changing demographics and student program interests.

The Rutgers Future Scholars Program (RFS), a five-year pre-college program, is an example of a current partnership between a university and local public school districts that includes, among other things, developing college aspirations, delivering learning in multiple settings, guidance through the admission process, and easing college transitions. Other examples of successful precollege programs include the Wolverine Pathways program at the University of Michigan and the Valley Scholars program at James Madison University, both of which are replicated from the RFS program. Each year, the RFS program offers 200 first-generation, low-income, and other underrepresented middle school students from New Brunswick, Piscataway, Newark, Camden, and Rahway the opportunity for a college education (Future Scholars). Select students are also drawn from a Rutgers-affiliated charter school, Leap Academy University Charter School (Future Scholars). Other partnerships around the country draw from other student populations, such as students with disabilities, and typically are not as extensive in their length or breadth as the RFS program. The RFS program is “one of the few programs for first-generation, low-income students that support them all the way through college. The Rutgers

Future Scholars program also starts earlier than most: seventh grade” (Zimmerman, 2017, para. 15). The RFS program is broad in scope compared to other collaborative efforts between universities and local school districts, which makes it a compelling case.

Because the success of the RFS program has implications in a wide array of areas including earning benefits for individuals, tax benefits for state and federal governments, crime rates, health and wellness, welfare programs, among many others (Belfield, 2010), it is necessary to understand the role the RFS program plays in student development, and its place in the developmental pipeline from secondary education through vocation. From there it is important to implement assessment and evaluation practices to support student academic and developmental success as well as the long-term success of the RFS program. In this case, the success of the RFS program may be determined by how well the program is ensuring a continuous progression in student development rather than a fragmented progression reflective of a siloed educational system.

It is worth examining the efficacy of the RFS program, specifically from the perspective of students who have successfully completed the program, in order to assess how well the program meets its goal of bridging the developmental gap between high school and college and in doing so, ensuring student access, transition, and retention. The student point of view is the focus of this research because as higher education moves closer to a consumer model, we need to be aware and address some of its underlying flaws, and understand the perceptions of the consumers. In this case, students are metaphorically consumers of education. The rapidly expanding social demand for higher education has been caused in large part by students’ desire to achieve the increasing benefits available to individuals with higher degrees (Dill, 2010). And while a student’s developmental support systems including family, teachers, and school

administrators have enormous influence over that student's academic and professional trajectory, students are indeed the direct consumers of higher education. In this context, the product of higher education is improved and better serving when Student Development Theory is reconceptualized as a continuum, when that reconceptualization is implemented through university-school partnerships. Doing so would enable us to tackle educational problems more holistically than K-12 or postsecondary educators and scholars can do alone.

My research explored the experiences of students participating in an initiative that serves as the context of a university-school partnership. Using their own voices, this study provided the students an opportunity to reflect on the experiences (including the various activities and programs) that serve to increase readiness and preparation for higher education. Of particular interest was whether the RFS program was successful in meeting the academic and socio-emotional needs of the participants. More specifically, the goal was to assess students' perceptions of whether they are better students (i.e. better prepared for entrance into and persistence throughout college) as a result of their experience in the RFS program, and in their early university experience. Subsequently, the research assessed the perceived quality of the university experience of first-year and final-year students who have completed the RFS program using data collected from individual students about their subjective experiences during their time in the RFS program and their perceptions of whether they perceived the RFS program to be a valuable experience in their development and preparation or not. There is great value in considering student voice in research and practice. Very little research has considered the student perspective as an integral component of education practice (Mansfield, Welton, & Halx, 2012). A more inclusive approach to researching student development can create innovative and relevant reforms to theory and practice. In fact, the notion of "student voice," or a student role

in the decision making and change efforts, has emerged in the new millennium as a potential strategy for improving the success of school reform efforts (Mitra, 2004).

Problem Statement

Access to higher education is increasingly critical but there remain significant gaps in higher education access, aspiration, and attainment for underserved and marginalized students such as minority, low-income, and first-generation students. There may also be gaps in meeting socio-emotional needs that may be specific to minority, low-socioeconomic, and first generation students. This is, in part, because of a disconnect, both in student development theory and in coordinated practice between secondary and higher education. Stage (1989) noted that since the early 1970's, there has been a great deal of research focused on the college student, and there has, subsequently been a shift from atheoretical to theoretical studies in college outcomes such as satisfaction, persistence, etc. There has, at the same time, been added focus in the student affairs profession about the nature of students and how they develop. However, there are significant gaps between these two bodies of research. In its current state, Student Development Theory is grounded in psychological research that is centered around, specifically, college students, and enables student affairs practitioners to understand the inner-workings of their students. However, my research was predicated on the notion that a substantial portion of the college-going pipeline is lost to many students in middle school and high school. For that reason, the concept of Student Development Theory, particularly for underserved students must have a longer time horizon—one that begins before the first year of college and reaches back into students' K-12 educational and socioeconomic experiences.

Hudley (2013) noted that the American narrative continues to insist that higher education is the path to the middle class. Nevertheless, as Hudley (2013) also noted, the primary and

secondary education that underserved students receive is demonstrably insufficient to make them competitive when compared to more advantaged students, thereby precluding a pathway to higher education. Deficient or outdated supplies, materials, and opportunities to learn, deteriorating infrastructure, teachers without adequate credentials, and other similar factors diminish student engagement and achievement (Hudley, 2013). Moreover, underserved students are less likely to receive appropriate support from guidance counselors (Perna, 2015), in part due to a counselor to student ratio double the national average (Haskins et al., 2009). While most school districts have inadequate access to guidance counselors, poor, diverse, and urban districts exhibit particularly high student-to-counselor ratios (Gagnon & Mattingly, 2015).

Students in higher-income public school districts have easier access to guidance counselors, better classroom materials and support systems, whereas students in high-poverty school districts do not. Paradoxically high-poverty districts tend to have students who need additional support but have fewer guidance counselors, larger class sizes, and poor facilities. This discrepancy is largely due to funding models that rely heavily on local property taxes. High-poverty municipalities have lower property values and therefore collect less tax revenue. Thus available funding does not necessarily equal necessary funds. These disparities are reproduced when students experiencing these conditions become less likely to pursue or complete a college education. Education reform over the past generation or two has focused mostly on improving the quality of public schools and since the 1970s, nearly every state has had litigation over equitable education (Semuels, 2016). In the past decade greater attention has been paid to increasing access to higher education.

The latest national data shows that high school graduation rates are trending upward across the nation, though fewer students are going to college. Just over 84 percent of the

students who were high-school seniors during the 2015-2016 year graduated, up from 82.3% in 2014-2015 and 81% in 2013-2014 (NCES, 2015). The rate has inched up annually over the last few years, largely because of strides made by disadvantaged students (NCES, 2015). NCES data shows 76.3 percent of Hispanic students, 72.5 percent of Black students, 74.6 percent of economically disadvantaged students, and 62.6 percent of students with limited English proficiency graduated during the 2013-2014 school year (NCES, 2015). Comparatively, 79.3 percent of Hispanic students, 76.4 percent of Black students, 77.6 percent of economically disadvantaged students, and 66.9 percent of students with limited English proficiency graduated during the 2014-2015 school year (NCES, 2016). Most states hit or exceeded the national graduation average, including a few that are already very close to reaching the 90% mark.

The outcomes clearly varied greatly from state to state and many gains were a result of local reforms, not necessarily due to broad socioeconomic trends (DePaoli, Fox, Ingram, Maushard, Bridgeland, & Balfanz, 2015). Though graduation rates have increased for low-income students over the past several years, this student subgroup still lags well behind their more affluent peers. The 2012-13 Adjusted Cohort Graduate Rate (ACGR), a newer graduation rate measure, for low-income students reached 73.3 percent, up 3.3 percentage points from 2010-11 but still more than eight points behind the national overall rate (DePaoli, et al., 2015). Similarly, graduation rates for minority students have significantly improved since 2006, with a 15 percent gain for Hispanic/Latino students, and a 9 percent gain for African-American students. In fact, Hispanic and African-American participation in higher education is increasing at a much faster rate than that of whites (Carnevale & Strohl, 2013). Despite this progress, Hispanic/Latino and African American graduation rates (75.2 percent and 70.7 percent, respectively) are still lower than rates for White (86.6 percent) and Asian (88.7 percent) students

(DePaoli et al., 2015). Moreover, whites have maintained their dominance in the top 468 colleges in the United States (of which Rutgers University is one), having shifted out of open-access institutions, while minorities have moved into the seats vacated by whites in open-access institutions that are frequently crowded and underfunded (Carnevale & Strohl, 2013). In addition, any progress that has been made, has not been universal, as more than a dozen states still fell below the national average, and a handful of those states, including Arizona, Illinois, and New York, even saw their graduation rates drop (NCES, 2016).

Despite increasing high school graduation rates, college enrollment itself is declining (National Student Clearinghouse, 2016). In fall 2015, overall postsecondary enrollments decreased 1.7% from the previous fall (National Student Clearinghouse, 2016) and in fall 2016, overall postsecondary enrollments decreased another 1.4 percent including a 1% decline in public sector enrollment (2-year and 4-year institutions combined) (Clearinghouse, 2016). There are practical reasons for this development including the rising cost of college education. There is another stark reality, that many students who do enter college are not prepared academically or developmentally to stay there (Gao & Johnson, 2017). According to Gao & Johnson (2017), a combination of weak high school preparation and poor counseling in high school lead to unclear direction at the college level. Their research also suggested that students historically underrepresented in higher education are more likely to drop off the pathway at every stage to and through college.

While students were more likely to enroll and stay in college during the Great Recession when there were fewer jobs, and conversely as people are drawn back toward the workforce in light of economic recovery, there is a particular disconnect for marginalized and at-risk students. Marginalized students are responsible for the biggest improvements in high school completion

(NCES, 2016) but such students are a big reason college enrollment numbers are declining across the country. For example, based on U.S. Census Bureau figures, the percentage of students from low-income families attending college immediately after getting their high-school diplomas has declined by 10 percentage points since 2008, to 46 percent.

Boosting graduation rates has become a priority for school districts across the country, in large part because of the ever-increasing importance of a high-school—and postsecondary—degree in the U.S. economy (Wong, 2015). In the 21st century global knowledge economy, there is a growing demand for college-educated professionals. The share of jobs that require postsecondary education has doubled over the last 40 years, as jobs require more skills (Carnevale, Smith, & Strohl, 2010). By 2018, it was estimated that 62 percent of jobs in the U.S. will require a college education, and that over half of those jobs will require a four-year degree (Dyce et al., 2013). If the United States maintains its current college graduate production rate, the country will face a shortage of 16 to 23 million college-educated adults in the workforce by 2025 (Dyce et al., 2013). The growing national and global demand for college-educated professionals warrants implementing strategies to increase the number of graduates American universities are producing. One such method is to tap into an underutilized supply of prospective college students who are those underrepresented and marginalized students who may not otherwise have the aspiration or means to attend college. A reconceptualization of student development theory and its implementation through university-school partnerships can enable that process.

In addition to national outcomes, higher education for underserved students is necessary as key to social and economic mobility and the threshold requirement for a middle-class family income (Carnevale et al., 2010; Perna, 2015). In light of the growing need for an educated

population, providing college opportunities is critical to promoting social mobility, particularly for socially or economically disadvantaged students. Indeed, a college education has a strong influence on whether or not students are able to move up the economic ladder as they become adults.

The dilemma of reduced college opportunities for underserved students and the parallel shortcoming of student development models that are discontinuous necessitates new theoretical models, particularly new models that evaluate student development in the context of a continuous pipeline. The application of new student development theory models that account for how postsecondary institutions might transform their educational and social structures to provide a continuous educational experience from secondary to postsecondary education rather than perpetuating two disparate academic experiences is needed to assist higher education to work more effectively with underserved students. Oliva & Nora (2004) noted that when the emphasis of a school is simply to prepare students for the next level of schooling without really involving those at the next levels (i.e., high schools and postsecondary institutions), it is difficult to imagine that whatever positive effect an intervention has on a student in middle school, for example, will continue and extend all the way to college. Oliva & Nora (2004) further argued that it is certainly important to establish a foundation from which students grow, but that university-school partnerships need to provide substantive coordination in teaching and learning for there to be any meaningful impact in the interest of students.

Institutions of higher education ought to move beyond the mere provision of student services such as advising and financial aid, and into something more transformative that may speak to rethinking the role of student affairs personnel and faculty and instituting appropriate access, transition, and persistence policies and practices. Reconceptualizing Student

Development Theory as a pipeline better enables institutions to generate access and subsequent success for all students. If Student Development Theory adopted an open systems approach and considered the educational system as a whole, integrated dynamic entity, it would be in a position to consider and understand many elements in the system, and develop a generalized picture of complex interacting elements and sets of relationships. Unfortunately most research focus on parts of a whole educational system and most theoretical perspectives consequently have biases or limitations by focusing on one part in a vacuum (Ballantine & Spade, 2008). Because understanding success for underserved students in a higher education context requires a much deeper understanding of educational and socioeconomic inequalities that exist prior to college, student personnel should be engaged in the challenge of applying new theoretical models that bridge the gap between secondary and higher education.

Research Questions

As higher education is important for social and economic impacts in society, there is a vested interest in ensuring a constant flow of students into higher education (Brennan & Teichler, 2008). It is also necessary to ensure that a student's development is a continuous, uninterrupted pipeline. In light of various types of inequities in certain school districts (e.g. gaps in resources, funding, personnel, or support services) that get passed down to its students and manifest themselves in the forms of lowered aspirations or reduced preparation, increasing college access cannot be the responsibility of local school districts alone, nor can it be the responsibility of institutions of higher education alone. However, with the joint efforts of both stakeholders, there can be a pipeline to college for students who may not otherwise go.

Indeed, there is growing interest in collaboration and partnership between campus and community. Ajinkya et al. (2015) demonstrated that partnerships are essential to helping high

school students prepare for college and to bridge the gap between the two. To that end, institutions of higher education are increasingly making efforts to reach underrepresented students in order to recruit, educate them about, and prepare them for college, by collaborating with local school districts and communities (Ajinkya et al., 2015). The Rutgers Future Scholars (RFS) Program, a five-year pre-college immersion program, is an example of such a university-school partnership that has been implemented and replicated.

This study was guided by an exploration of underserved students, what we know, what we still need to know, and how student development theory can be reconceptualized to better understand and serve students. In general, all students, including underserved students, are expected to progress through the educational pipeline, the continuous progression from high school to college, into the workforce. However, underrepresented and underserved students continue to face challenges in the pipeline that leave them vulnerable (Green, 2006). The processes by which students pursue and transition into college, including access, preparedness, and completion are of growing importance, especially as the prospective college student pool becomes increasingly diverse. However, not all students experience these processes in the same ways. For some students, particularly underrepresented and underserved students, accessing, transitioning into, and completing college can be especially challenging. The more we understand the barriers faced by underserved students, including cultural and structural barriers, the closer we will come to reframing student development theories and developing effective strategies for improving student attainment and increasing access to higher education.

This study was developed with the following guiding questions:

1. Can university-school partnerships such as the RFS program, reflect a new developmental pipeline paradigm? If so, can such a reconceptualization better equip

underrepresented, underserved, marginalized, and disenfranchised students with the development, skills, and social capital to access and transition into college and then navigate the challenges and rigors of college?

2. Assuming the educational structure is inefficient with regards to student development (and developing students), can creating educational pipelines through university-school partnerships more efficiently usher student development, identity formation, self-empowerment, and college preparation?
3. Does the RFS program demonstrate an understanding of what the specific needs of underserved students may be, and what may be some of the determinants of their development and college success that the RFS program accommodates?

Akareem and Hossain's (2012) study showed that perceptions toward the quality of education and programmatic elements depend on students' current status and socio-economic background. Hurtado and Carter (1997) similarly showed the subjectivity of the perceived student experience based on race and ethnicity. Indeed, the fact that RFS students are first-generation students who are largely minority, and low-SES students, likely had an impact on how they perceived the value of the program. Important topics of discussion with the participants included:

- In what ways did the RFS program enable you to develop as a student and as a person?
- In what ways did the RFS program increase your attendance and aspiration toward eventual completion?
- How has the RFS program helped you to prepare for college? What are your perceptions of college? What has been most meaningful to you in preparing for college?

Meaningfulness may be understood through the students' better understanding and grasp

of application, admission, and transition processes as well as their own development, persistence, experience, success, and college completion.

- What elements of the RFS program are contributing factors to your development as a student, and what gaps are there in the RFS program that need to be remedied?
- How would you improve the RFS program? Is anything missing that might be included to help other students achieve their college goals? Given your experiences, what specific suggestions you have for modifying program content or delivery?

While the overarching goal was to determine the value of university-school partnerships such as the RFS program, in reevaluating Student Development Theory, the value had to be a product of more than just detectable measures such as enrollment and completion rates. Measuring value has to be a product of acknowledging the specific challenges underserved students face and then striving to meet those needs. Data such as enrollment and completion rates tell only part of the story. We need to develop a more nuanced understanding of college/academic success and value in higher education and in programming. Green (2006) argued studies that move beyond simply collecting numerical data (such as enrollments, grades, and test scores) are needed to better understand the complex issues that affect underserved students' academic achievement. Doing so will provide researchers and educators with a more complete picture of academic culture, resources, attitudes, and practices that promote or hinder achievement for underserved students.

CHAPTER 2: LITERATURE REVIEW

The literature that follows measures “success” in higher education, points to the socioeconomic value of higher education, explains why providing access to higher education is an important goal, outlines determinants for the perception of education quality, and demonstrates how an educational pipeline created through university-school partnerships is effective at improving the student experience and student development, and a better model of Student Development Theory. However, as university-school partnerships are relatively new in educational reform and leadership, the analytical literature has been and continues to be somewhat lacking (Greenberg, 1992; Laguardia, 1998; Tierney & Hagedorn, 2002; Eriksen & Gajda, 2015; Perna, 2015). Since the 1990s, there has been relatively little peer-reviewed research on university-school partnerships specifically as a means of providing college access and as value-added propositions. Perna (2015) claimed that between 1990 and 2013, only 34 studies were published on the effects of such programs, of which only 18 provided sufficient information to conduct cross-study reviews of effects of targeted interventions on college readiness and/or enrollment. Even fewer have attempted to identify the effects of college-related outcomes of specific program components and services (Maynard et al., 2014). However, there is research conducted by non-profit organizations such as the Institute for Higher Education Policy (IHEP), a nonpartisan, nonprofit organization that promotes access to and success in higher education for all students. IHEP develops policy and practice-oriented research, including research on university-school partnerships.

Interestingly, university-school partnerships have proliferated over the past two decades (Thorkildsen & Stein, 1996). In fact, the Educate America Act of 1994 signed into law by President Clinton, lent the federal government’s recognition of the ability of university-school

partnerships to promote systemic education reform, improve the quality of learning and teaching, and support new initiatives to provide equal educational opportunity for all students (H.R. 1804, 1994). Among Congress' findings enumerated in the Educate America Act included:

[I]nstitutions of higher education should be encouraged to enter into partnerships with schools to provide information and guidance to schools on the skills and knowledge graduates need in order to enter and successfully complete postsecondary education, and schools should provide information and guidance to institutions of higher education on the skills, knowledge, and preservice training teachers need, and the types of professional development educators need in order to meet the purposes of this Act (H.R. 1804, 1994).

The bill recognized that university-school partnerships improve learning and teaching by providing a national framework for education reform, and promote the systemic changes needed to ensure equitable educational opportunities and high levels of educational achievement for all students.

The collaborative university-school programs that have proliferated since the 1990s that are designed to target students (as opposed to professionals) focus on different ages (e.g. middle school students, high school students, high school seniors) and do so with different objectives (e.g., college preparation, skill development). However the predominant university-school model that has been identified in peer-reviewed research for such collaborations include “professional development schools” (PDS) that serve as a teacher preparation model, or other research initiatives, and there is ample literature analyzing those models. For example, Nath, Guadarrama, and Ramsey (2011) investigated university-school partnerships through the lens of professional development schools, and Turley and Stevens (2015) considered these relationships

as research partnerships. In a global context, Kruger, Davis, Eckersley, Newell, and Cherednichenko (2009) studied university-school partnerships in Australia to identify examples of effective and sustainable partnerships as part of preservice teacher preparation programs and continuing professional development for practicing teachers. PDS models aside, there are collaborative partnerships between universities and communities that focus on navigating pipelines to college for underserved and marginalized students. Community partners are working together to assess what kinds of best practices and initiatives work best for the various student populations within their communities.

Measuring Success in Higher Education

Recent years have seen mounting pressure on colleges and universities to measure and describe the value that they are adding to their students (Cunha & Miller, 2014). This is partially a reflection of the modern outcomes-based culture of accountability. While most common measures capture the causal influence of institutions on their students these measures must take into account the fact that students enter college with different backgrounds (Cunha & Miller, 2014). Standard measurements do not enable us to observe those factors, and therefore, take them into account. Cunha and Miller's (2014) analysis showed that there are large differences in outcomes across public colleges and universities prior to controlling for pre-existing student characteristics. Indeed, there are a number of complexities that limit measuring success in higher education including the high variability in the quality and characteristics of inputs, such as the students (Sullivan, Mackie, Massey, & Sinha, 2012).

Recent scholars have called for new theoretical frameworks, assessment methods, and the pursuit of new lines of inquiry into college success that better reflect the experiences of diverse student bodies (Museus, 2014). Museus noted that over the last two decades, a substantial

amount of scholarship has examined the impact of institutional environments on the experiences and outcomes of diverse college student populations. These efforts are emanating from increased attention to the limitations of existing dominant theoretical perspectives, in particular limitations borne out of the lack of attention to racial and cultural realities faced by underrepresented populations (Dowd, Sawatzky, & Korn, 2011).

Simkovic (2017) argued that higher education should not necessarily be evaluated based on “good” or “bad” measurable outcomes since higher education can add substantial value even while under-producing “positive” outcomes (e.g. admissions, persistence, completion), and conversely, education can fail even while producing “positive” outcomes. Sullivan, et al. (2012) argued that using simple metrics such as enrollment and graduation rates without a solid understanding of their meaning in divergent contexts may distort as much as they inform and until more rigorous alternatives are created, they will continue to be used and misused. For this reason, this study will seek a more nuanced understanding of success by accounting for student background.

This study sought to determine whether students deem the RFS program a “success,” based on their subjective perceptions that are informed by their own statuses and experiences. Rendón (2006) argued that new models of student success must address issues related to the diverse nature of students entering higher education and warns against grouping students into “megagroups” or large seemingly homogenous students (p. 1). Ignoring the complexities of underserved students force researchers to operate with a blind spot about what constitutes the newly emerging college student and what constitutes an underserved student. There are numerous characteristics of underserved student populations. For example, low-income and many first-generation students grow up in poverty, attend under-resourced schools, and

frequently grow up in environments where nobody they know has attended college (Rendón, 2006). Many working-class students are students of color (i.e. African-American, Latinx) and are socially defined as “minorities” who are targets of prejudice and discrimination (Rendón, Garcia, & Person, 2004).

Baxter Magolda (2004) observed that societal expectations including rapid change, ambiguous and multiple lifestyle choices demonstrate extreme complexity that students are faced with when it comes to their development. Navigating the complexities of developmental expectations of contemporary society requires students to develop the ability to be inventive and creative, be guided by their own visions, and essentially be masters of their own domains. At the most sophisticated levels of development, students are able to acknowledge that their abilities and knowledge are constantly evolving and contextualized within their own perspectives (Baxter Magolda, 2004).

Determinants of College Access

Lareau (2003) argued that Americans are much more comfortable recognizing the power of individual initiative than recognizing the power of socioeconomic class. Yet there is no question that society is stratified. Public schools have a tendency to reflect the communities that they serve, which ensures that, depending on the nature of the community, classrooms may produce success and advantage or failure and disadvantage. Anyon’s (1980) research suggested that there is, in fact, a “hidden curriculum” in the level of school work depending on the social class communities of a school that has significant impact on the theory and practice of education. It is with this backdrop that improving college access and completion for underrepresented students is one of the most important challenges facing our nation (Perna, 2015).

Underserved students continue to be underrepresented at institutions of higher education for a number of reasons including funding, academic preparation, access to information, and an

inability to effectively navigate the college-going pathway (Tierney & Hagedorn, 2002).

Families increasingly face financial barriers to college access (Page & Scott-Clayton, 2015). As family incomes have remained stagnant over the past decade and have declined in real terms at the bottom of the income distribution, an increasing fraction of family resources becomes necessary to fund college (Page & Scott-Clayton, 2015). This is compounded by the increasing costs of higher education. For the 2015–16 academic year, annual current dollar costs for undergraduate tuition, fees, room, and board were estimated to be \$16,757 at public institutions, and \$43,065 at private nonprofit institutions. Between 2005–06 and 2015–16, the cost of undergraduate tuition, fees, room, and board at public institutions rose 34 percent, and the cost at private nonprofit institutions rose 26 percent, after adjustment for inflation (NCES, 2016c). While substantial amounts of financial aid are available, students are often unaware of what sources exist and the processes are for accessing aid. Moreover, misperceptions about college costs are widespread and are most prevalent among students from the lowest-income backgrounds (Page & Scott-Clayton, 2015).

Low-income, minority, and first-generation college students are often concentrated in under-resourced high schools, which compounds access barriers. Underrepresented minorities face barriers—including highly segregated schools and neighborhoods that are under-resourced and not effective in academic preparation. Moreover, prospective college students, particularly those from underserved populations, may lack necessary information about the costs and benefits of college, as well as the process of preparing for, applying to, and selecting a college (Page & Scott-Clayton, 2015).

The growing complexity of college costs and financial aid, information and

procedural barriers also hinder access (Page & Scott-Clayton, 2015). Some students may lack access to information, while others may be overwhelmed by the process of parsing information on the volume of potential postsecondary options (Page & Scott-Clayton, 2015). The complexity of the college-going process itself may hinder students from achieving greater rates of college access and success. (Page & Scott-Clayton, 2015).

The continued persistence in access gaps may be that traditional approaches to increasing college access such as student financial aid programs have focused too narrowly on the issue of enrollment without sufficiently considering the steps required to be academically, socially, and psychologically prepared to enter and succeed in college (Tierney & Hagedorn, 2002). Thus, improving college access and success for underrepresented students requires a multi-faceted, comprehensive approach, and commitment from multiple stakeholders in order to address the multiple forces that limit college access for students historically underrepresented in higher education (Perna, 2015). Such a comprehensive approach must ensure that: all students have the necessary financial resources to pay college costs; all students are adequately academically prepared for college-level requirements; and all students have the information and knowledge required to understand college-related requirements and processes, make appropriate college-related choices, and navigate the complicated pathways into, across, and through higher education institutions (Perna, 2015; Tierney & Hagedorn, 2002).

Factors Influencing College Transition

Current studies of student transition to college emphasize the intersection of social, economic, and academic circumstances of students and the institutional systems that should support them (Briggs, Clark, & Hall, 2012). While recent studies still cite Tinto's seminal work on transition, first-year success, and progression (Briggs et al., 2012; Stewart, Lim, & Kim,

2015)—in fact, Tinto's is the most widely cited theory of college student persistence and degree completion (Bensimon, 2007; Museus, 2014)—scholars have noted several critiques of his theory, particularly the lack of emphasis on the intersection of aforementioned circumstances. For example, Tierney (1992) noted that Tinto did not take into consideration the fact that underrepresented students come from cultures and communities that are vastly different from the college campuses they attend. Bensimon (2007) noted that institutions themselves as well as their personnel play a significant role in providing the confidence and courage to successfully enter into college, though Tinto did not take that into consideration. Museus (2014) argued that this is problematic because this can place blame directly on underserved students and their behaviors for their struggles without acknowledging the role of institutional environments in student transitions. Hurtado & Carter (1997) further departed from Tinto's model by suggesting greater attention needs to be paid to underrepresented students' subjective sense of transition, belonging, and integration into campus life. Collaborative university-school relationships have the potential to enhance transition processes, to respond to the diverse communities from where students come, to mobilize institutional resources to aid students, and to account for students' psychological dimension of students' connections to their institutions and their perceived sense of belonging.

Student transition into higher education has increased in importance in recent times, particularly with the growing trend of increasing participation by students from underrepresented populations (Gale & Parker, 2012; Raab & Adam, 2005). Researchers have become increasingly aware of the social and economic factors that contribute to how well students transition from secondary to postsecondary institutions. If students do not resolve transition issues in the first

year, particularly during their first semester, the likelihood of persisting at the same institution is diminished, which also affects future enrollments and graduation rates (Raab & Adam, 2005)

In response to that reality, there has been a burgeoning array of college preparation programs through university-school partnerships seeking to create opportunities for precollege students (Tierney & Hagedorn, 2002). These collaborative partnerships enable better-informed decision-making and are, therefore, significant (Briggs et al., 2012; Martinez & Klopott, 2003). Many of these collaborations include attention to student guidance, advisement services, and collaborative arrangements that expand academic options for students, and address the needs of targeted groups of students (Tierney & Hagedorn, 2002). Collaborative partnerships also enable students to manage expectations. Briggs, et al. (2012) posited that 1) prior to enrollment, students have a difficult time envisioning college life or accurately predicting their student experience; 2) there may be a mismatch between students' aspirations and the reality of their transfer into college and their first-year experience, which causes difficulty in adapting to higher education and; 3) uninformed decision-making, which leads to potential withdrawal.

Not all students who successfully enroll in college enter academically ready. With increased rates of college enrollment have come increased rates of students unprepared for college-level coursework (Page & Scott-Clayton, 2015). Access to college preparatory coursework and college counseling are not equally available at all high schools. Underserved and underrepresented students have fewer opportunities to obtain the academic preparation required for college and less "college knowledge" regarding what is expected in the first place (Page & Scott-Clayton, 2015). Evidence suggests that pre-college intervention programs such as access to tutoring and coursework, academic advising, and counseling programs have at least a

modest effect with helping students overcome precollege academic deficiencies and associated disadvantages (Pascarella & Terenzini, 2005).

Improving college access remains one of the most promising strategies for raising overall college degree attainment, particularly if universities conceptualize access not just as getting students into college, but also getting them off to a good start at an institution that is aligned with their interests and capabilities. The challenges that students face during the transition to college may influence not only whether they attend at all, but also the timing of enrollment, choice of institution, method of finance, and the pace of progress towards a degree (Page & Scott-Clayton, 2015).

Sidle and McReynolds (2009) found that transitional facilitation programs enable students to better understand the purpose of higher education, feel more comfortable as a member of the campus community, and increase their belief that they are capable of success in higher education. Additionally, students develop a sense of academic competence and identity. While Sidle and McReynolds' (2009) studies focused on established transitional methods such as freshman experience courses, a clear supposition is that students who undergo such transitional facilitation, in and outside of the classroom prior to their college-going experience have a more enriching college experience than if they did not receive such facilitation since it offers a smoother developmental pipeline. Similarly, Johnson and Carpenter (as cited in Flippo and Caterly, 2000) in discussing the viability of pre-college intervention and learning assistance programs, also pointed out that freshman students are often the main focus of institutions of higher education in their desire to maintain student retention because freshmen tend to be at a higher risk of dropping out. They need the greatest acculturation to services, academic life, and new demands on their time and sense of discipline. Furthermore, Friedman and Mandel (2009)

found that academic performance and college student retention can be predicted not only by transition facilitation but also by expectancy and goal-setting. These are all qualities that reconceptualized Student Development Theory frameworks that are oriented towards a pipeline model can take into account and facilitate when those models are implemented through university-school partnerships.

Higher Education Access for Socioeconomic Mobility

Access to higher education, particularly for minority, low-income, first-generation, and other underrepresented and marginalized students is increasingly critical but there remain significant gaps in higher education attainment for those students. Specific sources of inequality and gaps include inequitable access to funding for local school districts (Ladson-Billings, 2006), the unavailability of qualified teachers, teaching materials, or counselors (Anyon, 1980), local segregation (Carter, 2005), discrimination that leads to hypercriminalization (Rios, 2011), and prejudice against immigrants (Abu El-Haj, 2007; Suarez-Orozco, Suarez-Orozco, & Todorova, 2008). As a result of their limited or lack of college exposure, low socioeconomic status, ethnicity, geographic location, and social norms, such students often lack the financial capital to afford college, the vested human capital to ensure the appropriate academic ability to complete college, the social capital to ensure socioeconomic mobility, or the cultural capital to “fit in” if they do go to college (Dyce et al., 2013; Sweet & Meiksins, 2016).

Systemic and institutionalized inequality in American society has had a clear impact on education and therefore, socioeconomic mobility. Ladson-Billings (2006) referred to this phenomenon as an education debt. While the more commonly used term “achievement gap”—the disparities in standardized test scores between Black and White, Latina/o and White, and recent immigrant and white students—is one of the most talked-about issues in today’s education

literature, Ladson-Billings (2006) argued that it is more relevant to look at the “education debt” that has accumulated over time. This debt comprises historical, economic, sociopolitical, and moral components (Ladson-Billings, 2006).

The education debt has been perpetuated by the growing numbers of students who are competing for admission, as the number of applicants has doubled since the early 1970s (Bound, Hershbein, & Long, 2009). Underserved students have been at greater risk, as higher income families have been able to allocate greater resources to help improve odds of admission (Bound et al., 2009). Indeed, social background has played a role in predicting college admissions, which may serve as an indictment of the fairness (or, potentially, lack thereof) of the college admissions process (Stevens et al., 2008), or of the nature of college access. Social stratification occurs prior to college enrollment and that stratification has continued throughout the college-going process, which has reproduced social inequalities (Stevens et al., 2008). Despite the growing access of underserved students in higher education, the system remains virtually a dual system of disparate and unequal opportunities where stratification in higher education mimics and magnifies inequalities it inherits from primary and secondary education systems (Carnevale & Strohl, 2013).

Stevens et al. (2008) argued that colleges and universities historically may have been institutions that were designed to serve more privileged segments of society and that the expansion of higher education was elitist, perpetuated by corporate and civic leaders to serve their own purposes, though this is strictly speculative. What is not speculative, however, is that barriers towards college affordability and access, while issues for all prospective students, have disproportionately impacted underserved and marginalized students. Moreover, relative to more advantaged students, underserved and marginalized students have been less likely to attend

college and those who have attended have often chosen colleges that did not appropriately match their academic ability, a phenomenon referred to as academic undermatching.

In 2013 the immediate college enrollment rate for high school completers from high-income families (80%) was 31 percentage points higher than the rate for those from low-income families (49%) (NCES, 2015). This is significant because there is a substantial social economic cost to not tapping into the potential of low-income, first-generation, and minority youth. While research has suggested there is a high level of aspiration, there has been low levels of attainment and closing this gap requires vigorous support and programming (Dyce et al., 2013).

Underserved, marginalized, and low-SES students are widely known to not only lack access to higher education but those who do attend have a difficult time in the transition to college and have a higher likelihood to drop out.

Determinants of Education and Programmatic Quality

Prompted by an increasing concern for quality in higher education, there is growing research to identify factors associated with student success in college (Sattayanuwat, 2015; Tam 2004). Students' college-related decisions, behaviors, and successes do not occur in a vacuum. Rather they occur within, and depend on, the contexts in which students are embedded (Perna, 2015). Identifying and understanding these factors will help higher education and primary/secondary education administrators design and implement initiatives to enhance student learning, improve learning environments, and expand opportunities for furthering education.

Sattayanuwat (2015) identified family background, gender, socioeconomic status, and school inputs (quality of teaching and resources) as factors that affect student achievement in college. Akareem and Hossain's (2012) concluded that students' current status and socio-economic background were the key determinants. The New Jersey State Advisory Committee to

the United States Commission on Civil Rights (2010), viewing educational equity as a civil rights issue, identified teacher quality is a key determinant of student success, and that minority and economically disadvantaged students have disparate access to well-qualified teachers. Similarly Adelman (1999) found that the strongest predictor of college success was a rigorous high school curriculum. Portes and MacLeod (2010) found that educational achievement among immigrant second-generation youths in the United States was a factor of the parents' socioeconomic status.

Higher Education Access and National Interests

Higher education has moved to the core of national socioeconomic adjustment strategies, and has undergone a far-reaching institutional transformation in response to socioeconomic inequalities in higher education. While national interests are not at the central core of this study—student experience and perceptions are at the core—understanding factors that influence student success and identifying how university-school partnerships can promote those factors contribute to a national return on investment. National interest requires expanding access to higher education, and reducing barriers that underserved and marginalized students encounter. Identifying student success factors serve national interests, making higher education a national asset.

Across much of the world, the higher education sector has experienced rapid expansion and structural change, with countries seeking to meet “world-class standards.” Even though public higher education comprises only a small part of welfare states' expenditures, governments and economists alike have emphasized that reforming it in the form of increased access will improve both social inclusion and economic growth (Schulze-Cleven, 2015). In the United States, without a college degree underserved students have a 45 percent chance of staying in the

bottom socioeconomic rung, and just a 5 percent chance of moving to the top socioeconomic rung (presumably in the top 20%). However, the attainment of a college degree quadruples the chances of underserved students moving out of the bottom rung (Isaacs, Sawhill, & Haskins, 2008).

Educational attainment is not only necessary for socioeconomic mobility, but it is more important to the nation's economic success than ever before. In the 21st century global knowledge economy, there is a growing demand for college-educated professionals. Moreover, postsecondary education has become the threshold requirement for a middle-class family income (Carnevale et al., 2010). This is of particular importance, as economists argue that the middle class in America is rapidly shrinking. There is a clear relationship between formal education level and annual wages, as employers are willing to pay more to workers, on average, for the knowledge, skills, and abilities they attained with increasing levels of education (Carnevale et al., 2010). Ironically, as the value of education has increased, public resources directed to underserved students have been cut, blocking those students from the opportunity to attend college and attaining social mobility (Kahlenberg, 2004).

University-School Partnerships as School Reform

This relationship between community and campus is described as “campus-community,” “community-campus,” or, in the case of higher education and K–12 schools, “university-school” (Bringle et al., 2009). This collaborative approach may be the key to not only preparing disadvantaged students for the personal and academic rigors of college but also to providing them with greater access (Perna, 2015; Tierney & Hagedorn, 2002).

The concept of university-school partnerships has become an emerging theme in school reform discussions as a means of changing schools to correct perceived social and educational

problems such as inequality and stratification in access to higher education. There is a wide-ranging set of education afflictions that are commonly cited for the growing demand for such partnerships. Socio-political factors include lack of public support for public education, budget crises, a limited pool of potential teachers from minority groups, and changing demographics of the student body (Greenberg, 1991). Greenberg also identified factors such as students' frequent lack of skills preparedness, high dropout rates, limited minority retention and graduation rates, increased awareness of the need for enhanced articulation between levels of institutions, and an acute awareness that the challenges confronting secondary education, particularly for at-risk students, require a community effort in which colleges are being asked to play a larger role.

These challenges have lent themselves to collaborative initiatives since institutions of higher education may have the ability to utilize greater social, economic, and cultural capital to provide underserved students the necessary guidance, mentoring, and preparation than the local districts and communities with which those students are affiliated. These students are often not academically prepared by their public schools and often left out of any reasonable pathway towards higher education. These students lack academic, social, and emotional support, mentors, confidence, or basic knowledge of the college application and attendance process. Indeed, Carnevale argued that the key obstacle to getting more high school graduates enrolled in college is limited information (Wong, 2016).

Institutions of higher education have a unique opportunity to alleviate the stresses to local districts that are often unfairly blamed for not solving social and political pathologies, and for the disillusionment caused by failed reform efforts. This is achieved by essentially relieving underserved public schools of certain insoluble burdens such as creating college-going cultures. This collaborative model may be the key to not only preparing disadvantaged students for

college but also to providing them with greater access. Moreover, such collaborations would fulfill a university's mission of civic engagement. Additionally, because such a reform is structural and relational, institutions of higher education and their partner schools are insulated from reforms not meeting measurable aspirations.

Policy talk about reform has often had a utopian ring, though actual reforms have typically been gradual and incremental (Tyack & Cuban, 1997). Reforms such as university-school partnerships are particularly suited for a reform-minded culture in that such reforms do not necessarily require a major change in policy, just the financial resources from a university, the energies of a dedicated faculty and staff, and an intentional curriculum that is designed to provide adequate tools for college preparation, access, entrance, and completion. Moreover, such reforms do not require standardized student testing, or an overly heavy burden upon public school teachers of administrative tasks.

Mechanism of and Examples of University-School Partnerships

University-school partnerships can take multiple forms and institute a number of best practices including intervention programs that include preparatory summer courses, advising and mentoring, and admissions opportunities. Some states and school districts define reform through the lens of boosting academic expectations, benchmarks, or requirements for graduation. However an emerging body of research and practice has suggested that a better means of preparing students for college success and creating pipelines to college—particularly for those who do not envision themselves as college material—is providing some form of college immersion while in high school (Hoffman, Vargas, & Santos, 2009). Hoffman's et al. (2009) analysis focused on accelerated learning or dual-enrollment options but there are sufficient

parallels in process and results to render that analysis relevant to early intervention or early immersion programs since the shared concern is bridging the secondary-postsecondary divide.

Collaboration between universities and local schools can be significant for their ability to address structural and institutional barriers in terms of access and equity in higher education (Dyce et al., 2013). In this way, university-school partnerships that are designed as early intervention models are valuable for the college-going capital they create. Early intervention and college access programs can create social and cultural capital that includes mainstream academic knowledge as well as cultural values and dispositions that promote academic success (Dyce et al., 2013). The effectiveness of such programs can be evaluated by how they aid in the transition to college, increase persistence rates, and provide knowledge about the collegiate process.

The success of university-school partnerships can also be gauged by how well they fill the needs gaps of underserved and marginalized students. Their value hinges on productive participation and buy-in from multiple stakeholders, including administrators from local school districts such as superintendents, principals, and teachers, and from institutions of higher education including vice-presidents, vice-chancellors, and deans. Obviously we cannot make the assumption that even the most effective partnerships will cure all problems that plague disadvantaged school districts or that they will meet student needs. However, effective partnerships do have the potential to better advance the common interest of providing opportunities to students, and provide mutual support. Most importantly, university-school partnerships have the potential to achieve outcomes better than those when school districts and universities work alone (Timperley & Robinson, 2002).

Education has undergone significant changes as a result of globalization and economic changes, thus the traditional view of higher education is now considered outdated. Instead, there

is an emerging emphasis on lifelong learning and in this new era, successful educational systems are adopting strategies to promote outreach and collaboration between higher education and schools (Ng & Chan, 2012). Despite growing interest and discussion surrounding collaboration between universities and secondary education institutions—specifically for the purpose of increasing student learning as well as college access for underserved students—the number of successful efforts in implementing such a model has represented a very small portion of public schools and colleges (Greenberg, 1992).

There is a newly and ever-increasing emphasis being placed on the concept of cross-institutional education initiatives such as university-school partnerships (Eriksen & Gajda, 2015). Collaborative and sustainable university-school partnerships are an innovative educational framework. Such an approach needs to be brought to the forefront of pedagogical discourse, as only recently have case studies and literature increasingly emerged outlining cooperation between universities and schools on initiatives to improve student learning and opportunities (Eriksen & Gajda, 2015). To be clear, there are numerous collaborative models. Because the creation of partnerships for the purposes of aiding students is a relatively new development, there has not been sufficient opportunity to study their characteristics or their records of success (Laguardia, 1998; Perna, 2015). Much of the existing peer-reviewed research regarding local school district partnerships has focused on partnerships between local school districts and local partners such as business, community, and family interests, as a means of better integrating schools into their respective communities (Timperley & Robinson, 2002). Eriksen & Gajda (2015) noted that there is now a clear shift in perception and discourse among educators that places emphasis on the exchange of theoretical and practical knowledge between schools and institutions of higher education. This recent change in attitude toward education has allowed

educators and practitioners to focus more seriously on the student side of university-school partnerships, as opposed to previous models that emphasized research or professional development collaborations.

There is a growing collection of successful university-school partnership programs, each with different objectives and target groups. The University of Pittsburgh has a weeklong program for rising juniors and seniors designed to provide a college experience (Rothrock, 2017). Others focus on developing aspiration. The City University of New York has partnered with 171 middle schools across all five New York City boroughs to build college-going culture among middle school students by providing campus tours and providing workshops for families and educators (S. Deb, phone interview, June, 2017). The Westside Pathways Project at the University of Utah is a partnership with K12 schools in and around Salt Lake City that provides mentoring as early as elementary school to build college awareness and aspiration (S. Deb, phone interview, June, 2017). South Texas College established early college high schools and other programs in the Rio Grande Valley in order to promote college readiness by providing local high school students with college-level dual-enrollment courses (S. Deb, phone interview, June, 2017). In a similar vein, the Onondaga Pathways to Careers Scholars (OPC) program aids in the college transition process for students with disabilities (Bodemer, Deb, & Horan, 2018).

Rutgers Future Scholars Program

The Rutgers Future Scholars initiative was announced in 2007 by Rutgers President Richard L. McCormick during the Annual Address to the University Community. The initiative aimed to develop a model for enhancing educational opportunities for first-generation and low-income students that could be expanded across New Jersey and the rest of the country. The program was designed to provide academically talented students from surrounding school

districts with opportunities for education growth, social development, personal enrichment, and economic support. Additionally, the initiative sought to increase the number of students who complete high school and pursue higher education (Rutgers Today, 2008).

Prospective students are identified before they begin eighth grade and those who participate for the full five years of the program and meet Rutgers University's admissions requirements are able to attend Rutgers free of tuition. They continue to receive academic support and mentoring while at Rutgers. In addition to being in good academic standing, prospective students must not only be highly recommended by a teacher and school administration, they must also have full support for participation from a parent or guardian. Upon admission, students are expected to participate in a number of activities including summer campus programs that emphasize pre-college programs in various areas of study, a Saturday seminar series to enhance academic skills and career options, and PSAT/SAT/ACT test-taking training (Rutgers Today, 2008). Every year the RFS program admits 200 students prior to their eighth grade year and each year the program builds on the foundation of the previous year. RFS has served nearly 1800 students since its inaugural year, 2008 (Rutgers Future Scholars, n.d.).

The pre-college portion of the program costs approximately \$7,600 per student over the five years students are enrolled. The cost per student during college was originally projected to total between \$36,000-\$75,000 depending on available federal and state financial aid. The Rutgers Future Scholars program is funded primarily through private donations and corporate gifts. The investment is intended to creating a diverse community that is reflective of New Jersey's population, and to provide an education to those who may not have otherwise pursued it, thereby creating future leaders and productive and contributing members of the state and regional economy (Rutgers Today, 2008).

Students in the RFS program at the New Brunswick campus are predominantly admitted from the New Brunswick Public Schools and Piscataway Public School districts (Rutgers Future Scholars, n.d.). New Jersey's Department of Education categorizes school districts into District Factor Groups (DFG), that describe the socio-economic characteristics of the local district or the purpose of comparing students' performance on statewide assessments across demographically similar school districts. The weighting of a number of components such as the district's population with no high school diploma, the percentage with some college education and the poverty level and unemployment rate of the district is used to produce a statistical score for each district, which is then ranked and placed into one of eight groupings – A, B, CD, DE, FG, GH, I, and J. Each grouping consists of districts with similar factor scores. I and J districts score highest on the socioeconomic scale, while A and B districts score lowest. New Brunswick, Camden, and Newark are DFG A, Piscataway is in GH. Relevant to the New Brunswick campus, the 2016-2017 NJ School Performance report for New Brunswick High School's graduation rate was 68.7%, ranking it as "Needs Improvement," and 59.9% college enrollment rate within 13 months of graduation, compared to a state average of 76.1%. 87% of New Brunswick High School's students are economically disadvantaged and 16% are English language learners (NJ School Performance Report 1). Piscataway High School's graduation rate was 92.1%, designating the school as "Making Progress," and 85.2% college enrollment. 34% of the students are economically disadvantaged and 2% are English language learners (NJ School Performance Report 2).

Other school districts represented in the RFS program include Blackwood, Bloomfield, Cherry Hill, Clayton, Clifton, Elizabeth, Gloucester, Lumberton, Maplewood, Middlesex, North

Brunswick, Paulsboro, Pennsauken, Philadelphia, Plainfield, Sicklerville, Somerdale, Somerset, and Union.

Bergerson (2009) identified academic preparation, skills development, mentoring, nurturing aspirations, and financial assistance as the hallmarks of effective college access programming. The Rutgers Future Scholars (RFS) program has incorporated each of those objectives, as well as other goals for which Ajinkya et al. (2015) advocated such as financial awareness, admissions counseling, and transition assistance, which potentially makes it a model for other institutions to follow.

The RFS model engages students, or “scholars,” as they are referred to, in an interdisciplinary and holistic pre-college curriculum with the intent of fostering academic growth, social development and personal enrichment (NSLA, 2017). Upon selection, students participate in academic and experiential learning opportunities at their local Rutgers campus for three to six weeks each summer following their seventh grade year, including rigorous university credit-bearing enrichment courses taught by Rutgers faculty. The program features opportunities for students throughout the school year and over the summer. The summer program is intended to boost students’ academic skills, introduce them to careers and college majors, and it also offers students the experience of living on a college campus (NSLA, 2017). Additionally, the summer program provides a safe environment for students, a supportive environment that is conducive to learning, substantive interactivity that fosters a sense of belonging, and engaging learning environments (NSLA, 2017).

The summer program contains rigorous enrichment courses that eventually enable scholars to earn early college credit. The actual summer coursework varies by campus based on available resources and the specific needs of that community’s students, but each Rutgers

campus adheres to yearly academic and personal development themes (NSLA, 2017), and content that may mirror those themes. The year one theme and content focus is on identity formation (“Cultivating an identity as a Rutgers Future Scholar and future college student. Career exploration and college orientation.”). The year two theme and content focus is self-empowerment (“Cultivating the skills essential for self-advocacy. Critical analysis of nonfiction text. Developing arguments. Cultivating the habits necessary for high school and collegiate study.”). The year three theme is social and civic engagement (“Mastering skills essential for school success and educational expression. Navigating and responsibly using social media. Analyzing social justice issues.”). Year three curricular content has a STEM focus and includes SAT preparation. The year four theme is career and workplace exploration (“Exploring career and college pathways. Understanding the skillsets, expectations and rights in the workplace. Making a difference in one’s community.”). Year four content covers topics such as law, business, economics, and criminal justice, while also continuing test preparation. The year five theme is college preparation (“Actualizing the goal of being admitted to college. Navigating processes of accessing higher education.”). During year five students explore career interests and begin work on college essays and application (NSLA, 2017, p. 5, Rutgers Future Scholars, n.d.).

Outside the summer, during the academic year, the RFS program model includes mentoring and coaching to provide students with academic tutoring and personal guidance, monthly local cohort meetings, a seminar series that consists of topics such as career exploration, the college exploration process, and team building, and social and cultural events (NSLA, 2017).

As of September 2018, there are over 2000 students who have been served by RFS. As of August 2018, RFS has two cohorts of students who could have graduated from 4-year

postsecondary institutions, as the first cohort graduated high school in 2013. Forty-five RFS students have graduated from Rutgers University and other 4-year institutions to date (38% of those who originally enrolled at 4-year postsecondary institutions as of fall 2013). Since six-year graduation rates are most commonly used to report out for this population of students, there will be more accurate numbers in 2019. Over 575 students who completed the RFS program enrolled in, or began college in the fall 2018 semester. Of those students, 68 percent (approximately 390) enrolled at Rutgers University at any one of its three campuses. In the 2018-2019 academic year, there were 130 students in their first year and 69 students in their final year.

The RFS program is an innovative replicable model that demonstrates how educational opportunities may be expanded when institutions of higher education partner with local school districts. As such, other institutions of higher education have followed suit by replicating the Rutgers model including the University of Michigan (Wolverine Pathways Program) and James Madison University (Valley Scholars Program). The RFS program is consistent with the emerging focus on higher education as the pathway for individual and national economic success. These initiatives have been aimed at establishing a college-going mentality among underserved public school students, providing those students the tools to succeed in that endeavor and in their transition from high school to college, and providing the necessary mentoring and financial resources to ensure college admission and completion.

CHAPTER 3: METHODOLOGY

Research Plan

The RFS program serves as the contextual backdrop for this study. In reconceptualizing student development theory, and in understanding the efficacy of university-school partnerships, this study examined how students experienced the RFS program, and what aspects of the program best helped them prepare for the college experience (from the application and transition processes, through persistence), and how they perceive their likelihood of achieving success in college. Previous research has identified factors such as socioeconomic status, immigration status, and race that influence student success. Bearing in mind that RFS students are largely minoritized and marginalized youth, this study explored what RFS students identify as the specific factors that have contributed to their success of prior to and upon entry into college. More specifically, the research examined which elements of the RFS program are contributing factors to students' perceptions of their success. Also the study explored potential gaps identified by students based on their experiences in the RFS program. Of particular interest are the ways in which students made personal meaning that contributed to their development as a successful student in middle school, high school, and ultimately, college. What might students identify as structural and institutional barriers in terms of access and equity in higher education? How would the students define program and personal success?

Setting

The Rutgers Future Scholars Program is implemented on all three of Rutgers University's campuses, Camden, Newark, and New Brunswick. This study included RFS students from all three campuses.

Participants

In broad terms, this study proposed the rethinking of college Student Development Theory as a contiguous pipeline from middle school through vocation with a specific focus on the transitional period between secondary and higher education, through early higher education by examining the student experience in, and as a result of, the RFS program, and consider the RFS program's role in reshaping development theory. The primary target population was the 100 students currently in their freshman year since the lens through which I evaluated university-school partnerships is through college access and transition. These students completed the RFS program in the summer 2018 term. As recent alumni of the RFS program and as college first-years, I speculated that this population was not so immersed in college that they were overly removed from their RFS experience, but still immersed enough where they could reflect on their new college experience and future prospects. Did RFS meet their needs during high school? Did the RFS program enable them to aspire towards college and enable them to access higher education if such aspirations were previously lacking?

Fall semester first-year students are generally not particularly familiar with their development pathway and are focused on their transition into college, developing a sense of school belonging (Freeman, Anderman, & Jensen, 2010), and navigating self-efficacy beliefs, values about their education, perceptions of the university environment, perceptions of campus support, and relationships with their peers (Kirton, 2000). This lends itself to the rhetorical question, what do freshmen truly know at this point? When RFS alumni first arrive on campus as college students, all they know is how they subjectively "feel." The student perspective may not be authentic, since students actually know little of the college experience. For this reason a second population included current Rutgers seniors who completed the RFS program who served

as a comparative group. Where the sample of freshman students served as the focus group, the seniors were the cross-sectional sample.

Qualitative sample sizes should be large enough to obtain enough data to sufficiently address the research questions. The prevailing concept for sample size in qualitative studies is “saturation,” which occurs when adding more participants to the study does not result in additional perspectives or information. A key drawback of saturation is that authors often claim that saturation was achieved without specifying understanding of how saturation has been assessed (Malterud, Siersma, & Guassora, 2015). However, Malterud, Siersma, and Guassora (2015) proposed the concept of *information power* to guide adequate sample size. Information power indicates that the more information a sample holds the lower amount of participants is needed.

To make the information power model simple and readily understood, Malterud et al. (2015) developed it specifically for the context of individual interview studies. An interview study, as this is, may benefit from sampling strategies by shifting attention from numerical input of participants to the contribution of new knowledge from the analysis. Obviously an initial approximation of sample size is necessary for planning, while the adequacy of the final sample size must be evaluated continuously during the research process.

Around ten students each in their first and final years were selected as a maximum variation purposeful sample in order to consider a diverse range of students and develop a robust picture. Because the RFS student body has a 55 percent to 45 percent female to male ratio, slightly more than half the sample were female. The study sought a sample that was representative of the diverse socioeconomic and demographic qualities such as race, ethnicity, and economic status of the population, though bearing in mind that the most of students are

minority and low-SES students. The RFS student body across all campuses consists of 45 percent Latino/Hispanic, 36 percent Black/African-American, 8 percent multiracial, 6 percent Asian/Pacific Islander, 4 percent White, and 4 percent who identify as “other” (Rutgers Future Scholars, n.d.).

Data Collection Methods

Data was collected by conducting individual in-person interviews using a semi-structured interview protocol during the spring 2019 semester. This point is ideal for researching first-year students because it is a period during which the students have had some time to reflect on their experiences with the RFS program while also experiencing the early rigors of college. At this stage they continue to receive mentorship from RFS faculty but they are also transitioning into self-sufficiency and a sense of self-authorship, which Baxter Magolda (2001) defined as “the ability to collect, interpret, and analyze information and reflect on one’s own beliefs in order to form judgments” (p. 14). Similarly, Kegan (1994) argued that self-authorship requires cultivating a secure sense of self that enables interdependent relations with others and making judgments through considering but not being consumed by others’ perspectives. Achieving self-authorship entails a shift from uncritical acceptance of external authorities and social beliefs to critical analysis of authority and society in order to establish one’s own internal authority. Thus self-authorship is the capacity to define one’s beliefs, identity, and social relations (Baxter Magolda 2001; Kegan 1994).

This period of time was also ideal for researching final-year students because they have not only had a complete collegiate experience, and have therefore been removed from the transitional period from high school into college, but also because they are considering a new transition, that of college to vocation, or, in some cases, graduate school. The distance from their

first year in college provided room for comparative analysis, particularly with regards to their growth and understanding, as well as their interpretations of the challenges, realities, and responsibilities in college.

The protocol was designed to gather data about what students' perceptions were about the RFS program, whether and how the RFS program has contributed to their development as college students, whether the RFS program has helped in achieving the students' goals including a successful transition into college and persistence for completion. The protocol also gathered self-identifying demographic information. The interviews were recorded and transcribed with permission of the participants. The transcriptions yielded broad ideas that lent themselves to a code book that was revised as necessary. While the intention was to start with a number of predetermined codes and then fit the data to them, I also incorporated emerging codes based on the data collected.

Data Analysis

In examining the RFS program as the context of university-school partnerships, I conducted an empirical inquiry that investigated a contemporary phenomenon in its real life context (Yin, 1984) using a qualitative data set (i.e. interview transcriptions). To analyze the qualitative data set, I first organized, prepared, and cleaned up the raw data. This process started with ensuring the interviews were transcribed and labeled as accurately as possible, and reviewing field notes. I considered the compilation of interview data from the complete sample. Reading through all the data provided an opportunity to get a general sense of the information and an opportunity to reflect on its meaning (Creswell, 2014).

In order to organize and manage the data, I devised a system of coding that was completed both deductively (drawn directly from the data) and inductively (drawn from a logic

model and an interview map). The data was sorted by code in order to look for bigger patterns of data based on the respondents' key ideas. I also consider outliers and whether a code is informed by multiple respondents. Based on the patterns, data was recoded, or consolidated, while codes continued to be redefined or eliminated.

Researcher Positionality

Of the various college access programs (such as TRIO programs), I specifically evaluated the RFS program because 1) it is an example of a university-school partnership, which may be an effective school reform model and; 2) because I previously taught for the program. That I was once an instructor in the same research site may affect the level of candor that the subjects are willing to share due to my role in the program, it was in the best interest of the research to not reveal that role. Subjects may have been hesitant to share frank thoughts with me that could be interpreted as critical of the RFS program, or out of fear that their thoughts may be reported to family or school officials. Then I had to ensure that my own experiences, particularly those as a former instructor in the program, did not influence my interpretation of what the students tell me. While I am an "insider" as far as being a member of the RFS program goes, I am an "outsider" as far as connecting with the students' life experiences. This outsider's perspective can be both a strength and a weakness. Indeed, I did notice things an "insider" would not, but I also had to work to ensure I was understanding and reflecting the student's perspectives accurately.

While I am not a member of the communities from which the students may identify (by communities, I am referring to municipalities, socioeconomic status, race, ethnicity, and district factor groups), my work with secondary education students, including, specifically, Rutgers Future Scholars students, has impacted my own identification with this set of students. My lived experiences most likely do not overlap with the experiences of the students or their parents. This

does not go to say that I do not understand their experiences, however my understanding is academic rather than experiential. My academic and intellectual understanding of the issues certainly guided me and while I am aware that my lived experience is different than the students', my intention was to gain an increased understanding through their voices.

CHAPTER 4: RESULTS

Characteristics of Camden, Newark, New Brunswick, and Piscataway

Camden, Newark, and New Brunswick are urban areas, while Piscataway is considered largely suburban. My own visits and conversations with students reveal both a fatalistic view of those areas, but a sense of optimism at the same time. Camden is the poorest city in the nation according to Census figures, with a median family income of \$26,105, nearly a fifth of the population unemployed, and 37.4% of the population below the poverty line (DataUSA 1, 2018), though that is the lowest it has been in over a decade. Camden's population is 75,600, of which 48.5% is Hispanic, and 41% is Black/African-American (DataUSA 1, 2018).

Walt Whitman once described Camden as "a city invincible," and the city was once the commercial and industrial center of the southern portion of the state, but the past several decades have not been kind to the city. The five-minute trip to nearby Cherry Hill, a beautiful suburban area is like a journey to a different world. Camden has begun a recent comeback, as billions have been invested in redeveloping the waterfront with high-end housing, job creation, and attracting new companies. Evidence of Camden's strides can be seen in reduced crime rates and a skyline that is being reshaped. However, the vast majority of Camden's population are still faced with a different reality. A walk around the residential areas will show a multitude of low-income apartments, older houses in disrepair, and a disproportionate number of shuttered properties.

Like Camden, Newark's once beaten-down downtown is making its revival a reality. Featuring new luxury condominiums, a Whole Foods supermarket, new public parks, and high end restaurants, the city's downtown revitalization efforts are evident, however the city's other neighborhoods continue to struggle. While downtown Newark is becoming a hub for the arts

and education, the realities for the vast majority of the residential population that are just blocks away from the Prudential Center, the New Jersey Performing Arts Center, or the Rutgers Newark campus. Neighborhoods are full of abandoned houses, high crime rates, and a sense of hopelessness. Newark's median income is \$35,167 and 28.3% of the population is below the poverty line. The population is 285,156, of which 49% are Black/African-American, and 36.25 are Hispanic/Latino (DataUSA 2, 2018)

Continuing the theme of focused urban renewal, a walk around the heart of New Brunswick reveals a tale of two very distinct cities. One is a narrative of redevelopment, revitalization, and urban renewal with over \$1 billion invested over the past 15 years to develop the downtown and nearby surrounding areas. Downtown New Brunswick has a vibrant theater district, a charter school, four-star hotels, luxury condominiums, high-end restaurants, and boutique shops visited predominantly by white and middle to upper-class patrons. A few blocks west, however, reveals the "real" New Brunswick with "shotgun"-style houses, many of which are in various states of disrepair, and largely housing the third of New Brunswick's population that is at or below the poverty line. New Brunswick's median income is \$38,413. The total population is 56,792, of which 53% is Hispanic/Latino, 22.8% is White, and 12.8% is Black/African-American (DataUSA 3, 2018).

Piscataway is far different from the urban areas of Camden, Newark, and New Brunswick. As a suburban area, a drive through the town reveals far more higher-value properties including middle and upper-class residential developments, apartment and condo complexes. There are successful and modern shopping plazas, and restaurants targeting multiple demographics. The population is much more affluent, with a median income of \$89,617 and less than 10% is below the poverty line. Piscataway has a total population of just over 56,000, 38%

are Asian, 36.3% are White, 19.8% are Black/African-American, and 11.35 are Hispanic/Latino (U.S. Census Bureau, 2018).

Sample

Of the 130 students who completed the RFS program and were currently in their first year at Rutgers University, 16 were from Camden, 39 were from Newark, 30 were from New Brunswick, and 29 were from Piscataway (affiliated with the New Brunswick campus). Sixteen students represented other school districts (Blackwood, Bloomfield, Cherry Hill, Clayton, Clifton, Elizabeth, Gloucester, Lumberton, Maplewood, Middlesex, North Brunswick, Paulsboro, Pennsauken, Philadelphia, Plainfield, Sicklerville, Somerdale, Somerset, and Union).

The average GPA of students in their first year was 2.459 (including pre-college and fall 2018 courses). Students from Camden had a higher average GPA (2.879), while students in New Brunswick, Newark, and Piscataway were slightly below the average at 2.447, 2.399, and 2.368, respectively. Of the 69 students in their final year (seniors) at Rutgers, six were from Camden, 17 were from Newark, 17 were from New Brunswick, 19 were from Piscataway, and 10 represent other school districts. The average GPA of students in their final year was 3.018. Students from Piscataway and Newark were slightly above the average at 3.048 and 3.040, respectively, while students from Camden and New Brunswick were slightly below average at 2.986, and 2.977, respectively.

This study utilized a self-selected sample. Prospective participants volunteered to participate in response to one of two solicitation e-mails, the first sent out to the population at large and a second sent to each individual as a follow-up. A potential problem with self-selection is that when respondents are allowed to decide entirely for themselves whether or not they want to participate in the study, there may be bias in the resulting data since the respondents

who choose to participate may not represent the entire target population. At the same time, self-selecting respondents generally have a greater willingness to provide more insight. Indeed, there was mutual benefit for the participants, as they had an opportunity to take time to self-reflect on their development as a student. Moreover, since this study is not necessarily considering causation, a self-selected sample provided rich data.

Through the lens of Student Development Theory, the themes of this study included college-going aspiration, college transition, and potential for completion. If Student Development Theory were a metaphorical stool, these themes serve as the three legs of a pipeline model between secondary and post-secondary education. First-year students were selected to participate in this study to assess the premise that their pathway and entrance into college would be more effective if educators did not separate their development as high school students and college students and closed the conceptualized developmental gap between their senior year in high school and first year in college. Seniors were selected as a comparative group to identify differing perceptions and to gauge the overall impact of their college experiences.

Of the 130 first-year students, 22 students initially volunteered to participate in an interview, 13 ultimately participated and nine students withdrew. Of the 69 seniors, 18 volunteered to participate, of which eight participated, while 10 students withdrew. Students cited a number of reasons for withdrawing including scheduling conflicts, and a reluctance to share information. The volunteers participated in interviews that lasted approximately a half hour. The interviews were mostly conducted over the phone. One first-year student and one senior preferred to respond in writing.

The sample of first-year students is largely representative of the population (see Table 1). Among the first-year, there were nine females, four males. Four students primarily self-

identified as Hispanic, three as Asian (including mainland and subcontinental Asian), two as Latinx, one as Black, and two as “other” or expressed multiple identities. One was enrolled on the Camden Campus, six were enrolled on the Newark Campus, and six were enrolled on the New Brunswick Campus. All students self-identified as being from families who are “working,” “lower,” or “lower-middle class.”

Table 1

| Pseudonym | Sex | Race | SEC | School district | Rutgers Campus |
|-----------|--------|------------------------|----------------|-----------------|----------------|
| Gabby | Female | Hispanic | Working | New Brunswick | Newark |
| Asiyah | Female | Indian, Asian | Lower-middle | Middlesex | New Brunswick |
| Didi | Female | Asian | Lower-middle | Lumberton | Camden |
| Clara | Female | Latina, White | Lower-middle | Newark | Newark |
| Isabella | Female | Latina, Hispanic | Lower-middle | Newark | New Brunswick |
| Deon | Male | Black | Lower | Newark | New Brunswick |
| Erica | Female | Other | Working, lower | Newark | Newark |
| Mia | Female | Hispanic | Lower | Piscataway | New Brunswick |
| Chang | Male | Chinese, Asian | Lower-middle | Camden | New Brunswick |
| Thomas | Male | Hispanic | Lower | Newark | Newark |
| Tessa | Female | Hispanic-Latino, Black | Lower-middle | New Brunswick | New Brunswick |
| Mateo | Male | Hispanic | Lower-middle | Newark | Newark |
| Camila | Female | Hispanic | Working, lower | New Brunswick | Newark |

Similarly, the sample of seniors is largely representative of the population (see Table 2). Among the seniors, there were four females and four males. Five self-identified primarily as Hispanic, two identified as Black, and one student, Allison, declined to self-identify. Two students were enrolled on the Camden Campus, two on the Newark Campus, and four on the New Brunswick Campus.

Table 2

| Pseudonym | Sex | Race | SEC | School district | Rutgers campus |
|-----------|--------|------------------|------------------|-----------------|----------------|
| Danielle | Female | Black | Lower-middle | Camden | Camden |
| Braden | Male | Hispanic, Latino | Lower | Newark | Newark |
| Allison | Female | Did not disclose | Did not disclose | New Brunswick | New Brunswick |
| Mariana | Female | Hispanic | Lower | New Brunswick | New Brunswick |
| Ruiz | Male | Hispanic | Lower | Camden | Camden |
| Martin | Male | Hispanic | Lower | New Brunswick | Newark |
| Valentina | Female | Hispanic | Lower | Newark | New Brunswick |
| Andre | Male | Black | Lower | Piscataway | New Brunswick |

The majority of first-year students expressed interests in challenging STEM fields. Asiyah, Deon, Erica, and Chang expressed an interest in Computer Science. Gabby, Didi, and Clara had plans on pursuing nursing. Don, Erica, and Chang also expressed interest in other STEM fields. Isabella, Mia, Thomas, Tessa, Mateo, and Camila also expressed an interest in a number of social science fields including Business, Human Resource Management, Psychology, and Political Science. Seniors showed similar interests. Danielle, Braden, Ruiz, and Valentina indicated they were pursuing Computer Science or Information Technology. Allison and Martin were pursuing a Business field (Allison was also pursuing Communications), and Marian was pursuing Public Health and Policy after a brief stint in the Nursing program.

Reconciling Aspirations and Expectations

Among the information collected from the first-year and final-year students were questions about aspirations and expectations for going to college, and expectations to complete college. Broadly speaking, Rutgers University first-year and final-year students who completed the RFS program, while coming from challenging environments, demonstrated a sense of drive and ambition, had the aspiration to attend and complete college, desire to better themselves through a college education, and had a sense of optimism about their futures. With little exception, the participants all expressed some aspiration to attend college.

Tessa: In school I had always been a very determined student. Even without RFS, I would have somehow made it to college, 100%. RFS did help with getting me on right path and making the path more clearer. Even without the RFS program I definitely would have ended up at a four-year institution.

RFS students did have some variations about whether they had aspirations of going to college in middle school. Some were not familiar with the college-going process or options, while others were concerned about the financial feasibility of a 4-year college education, but upon starting the RFS program, they developed an aspiration.

Camila: I didn't even know college was a thing before RFS. I would have just graduated high school and taken that as my highest form of education. I also probably would not have taken school as serious as I do now.

By the time the students entered high school, their expectations increased considerably, and by their senior years, the students who persisted in the program and enrolled at Rutgers firmly expected that to be their pathway.

Mia: As a kid I was never really thinking that far ahead. But when I was selected to join the RFS program it was definitely a comforting feeling knowing that when I finished high school I would not have to worry about college expenses. I pretty much decided that Rutgers would be my first-choice school ever since 7th grade.

Andre made an interesting observation that was echoed by a number of other participants, particularly Asiyah, Danielle, Allison, and Mariana, that the RFS impacted their college pathway, as it convinced them to enroll at Rutgers University.

Asiyah: Spending the summer program at Rutgers and taking college-level courses really helped me out. I had a better idea of college than most of my

peers. When I applied for college, the summer program helped with my essay. It was such a breeze to apply. I only wanted to apply to Rutgers.

Mariana went so far as to say that despite living just blocks from campus, it was not until she enrolled in the RFS program that even knew about Rutgers University. Certainly university-school partnerships can aid universities with recruitment by creating these pathways, but it is important to be aware of the fact that numerous students enrolled at other institutions.

Despite students' aspirations, not all students persist through all five years of the RFS program. Didi noted that over time RFS students in her graduating class started to decrease, having started with around 25 students but ending with about 15 by her estimation. Of those who persisted, their aspirations ranged from wanting to attend a four-year institution to attending a two-year institution instead. Alternatively some suggested the possibility of pursuing military service.

Perhaps the most notable means by which the RFS helps reconcile aspirations with expectations is by helping students overcome the primary perceived barrier to a college education, which is financial. Ten of the participants credited their RFS scholarships as their means to a four-year college degree.

Braden: Before the RFS program I wasn't really considering college. I come from a poor family. My Mom went [to college] for some time but dropped out eventually. She is basically a single mother. College is not something I had considered. One of the few reasons I attended is because it's free for me because of the scholarship. The scholarship helped a lot. The scholarship is why I applied for college in first place. The full-ride was a good opportunity.

Martin: RFS definitely influenced my decision to go to college. I am a DACA student. I had the opportunity and resources to go to a well-known school with a great education. [Without RFS] I most likely would have either gone to a community school or not gone to school altogether. My family's resources are limited.

Valentina: If it weren't for RFS I feel like I wouldn't have been in college because financially they helped me a lot. With my parents, my dad was the only one who worked full-time. There is no way parents could afford both [my brother and me] going to college. Maybe I wouldn't have entered at all or went to a community college and get an associates.

Braden made a particularly important point when she noted that the RFS program allowed her to focus all her efforts into academics without having to worry about the financial aspect of her college education, which contributed to her ability to excel in college. She devolved into multi-dimensional challenges, as she mentioned not only financial challenges typical among RFS students, but also the psychosocial challenge of being raised by a single mother. Didi echoed a similar challenge:

Didi: My mom is a single parent so we do not have much money. The only reason I'm attending college is because of RFS.

While participants identified finances as a barrier to college more than any other factor, clearly some students acknowledged, however, that nevertheless they had the aspiration to attend and may have found a way to at least attend a community college.

Mateo: I'd always considered college as something I intended to do. In my household, we aren't exactly low income but I'm not sure if we had money After

joining the program, attending college because less of an eventuality and more of a goal. If I weren't in RFS, I believe that I would still probably attend college but a two-year college most likely.

Perhaps more importantly, when students compared themselves to their peers, they acknowledged that they were advantaged in comparison to those who did not participate in the RFS program. These advantages manifested themselves not only financially, but with their transition into college, and with the support services received during and following the RFS program.

Clara: I saw myself doing better than my peers academically and in college readiness. My level of understanding and expectations of college were a lot more realistic than most of my friends. I was not necessarily groomed but I was prepared. I had a very easy transition [into college]. I had the advantage of having RFS offices there. I didn't have any big setbacks. It could have been a lot worse if I didn't have someone encouraging me to be the best I could be. If I didn't have that, I think I could have had a bad transition.

Camila: I know a few friends who would have benefitted from RFS. They currently are in community college to save money, not in college, or with the help of other sources of financial aid in some sort of college.

There are numerous factors contributing to the students' aspirations including the desire for a better life, influential parents who encouraged their children to pursue college, and the reassurance that their aspirations and expectations can be reconciled. Participants largely agreed that enrolling in the RFS program enabled them to reconcile expectations with not only attending college, but succeeding as well. The RFS program introduced students to the challenges and

responsibilities of college, which helped them begin adjusting to college life before they officially start in the fall semester.

From Aspiration to Completion

By and large, the RFS program effectively matches students' aspirations to both college enrollment and to successful completion. Participants commonly mentioned that they felt prepared for the expectations of college-level courses (it is useful to note that there is a distinction between "expectations" and "rigor," particularly since some said that they were not as prepared for the latter), their socialization was enhanced, and they developed a sense of accountability and self-confidence in their abilities to navigate their academics and the rigors of college life.

Allison: If I didn't have the RFS program, I would still be in school, but I just wouldn't have that strong of a backing and support that RFS provides for me now. I wouldn't have certain experience. I wouldn't have as much exposure to Rutgers and what a college student does at a young age. I would have had to wait and come to terms with it when I got to be a student like the average student. There were opportunities to open my mind to different areas of studies I may want to pursue. Taking college courses also prepared me since the teaching structure is different. I was seeing what it was going to be like.

What students like Allison largely agreed on is that the RFS program allowed them to "test drive" college. The program taught them content and skills, enabled them to acclimate to campus life, provided access to college-level classes, and they learned about potential majors and career paths. Thus, the students not only had aspirations for college, the RFS program instilled a sense of preparedness in them. Eleven of the participants specifically credited the RFS program

for their feeling prepared for the challenges of college. Most participants defined those challenges as academic challenges, such as the rigor of the coursework or the responsibility of keeping themselves on track.

Clara: I think things would be very different [if it weren't for the RFS program]. I would be struggling. I would be working very hard to keep myself in school to do everything I need to do. If not for RFS, I would not be as college ready. We had courses with professors...It was great having that relationship. I was more prepared with expectations. I can hold myself accountable to grades because I know what's expected.

Clara reflects a common sentiment among participants that, for the most part, the RFS program prepared them for college learning. Or, as Danielle glibly put it, RFS prepared them for what they're getting into. Participants cited the college-level courses (as well as the non-credit courses and seminars that would mimic what college learning is like). While some of the participants reported feeling unprepared with regards to picking a major or choosing a career path, but I would speculate that this is more a reflection of students thinking too far ahead and conflating multiple sources of anxiety.

Next to academics, the area of greatest concern was the students' socialization. Students had to not only learn the norms, rituals, and rules of campus life, but they had to become comfortable with communicating and developing meaningful relationships with their peers. These relationships play a significant role in success and retention. Nine of the participants reported various amounts of anxiety about their ability to socialize on campus due to a number of factors. Some participants identified as introverts, others expressed concern about transitioning

from small schools with small classes to a large college with large classes, while others were simply worried about the process of meeting new people.

Danielle: I had to get accustomed to the campus. Social interactions or reaching out are not my thing. But RFS helped me get out of my shell. The program is really hands on, so that helped me to get accustomed to everything. It definitely influenced me to continue my education. I got to be more outgoing and more involved. I had to step out of the box. The biggest difficulty is opening up and asking for help.

Danielle touched upon a complete cross-section of themes touched upon by the participants including getting out of their comfort zone, self-advocacy, getting involved on campus, and the willingness to continue at Rutgers to completion.

Participants credited the mentorship that RFS provides from as early as the middle school years in aiding their development as students and with their transition into and progression through college. The participants, who are largely highly motivated students, mentioned that they had many concerns about college, both in terms of academics and student life. RFS mentors mentally prepared students through the middle school and high school curricula, and continue to provide support through the college years.

Ruiz: The program had the most influence before university. There are internship programs, and activities just to keep us as a unit. They are also teaching us different subjects. As I was in middle school, they were giving math and English assistance and talking about the college lifestyle. They provided a peek through the window. They create a general vibe for the campus.

RFS faculty and staff provide students a little taste of college and what college is going to be like from as early as middle school and continue to provide assistance through major/minor selection, professional development, and college graduation.

Post-secondary Learning

Braden's observation that being relieved of the financial pressure allowing him to focus on his academic speaks to a larger point, that impacts on post-secondary learning, and even learning itself, predates post-secondary enrollment, which Ana speaks to. Danielle and Thomas noted that starting the learning process prior to enrolling at Rutgers contributed to their success as a student.

Thomas: In college you have to study more. In high school they teach you inside a classroom. In college you have to teach yourself, but I was prepared for that.

[RFS] taught different note-taking methods, time-management skills, and ways to communicate with professors.

Indeed, one of the most intimidating aspects of college is the realization that college-level work is more challenging than what you may be used to from middle school and high school. The majority of learning time in college is outside the classroom, and the onus of learning is on the student rather than the teachers. Developing success strategies earlier empowers students to meet those new expectations. For example, time management skills became an area of focus, as a dozen participants noted that developing time management skills (or overcoming procrastination habits) was the key to academic success. The RFS program instilled this message, but some students did not appreciate it until they experienced the rigors of college academics first-hand. Other skills RFS faculty and staff emphasize include critical thinking, effective note taking, writing, and alleviating assessment anxiety.

The RFS program influenced students from an early age to embrace a long view of learning that includes higher education and takes steps to guide a student from eighth grade to college graduation.

Ruiz: Most likely sure I would have [gone to college], but I really don't know. I was on the fence before RFS about what I was going to do with myself. But the early seed planted swayed me heavy since I was going to get financial assistance. They gave me an extra push to take that leap. It gave me a safety net. Eighth grade me didn't know what to do with himself.

Martin: They influenced me to think bigger. To think about, "what do you want?" What does Martin want? How high can you go? Questions I never thought I could ask myself because I had limited resources. They helped me branch out and get outside my comfort zone. Be my own advocate. One thing they helped instill in us is self-advocacy. We reflected on what it is you need, were are you now, and what you need to be better.

Participants believed that without the RFS program, their potential could have been limited. Seth reflected that even if he achieved the same level of success, it would have been much harder and much less fun. Similarly, Martin indicated that because of the five years of preparation provided by RFS, when students got to college, rather than adjusting, they just had to keep their momentum going since they were already in the college-going mindset.

There were few distinctions among students in their freshman year versus those in their senior year with regards to their experiences in the RFS program. Where there is a distinction is in their respective areas of foci. For first-year students, the focus is on transitioning into college,

meeting academic expectations, establishing independence, and creating new campus relationships. Seniors are focused more on life after college.

First-Generation Dynamics

For evidence that the impacts on post-secondary learning occur prior to college enrollment, one must look no further than the influence of families. My research showed student perspectives were influenced by family in three ways: 1) families provided inspiration for aspiration; 2) families were unable to provide effective guidance and; 3) families did not have any understanding of the college experience and therefore could not relate to or be related to by the students. As first-generation students, their aspiration was inspired by parents, but their expectations were often also tempered because the parents did not have the appropriate experience to provide guidance or have an understanding of the realities of college. While parents can influence aspirations by modeling behavior and providing academic resources to their children, and while environmental supports can bolster positive aspirations in academic and professional development, RFS students did not have that advantage as low-income first-generation students.

Parents both augmented and undermined students' expectations towards college. Students' views of college were enhanced when parents motivated and even expected them to attend college. In this way, parents were motivational partners in the college access process.

Gabby: College is something my family has always pushed. They won't take no for an answer. My family was proud.

Mia: My parents decided to bring me here to further my education. They weren't involved with anything, but they had expectations of me getting good grades.

Valentina: When I was in high school, I didn't think about what my long-term plan was. Mostly it was family who wanted me to go to college.

As low-income parents, they felt that college was important for their children so that they could have a better life. The students similarly are motivated to complete their degrees because of the potential of well-paying jobs upon graduation. Some even expressed the desire to go to graduate school.

While the parents are a source of motivation for the students, the fact that parents did not have a clear understanding of college life or the ability to provide guidance was also a source of frustration for students.

Mateo: It does make things more awkward. I didn't have many people in my family to turn to for advice. Otherwise they have always been a motivating point. They value the fact the fact that I can attend.

Martin: This was definitely a curve ball. Who do you ask? I have friends whose parents went to college and they know how to fill out financial aid how to find scholarships, how to talk to your professors. There's a lot of rules you have to follow. How do you do it? How do you present yourself in a professional setting? How do you prepare for an exam properly?

Valentina: That to me was, I don't want to say disadvantage, but for lack of a better word. Unlike others who had parents who went to college, we went on our own. We had to face problems and obstacles on our own. I didn't have anyone to talk to about it. When I was younger, my parents helped in basic classes, but as I progressed and classes got harder, they couldn't help me...College is more than academics, but couldn't ask them about social life. I learned on my own.

Obviously an assessment of the costs and benefits of education influence aspirations, especially as prospective college students examine the education and occupation experiences of those around and most like them. First-generation low-income students may feel isolated because they lack access to people, including their parents, who can empathize with their feelings and understand their experiences. The RFS program served to effectively fill that gap.

Despite its strengths in creating academic pipelines for first-generation students, one area where the RFS program cannot provide support for these students is with their family dynamic, specifically in aligning the expectations of campus space with those of the home space. In other words, students reported that while their families understood the importance of getting a college education, it was difficult for them to understand the college experience since they had never been through it. The parents did not understand the intensity of the work, the college environment, or what the student was going through, and therefore maintained expectations of their children to maintain responsibilities at home.

Mariana: Even though they were very interested about me going into higher education, one thing they say about going to school is that I still have a life at home. They don't get that college is difficult. They think you should be able to do everything. There is a gap between parents and you. They try to learn their best, but there is still a gap. College is different than what they think or perceive.

RFS' academic staff certainly provides the necessary support to empower their academic and social success in college, but unfortunately there is little they can do to support and educate the parents in the same way. Future research may, in fact, consider university engagement with families as a means of improving the pipeline.

Developing Purpose

By and large, first-year and final-year students shared common perceptions regarding the efficacy of the Rutgers Future Scholars program. Moreover, they mostly had high levels of aspiration but concerns about the affordability and accessibility of college. They possessed shared challenges as first-generation students, and had a good understanding of the skills necessary to be successful at their respective stages in college. However, students do change in numerous ways between their first and final years in college, indeed as a product of their respective stages, there was significant differentiation between first-year and final-year students with regards to their sense of purpose (and, by extension, the challenges akin to their respective purposes). First-year students defined their purpose in academic and social terms, whereas final year students were focused less on academic success and more on career paths, and, in some cases, plans for graduate school.

Information collected from the first-year and final-year students also included questions about their preparedness for college and their awareness of the challenges ahead. The vast majority of first-year students defined their preparation for college through the lens of being prepared to handle the rigors of coursework. Moreover, first-year participants even defined college “culture” through an academic lens, citing characteristics like large classroom settings, unstructured daily and weekly schedules, and self-sufficiency.

Isabella: RFS really did expose me to how hard the courses would be. I took English 101 and lived on campus and earned college credit. I was exposed to a college class before I even came to college. RFS talked to us a lot about major requirements and exposed us to college-level course so I was able to see how

professors grade. So I did feel prepared because in a way, I knew what I was being exposed to.

Isabella effectively encapsulated the sentiment of her first-year peers, who also cited characteristics that were instilled in them such as time management and personal accountability that were relevant to their academic success. Participants recognized that because college academics is structured differently and because professors rely on their syllabi to guide students on assignments and deadlines, that they would have to be more disciplined and self-sufficient that they may have been used to in high school.

While seniors also considered academic challenges, in their final semester they were more concerned about post-graduation plans. Having been students for most of their lives, this is the first time they were looking at a future that did not necessarily include school.

Allison: When I was coming into freshman year, it was still easy. There was a transition period but not that much difficult. I was going from being in school to being in school. Now I am more independent than in high school. Now it is more stressful because this is the year you go from being in school to being independent and in the real world. My senior year effort, even though it's not academic, it's more your life and future.

Seniors were clearly concerned a different set of “next steps,” than they were when transitioning from high school to college. They are defining their purpose through networking, job applications, and possibly graduate school. They may be as worried now about their transition into vocation as they were 4-5 years prior about their transition into college.

Marianna: Like everyone else graduating, the challenges are about what's next. My biggest concern is when I go to a different company, is it the right move?

Valentina: The challenges are different now. It's more like making sure I'm getting experience I need in order to be a competitive candidate.

Andre: I'm very scared of things I don't know the outcomes to. Job applications have been stressful.

At this stage, RFS had much less influence on the students since they had pulled away from its orbit and relied more on other university resources such as Career Services. The impact of RFS is seen here more through the sense of self-advocacy the program instilled on its students.

This research painted a picture about college readiness and opportunities to pursue a successful college education as much as it did about the role of race, generational status, and socioeconomic class with respect to educational opportunities. Prospective students' aspirations and self-perceptions are certainly shaped by their teachers and their school districts, and perhaps even more, by their families' own experiences with education. In examining the experiences of high-achieving first-generation students in three urban areas in New Jersey we see their ambitions, college-going experiences, and the impact the Rutgers Future Scholars program had in molding their development and preparation (or readiness) as college students.

CHAPTER 5: DISCUSSION

This study explored a number of interrelated themes. First the research explored how first-generation low-SES students experience the college-going process as well as their perceptions of potential barriers to accessing, transitioning into, and completing their degrees. Second, the study showed how students' aspirations may have been influenced through their interactions with similar peers who are brought together through a pre-college program (or by the program itself), and how their socialization in college may be impacted by that pre-college program. Finally, the research affirmed the benefits of reconsidering Student Development Theory as a pipeline model. For context, this research also explored first year students' perceptions and challenges in college, comparing their experiences to students in their final year of college. This cross-sectional data allowed for comparisons between first year and final year students, providing an opportunity to explore the impact of the RFS program on college-going readiness.

There are numerous factors that contribute to a student's access to and success in college. What was not necessarily of primary concern in this study were the immediate impacts on access and success (though these matters, in themselves, are quite important). Rather the concern is to reflect on the wider theoretical significance of developing continuous pipelines through higher education. What potential pipelines can we develop for young students? What relevant knowledge, skills, and predispositions can we transmit at each level of education? What is the future relationship of students with their current state of education and development? By examining the activity of the Rutgers Future Scholars program, we can see how a pipeline model of Student Development Theory not only has theoretical significance, but academic, vocational, and social significance as well.

What I found is that despite identifying as low-SES first-generation students, they largely harbored aspirations to go to college, but had sometimes overwhelming concerns about their ability to access and afford college, as well as their understanding of the application process and the college culture. Their reality is shaded by numerous challenges that are functions of being first-generation students, and coming from low-income families, factors that commonly precludes college attendance. These students needed a viable pathway to reconcile their aspirations with reality and then they needed sufficient social supports to ensure academic and psycho-social success on campus. Even those who would have found a way to get in to college with a pre-college program, still would have encountered social challenges, as well as issues with self-advocacy, self-efficacy, and even mental health.

Access and Challenges

Carla Shedd (2015) similarly explored how urban youth, even high-achieving youth, struggle with their place in the education system. My research was certainly about ensuring effective higher education access, but like Shedd's (2015) work in Chicago, this was a sociological journey into the minds and lives of teens and young adults in a number of New Jersey's urban areas, and the conflicts they face with regards to self-efficacy and belongingness. Shedd (2015) lamented that we routinely look at the problems of youth today, but we spend little time seriously trying to understand what motivates them or the sum total of their experiences. She saw youth as walking experiments in the effects that agencies and institutions—in her case the Chicago Board of Education, in my case Rutgers University—can have on a population of students who are particularly vulnerable.

Urban and first-generation students are forced to navigate school and family challenges, and confronting those challenges has the potential risk of holding them back from progressing through the academic pipeline. Lacking access to academic opportunities (or not knowing how to gain access to those opportunities), differentiated learning opportunities, and less access to counseling afforded to students in non-urban school districts, high-ability, low-income students are becoming what has termed a “persistent talent underclass” — underserved and therefore prevented from fully developing their talent (Plucker, Glynn, Healey, and Dettmer, 2018). For example, Allison mentioned that she probably would have attended college even if she were not in the RFS program but that her experience would have been adversely affected without the support she got from the program. She would not have had an understanding of what a college student does and would have been underprepared to handle the academics and structure of college. Braden went so far as to say that because he comes from a poor family that he would not have gone to college at all. He even credited the RFS program for his declaring Computer Science as his major.

These students are the beneficiaries of alternative narratives that the RFS program has created for them. Indeed, where Shedd (2015) talks about “crossing boundaries,” be it racial, class-based, or even geographic, similarly, my research is about creating alternative narratives for and by youth. Shedd (2015) noted that the voices of our youth are frequently unheard or ignored, particularly in the policymaking process. This is especially true of marginalized students. While many school districts and universities have struggled with how to improve student outcomes, few have decided to go straight to the source and ask the students (Mitra, 2004). Shedd (2015) painted a picture of how students’ perceptions of themselves and the larger social world are shaped by their interactions with others and with by their environments. She

noted that Chicago's neighborhoods are defined by a legacy of socioeconomic stratification and discrimination. As she explained, the disadvantaged teens who traverse a number of boundaries, including economic and geographic boundaries, daily, develop a keen perception of injustice, or the recognition that their economic and educational opportunities are restricted by their place in the social hierarchy.

Shedd (2015) argued that social scientists, policymakers, and educators ought to focus on home and school contexts such as family or socioeconomic status to understand students' perceptions of inequality in society and in their educational systems, as well as their narratives. This necessitates the creation of a number of alternative or counter-narratives for underserved students to ensure that those boundaries can be crossed.

One narrative is to overcome the notion that there is little to no pathway to college (college may not be feasible, realistic, or affordable) by creating active pipelines to ensure access. While RFS students largely aspired to go to college, as first-generation students, they did not grow up in households that had a preexisting college-going culture or an understanding of college at the most conceptual level. Moreover, they came from urban school districts with high dropout rates and inadequate support systems.

A second narrative is emphasizing that once they are in college, they do belong there. For some students, particularly underrepresented and underserved students, accessing, transitioning into, and completing college can be especially challenging. And even upon entrance into and starting college, many feel that they do not deserve to be there, nor do they believe their successes are earned.

A third narrative focuses on the role of family. Even those families that supported and encouraged students to go to college, because they did not understand the nature or burdens of

college, expected them to continue to prioritize supporting their family. As Deon bemoaned, his parents did not understand the intensity of his college life or what he was going through.

Similarly, Mariana spoke of a gap between her parents and her with regards to an understanding of college life. Her parents expected her to continue her life at home and did understand the difficulties of college. Mariana even suggested the impact of gender roles, as her parents expected her to support the family by cooking and cleaning, while not putting similar pressures on her brothers.

The results of this study shows otherwise, that understanding multiple contexts is important to understanding student development and developing counter-narratives, and that creating continuous educational pipelines is more important to creating school success than a student's socioeconomic or first-generation status. It is certainly necessary to understand those contexts impacting student development include socioeconomic status, race/ethnicity, first-generation status, among others. RFS students may actually be in the strongest position to create the necessary counter-narratives to strengthen the educational pipeline. Not only did a handful of the participants specifically mention a desire to return to their communities to create support systems for students, Thomas even aspired to be a school counselor specifically because of his experiences as a troubled student turned RFS scholar. Thomas has experienced the challenges of being a student in an urban school district and believed that he would be able relate to the students.

Budget challenges in school districts that have a high representation of low-SES students have served to reproduce inequality and stratification in educational pathways, as well as developmental barriers. This has an adverse impact on the pathways minority and other underrepresented students can take from earlier stages in their lives. Carnevale and Stroh

(2013) referred to this phenomenon as the intergenerational reproduction of white racial privilege. Kozol (2005) referred to this as the “restoration in apartheid schooling” in urban public schools. From 1988-1990 Kozol (1991) visited 30 urban school districts, including Camden, and described the horrifying conditions in those districts. Kozol (1991, 2005) underscored the racial and socioeconomic dimensions of the educational trajectories of urban students. The public and higher education systems in the United States have a legacy of inequality and stratification. The inequalities in resources and opportunities dominate social institutions such as institutions of public and higher education. Students are held responsible for traversing social, economic, spatial/geographic and other terrains that can shape their experiences, perceptions, and development and doing so in a system whose development theories may not take into account the totality of their person.

As schools have become powerful engines of social stratification (Carnevale & Strohl, 2013; Shedd, 2015; Stevens et al., 2008), it stands to reason that reconceptualizing Student Development Theory to a pipeline model that unifies siloed developmental models may serve to establish better relationships between local school districts and institutions of higher education and develop more productive students. Paradoxically, while schools serve to reinforce some barriers, they can also serve to overcome those barriers if proper perspective is given on how students develop, aspire, transition to, and complete college. This does not go to say that socioeconomic stratification will be relieved through the reconceptualization of Student Development Theory, but it does theorize that it will better prepare and empower both students and educators to enable long-term student success. By extension, we should be heartened to learn that a collateral benefit of the RFS program is that it developed a cadre of students who have a desire to leverage their own academic success and future prospects into community or

foundation work to support students and other youth in their hometowns who face many of the same challenges they did and overcame. For example, Marianna discussed the possibility of advocating for social and corporate responsibility in order to ensure students have greater access to internship opportunities. Similarly, Martin wanted to return to his community and share his knowledge and wisdom to counter misinformation that may be prevalent among Latino families.

Evidence suggests that students who completed the RFS program bucked some emerging trends, including nationally declining college enrollment, particularly through their immediate enrollment at Rutgers University. It is important to note that a limitation of this study is that this conclusion applies specifically to a narrow group of students: those who completed all five years of the RFS program and enrolled at a specific institution, Rutgers, immediately after. Not all students who started in the RFS program completed it. Additionally, not only all students in the RFS program enrolled at Rutgers University or even another four-year institution.

Aspiration, Preparation, and Persistence

Students in the Camden, Newark, New Brunswick and other nearby represented school districts, are frequently forced to confront numerous challenges that may hinder their academic pipeline. They could have been victims of weak high school preparation, poor access to resources, preparatory coursework, or academic counseling, but the RFS program served to bridge those gaps not only through extrinsic qualities such as credit-bearing college coursework as part of the program's curriculum, but also through intrinsic qualities such as the provision of nurturing counseling and mentorship during the high school and college years and by creating what participants described as a familial environment for its students. The program's cohort model was useful for making friends and fostering a sense of community. The program's individualized approach to counseling further allowed faculty and staff to focus on each

student's specific situation and impacts on learning. In doing so, the program created a sense of belonging as well as a sense of readiness. The program also engendered a sense of self-advocacy and self-authorship, as students developed the ability to define their own goals, beliefs, identity, and social relations (Baxter Magolda 2001; Kegan 1994).

College readiness is generally considered as (and limited to) the academic and practical knowledge needed to be successful in higher education (Pitre & Pitre, 2009). However, many underserved and first-generation students go to college not only academically underprepared but also not knowing how to fit into the culture of a higher education setting. This study sought to understand not just participants' academic preparation, but their cultural and psychological preparation as well. My questioning did not necessarily make that distinction, so that students could provide their perspectives without being led and to self-define what "readiness" meant for them. Some participants' immediate reaction was to describe their academic preparation (e.g. their expectations regarding the rigors and format of college-level courses), but many looked to other factors such as their social preparation. Because the respondents were first-generation students, they largely reported that they did not have the benefits of advice or experience from family, and their families certainly did not relate to their college experience, but just as with the academic component, the RFS program worked to bridge that gap. At the same time, respondents did credit their families with imparting on them the importance of going to college. This is consistent with what Raleigh and Kao (2010) found, that immigrant and minority parents have more consistent aspirations for their children. Raleigh and Kao (2010) found that blacks and Hispanics have higher levels of aspirations compared to their white counterparts and that despite the fact that immigrant families may face additional challenges due to their less

advantaged socioeconomic status or language proficiency, they have higher aspirations than native-born minorities.

Finding support organizations and friends in college increases the level of students' social integration in college. Sommerfield and Bowen (2013) suggested a correlation between positive social/academic preparation and assimilation and the college success of underserved and first-generation students. Students with high college social integration have greater college enrollment and retention (Sommerfeld & Bowen, 2013). Participants in my study would bear that out as well. RFS students saw their confidence grow and even in those times where their transition from high school to college was challenging, they received appropriate supports from RFS staff, and fellow colleagues, as well as by becoming active on campus with extracurricular activities.

First-year Students versus Seniors

When first-year RFS students first got to campus, some were anxious, others were confident, but it seems that most were emotionally "pumped up" through a process of conditioned optimism manufactured by RFS through five years of pep talks, bonding activities, developing cohort cohesion, and fostering a sense of euphoria and even loyalty to RFS staff as if they were family. As such, it is difficult to gauge if they are able to provide an authentic student perspective. Despite all the preparation that the RFS program provides to students, they still do not know what they do not know. First-year students barely know how they are doing; all they know is how they feel. To some degree, while first-year students in the spring semester have enough experience to overcome the conditioning a little bit, they are still, for all intents and purposes, "13th graders." For that reason, the methodology of this study entailed studying students in their first year at Rutgers University as the focus group, and incorporating seniors as a cross-sectional group for comparison.

There was little variation between the data provided by first-year students compared to that provided by seniors, particularly with regards to aspiration and perceptions of readiness. It is possible that this is a product of a pipeline approach to student development. RFS creates optimism and fosters a college-going culture from an early age by taking an active approach to maximize a students' potential and working to minimize stressors. RFS students who persist through all five years of the program develop confidence about their eventual success and an attitude to continue trying even when they face academic or social challenges. It is interesting that even with the passage of time, the students' enthusiasm for the program has not waned. Students in their final year were as complimentary of the program as students in their first year.

To be clear, there were certainly variations in the challenges the respective students faced – first year students were concerned about their academic and social acculturation, whereas seniors were focused on their next steps, in particular, their job and/or graduate school prospects. There were also variations in the level of understanding about the realities of life. First-year students mostly reported being aware of the challenges that awaited them prior to arriving on campus. They also mostly indicated they had a sense of readiness for college due to their preparation over the previous five years in the RFS program. However, it is fairly evident that their understanding was in the abstract. For example, they demonstrated an awareness about the high cost of a four-year education, and were also culturally averse to student loans, but they were not entirely certain how much a four-year degree actually costs. They were similarly aware that college classes would be hard, having already received college credit, but some were still surprised at the overall workload and the necessary adjustment to a daily and weekly schedule that was less structured than what they were used to in high school. Clara perhaps put it best when she said that RFS were students were “not necessarily groomed but prepared.” Mateo

similarly reflected on how when he first started at Rutgers, he still hadn't grasped the idea of the college environment, but that through RFS's preparation, he was "unconsciously prepared" and despite his uncertainty, the RFS program equipped him to handle it.

Seniors were largely aware of the challenges of professional development and their ongoing or upcoming job searches and the extrinsic consequences of not rising to those challenges. Valentina reflected on how stressful her final semester has been with balancing academics, serving on the executive boards on two extra-curricular organizations, and managing her job applications. Similarly, Allison described her final semester as nerve-racking, pointing out how she had been a student for such a long time and that was coming to an end for the time being.

Without any surprise, both groups of students understood in the abstract and on a concrete level the importance of higher education as a means of creating a better pathway in their lives. As an historical observation, there is a growing demand for higher education. It is true that higher education is correlated with career success, and social and psychological well-being. However, there are emerging changes over the past quarter century, as funding cuts for higher education have had major consequences in the forms of tuition increases, and reduced academic opportunities and student services. Indeed, while CEOs and other executives who are constantly demanding new talent outwardly extol the virtues of a college education, their lobbyists are advocating for tax cuts rather than increased funding in higher education. This trend is not particularly propitious, particularly since in the last few years a growing chunk of American population have come to believe that higher education is bad for the country.

Conclusion

Student Development Theory focuses on post-secondary education learning. However, this study suggests that post-secondary learning actually starts at the secondary level, as do the factors that influence said learning (arguably those factors even predate secondary education), including the impact of family, community, race/ethnicity, sex/gender, resources, and opportunities. Essentially this study showed that it is necessary and feasible to bring youth student development under the umbrella of Student Development Theory. This is implemented, in part, through collaborative partnerships between institutions of higher education and local school districts. These partnerships will serve to bridge the gap between secondary education and college and create a single contiguous pipeline for students. As such, university-school partnerships will better enable more students to get to and through college.

Student Development Theory covers a number of areas including race, transition, moral development, and psychosocial development. The focus of this study was on aspiration, transition, and completion. In those areas of focus, there is still clear rationale for the premise that a pipeline model between secondary and post-secondary education is an effective paradigm through which we enable student success. Innovation in higher education is not particularly clear-cut particularly as institutions struggle to attract and retain students. Perhaps for this reason Plucker, Glynn, Healey, and Dettmer (2018) put the onus on state governments to develop a comprehensive P-16 talent development plan. They argued that the lack of coordination among various moving parts including gifted education, advanced placement, dual enrollment, and college preparation leads to dysfunctional talent development systems that address neither excellence in education, nor, what they term, excellence gaps.

In the absence of legislative reforms, there are best practices that institutions of higher education ought to consider. The RFS program is becoming somewhat representative of higher education practice in its intentions, and is indicative of an emerging paradigm in Student Development Theory. The RFS program has essentially created pockets of success that enable students to move past the pathologies faced by many first-generation students who identify as lower or working class. The proliferation of similar programs at other institutions can serve both student development and student recruitment purposes. Not only can long-term pre-college programs be useful in developing student pipelines, they can also be utilized for funneling students towards specific fields, especially if there are outsized demands in those fields. For example, a pipeline model can benefit the primary and secondary education field, especially where colleges can create partnerships with local school districts that face a shortage of qualified teachers. In comparison to other industries, particularly private sector industries, public schools do a poor job of attracting wide pools of talent. School districts need to take cues from other industries to seek top talent and reframe the teaching profession. Public schools need to make an unapologetic effort to recruit qualified prospects into the profession, and this can be achieved, in part, through university-school partnerships that transcend vocational training partnerships and include creating interest in the profession as early as middle school.

In addition to partnerships between universities and local school districts, institutions of higher education ought to engage the parents and families of first-generation students as partners in their students' success. Engaging with parents and families is an important step for a college students' success. When we consider first-generation college students, the need for connection to community and fostering a sense of belonging becomes even more critical. Thus the next level of partnership transcends the school district and enters the community itself.

Programs like RFS should work in conjunction with other departments to augment their outreach. A surprising part of my data is that some students found that the real benefit prior to enrolling at Rutgers came from the EOF office rather than their participation in the RFS program. For example, Deon and Tessa discussed how the EOF program best enabled them to transition into college and maintain momentum that the program built up. Federally funded TRIO programs can provide underserved and first-generation students with college preparation, support during the application process, and tutoring to ease the transition between high school and college (Pitre & Pitre, 2009). Involvement in these types of programs increases opportunities for students to learn about financial aid and college entrance requirements, and to develop social and academic skills necessary for college. Such programs also offer a level of clarity of purpose and goals that a number of students reported missing from the RFS program.

There are two important conditions to note regarding this study. First, not all students who are admitted into the RFS program end up completing the program. This research did not explore what happened to the students who dropped out of the RFS program at some point and if or how their academic paths diverged from those who did complete the program. Second, many participants claimed a high level of aspiration to attend college and attain a degree, but it was difficult to determine whether that aspiration was preceded or, in fact, inspired by enrollment in the RFS program, eliciting a “post hoc, ergo propter hoc” dilemma. It is entirely possible that the RFS program did not create aspiration but catered to those who already had those aspirations. This does not necessarily impact the study or its conclusions, but future studies can add dimension to the findings by including other populations such as parents and the school administrators who were responsible for nominating students to the RFS program. Additionally,

this study did not necessarily consider within-group differences or factors and therefore may not be representative of the RFS study body as a whole.

Anecdotally speaking, the American education system from as early as kindergarten seems to be trying to rush children into adulthood, which is common for policymakers who are singularly focused on success and results. However, I would argue that if each stage of a student's development is managed well, the student will walk away with academic, psychological, and vocational strength. Conversely, mismanaging different stages of student development will endanger future development. For this reason, future studies could consider a broader pipeline that includes elementary and middle schools. Bridging what is currently two separate realms of education, secondary and higher education, into a single pipeline may be the best means to manage student development and ensure long-term student and vocational success.

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APPENDIX A: Interview Protocol**Participants:**

Recent alumni of the Rutgers Future Scholars Program who completed the program this summer and are currently matriculated at Rutgers University in their freshmen year and in the final year.

- Tell me a little bit about your academic interests.
- Tell me a little bit about your career interests.
- What was the process for applying to the RFS program?
- Did you consider going to college before the RFS program?
- Why did you decide to apply for the Rutgers Future Scholars Program?
 - What do you think your life would be like today if you weren't in the RFS program?
 - Do you know of friends who weren't in the RFS program but might have benefitted from it?
 - What are they doing now?
- When you found out you were admitted into the RFS program, how did you feel?
- How do you feel about going to college?
 - How do you feel about completing college?
 - How do you feel about life after college?
 - Do you feel prepared for the challenges of college?
 - What do you think the challenges of college are?
- Walk me through what the RFS program covers from year one to year five.
 - What would you tell someone who was thinking about participating in the RFS program what they can expect to learn?
 - Tell me about a positive experience you had in the RFS program that sticks out.
 - Tell me about a negative experience you had that sticks out.
- I'm going to ask you about your thoughts about the RFS program:
 - How has the RFS program impacted or influenced you?
 - If I were a new 8th grader thinking about applying to the RFS program, what advice would you give me about how to do well and get the most out of it?
 - Did RFS change your conceptions about going to college?
 - What are your thoughts about going to college?
 - If you did not get admitted into the RFS program, would you still go to college?
 - What were your goals coming into the RFS program?
 - Did the RFS program help you in reaching those goals?

- Has the RFS program contributed to your success as a student?
 - If there were things you could change in the RFS program, what would they be?
 - What stood out for you the most?
- Describe what it was like transitioning from high school to college.
- [Demographic questions]
 - If you were to put your family in a class, what class would you put them in?
 - If I walked around your neighborhood, what would I see?
 - Do you consider your family to be wealthy?
 - How do you identify with regards to race and ethnicity?
 - Do you believe your racial or ethnic identity played a role in your future prospects?
 - How many people in your family have gone to college?
 - What kind of jobs does your family have?
 - Tell me a little bit about your family's education history.
 - Did you know people who went to college before?
 - Did you think your family could afford to send you to college?
 - Do you think your race, ethnicity, or sex affects your life? Has it affected your daily life?
- [College experience questions]
 - Are you enjoying college?
 - Are you making friends in college?
 - Do you think the RFS program changed you? In what ways?
 - What do you think you'll do after college?
 - Do you think you'll have a better career or job with your degree than not?