A CASE STUDY OF A DUAL ENROLLMENT INTERVENTION IN AN URBAN COMPREHENSIVE HIGH SCHOOL

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Abstract

The purpose of this case study was to contribute to the body of literature regarding dual enrollment programs and their potential for supporting high school students’ college readiness and college persistence, specifically in urban minority populations. To that end, this case study investigated the impact of a dual enrollment program called The Pathways through College Program implemented at Mount Pleasant High School in Providence, Rhode Island from 2007-2010. The term-by-term GPAs and retention of participants and non-participants of the program enrolled at a local college was used to statistically determine whether participation in the program may have increased Mount Pleasant High School students’ college readiness. The analysis determined that indeed students participating in the program may have been better prepared to meet the academic expectations of college work during the first two years of enrollment. Through interviews and focus groups, program administrators and students also shared their view of how the program benefited participants in their preparation for college. The findings are related to Bandura’s Social learning theory and Tinto’s model for institutional departure as well as discussed in relationship to the current literature on dual enrollment programs and their potential impact on student readiness for college.

Keywords: college readiness, dual enrollment, urban high school, college persistence, institutional departure, underrepresented populations.
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Chapter I: Introduction

Problem of Practice

The Providence Public School Department is the largest school district in the state serving approximately 24,000 students, and the majority of all minority children in the state of Rhode Island. The mission of the Providence Public Schools is to prepare all students to succeed in the nation’s colleges and universities and in their chosen profession. Despite Providence’s mission to prepare students for college, The dropout rate for the Providence Public School Department is 26 percent and the graduation rate is 69 percent. According to the National Student Clearinghouse about 55 percent of the students who graduate enroll in college. According to the same source, approximately 77 percent of these students return for their second year. (Providence Public Schools, 2010, p. 25) Providence Public Schools has been collecting this data for the past ten years.

Mount Pleasant High School is one of four large comprehensive high schools in the Providence Public Schools. The school is currently under corrective action because of its continued low achievement as measured by the Rhode Island State assessment, the New England Common Assessments Program (NECAP). One of the indicators that is measured by the NECAP is the school’s graduation rates. The graduation rate for Mount Pleasant High School for the 2006 academic year was 57.9 percent and the dropout rate for that same year was 29 percent (Providence Public Schools, 2010, p. 25). According to the National Student Clearinghouse in 2006, only 50 percent of the students who graduate from Mount Pleasant High School enrolled in college (Providence Public Schools, 2010 p. 25). And according to the same source, only 57 percent of these students return for their second year (Providence Public Schools, 2010). There has been a national effort to identify the school and non-school factors at the K-12
level that contribute to this growing problem of students not being prepared for college (Howard, 2003, p. 3). There have also been many, states, school districts, and schools that have tried different programs in an attempt to increase the college readiness in their students.

Since Mount Pleasant High school found that their students were unprepared for their college and career goals the school welcomed the opportunity to work in collaboration with the Rhode Island Board of Governors for Higher Education, and Rhode Island College with funding from the Nellie Mae Foundation to implement a new program called Pathways Through College with the explicit purpose of better preparing students for college. The program was implemented in 2007. The Rhode Island Pathways Through College initiative was a one year dual enrollment pilot project aimed at increasing the number of low-income and minority students that enroll and succeed in college (Hill, 2008). The goal of the program was to promote college readiness and increase aspirations by offering a program which included academic/educational, financial assistance, professional/career development, social/psychological and community support. Dr. Geier, Director of Early College Access programs through the Rhode Island office of higher education stated, “very few of my kids had ever been on the Rhode Island College campus because they didn’t think they belonged or deserved to be there. Pathways Through College helps them believe they can go to college.”

The Pathways Through College Initiative was a two-phase dual enrollment pilot project. As stated by Dr. Hill, the program consisted of two phases:

In Phase I, students participated in a course, titled College Course 125: College Learning Strategies, during the fall semester of their senior year in high school. Students earned three college credits concurrently earning credits towards high school completion. Upon recommendation from teachers and staff as well as successful completion of College
Course 125, the students transitioned, as a cohort, to Phase II on the RIC campus where they enrolled in four three-credit college level courses concurrently earning 12 credits for college and towards high school completion. Students were assisted in applying to RIC as well as other colleges in the New England region and beyond. Successful completion of the program guaranteed Pathways students admission into RIC for the fall of 2008” (Hill, 2008, p. 1-2).

The Pathways program ran for three years (from 2007-2010) and seemed to show improvement although no formal evaluation was conducted. According to Dr. Hill, the number of students that applied to college from Mount Pleasant High School increased. It is also noted in her report that changes of students’ knowledge, attitudes, skills and behaviors were reported by students themselves and by those with whom they interacted (Hill 2008). However, lack of clear results from this program left the district struggling to decide whether to finance the program in the future. After the 2010-2011 school year, it was decided to no longer subsidize the program.

Given the current economic crisis and the district’s need to continue making very tough economic decisions related to student success, the question still remains whether to fund the program in the future. The Providence Public School Department has recently joined in the state’s application for Race to the Top Funding to assist with the funding gaps in the schools budget. As part of its application the district must document its plan to increase the college readiness of its graduates.

**Significance of the Problem**

There are many students in United States of America who graduate from our high schools without the basic skills needed to be successful in college (Barton 2005). One third of high school students are not ready for college because they do not graduate on time (Barton 2005).
Many high school students have had to take remedial courses in high school because they were not academically ready for rigorous high school courses that would have prepared them for college. Included in this one third are many poor and minority students that graduate from many of our urban centers that are also not being prepared for college. As a result many of these students are, for the most part, condemned to wander through life like lost travelers, without guidance or goals (Barton 2005). Students who graduate from Mount Pleasant High school in Providence Rhode Island are no exception to this phenomenon. In 2006 Mount Pleasant High School had approximately 1,200 students, and continued to be comprised of a largely minority population, with 78 percent of the students living below the poverty line (Providence Public Schools, 2010, p.9). Of the 1,200 students, 58 percent were Hispanic, 27 percent were African American, 9 percent were Caucasian, 6 percent were Asian, and 1 percent were Native American (Providence Public Schools, 2010, p.9).

The issue of college readiness is not unique to Mount Pleasant High School but is evident across the country due to the number of college freshmen that require taking remedial courses. The 2008 U.S. Department of Education report, states that 21 percent of all entering freshmen reported taking at least one remedial course (Berkner, L., Choy, S., Hunt-White, T., 2004). According to Conley, college readiness has an operational definition as the level of preparation – without remediation – in a credit-bearing general education course at a postsecondary institution that offers a baccalaureate degree or transfer to a baccalaureate program (Conley 2007). The fact that students have to take remedial courses at the beginning of their college career puts them in jeopardy of not completing their degree due to financial aid restrictions. Students that need financial aid to complete their degrees that have to take remedial courses find themselves running out of financial aid to cover all of their courses prior to graduation. As a result many
low income and minority students find themselves unable to complete their degrees because of their poor college preparation prior to entering college.

A state’s ability to prepare students for college has an impact on the level of federal funding that states can receive. The Race to the Top competition asks states to develop their longitudinal data systems to measure and report the number of students that enter and succeed in college. The competition also calls for a rigorous plan to address the gaps in the area of college readiness that these reports reveal. As a result many states have also implemented programs designed to measure the number of students prepared for college. Programs in schools that have shown any level of success are now being evaluated in order to define and identify best practices for increasing college readiness. However, there are still some states that have yet to put in a system that in fact measures this goal amongst their graduating seniors. This number is a very meaningful number when determining how beneficial and effective a high school program is to students. The college readiness factor is especially important to families and community members who support the local public school system.

**Intellectual and Practical Goals**

Many research studies have identified that the performance of many poor non-white children, especially those who live in the urban areas, are far behind their rich white peers in college readiness (Kuh G., Kinzie J., Buckley J., 2006)). This is evidenced in the gaps that continue to grow in terms of which groups continue to obtain college degrees. The gaps exist at every academic level. According to an ACT 2006 report only 21 percent of African Americans high school graduates, 33 percent of Hispanics with annual incomes below $30,000 have college reading skills. Underrepresented college students have lower odds of completing high school and enrolling in college (Kuh G., Kinzie J., Buckley J., 2006).
**Intellectual goal.** The intellectual goal of this study was to add to this body of research on college readiness by way of assessing the degree to which the Pathways through College program impacted the college readiness of the program’s participants and their persistence in school. College readiness research is a very fascinating topic in the educational community. There are districts that are struggling to prepare students for today’s demands. There are students who get to college and are not prepared for the rigors of college. As a result many students that lack the preparation are forced to take remedial courses in order to be prepared. Many of these students use their financial aid on remedial courses and then do not have enough to aid to pay for their senior year. This study assessed the degree to which a dual enrollment program positively contributed to its participants college readiness and persistence in college.

**Practical goal.** The practical goal of this study was to identify the degree to which a dual enrollment program like the Pathways through College Program could be beneficial to superintendents, school officials and policy makers in supporting students’ college readiness, as measured by their persistence in college. There are many dual enrollment programs that are being implemented around the country. These programs allow high school students to take courses during their junior or senior year for college credit. The idea is that by taking these courses students will be better prepared for college. The focus however has been on the high achieving students whose families have the means to pay for college level classes. The Pathways Through College program was different because its focus is on low-income and underserved students which represent many of the students in our urban centers. As the research suggests there is a disconnect between what schools are focusing on and what students actually need in college. School officials must have a way to identify and evaluate the college readiness of their strategic plans. Providence Public Schools is no exception. There are many students within the
Providence Public School System that will benefit tremendously from the results of this study. The Pathways Program could be a model to help answer the questions of lack in college readiness that could be funded with Race to the Top dollars.

**Summary of Research Questions**

This study sought to answer the following two research questions:

1. To what extent did the Pathways Through College Program increase Mount Pleasant High School students’ college readiness (as measured by their comparative annual GPA) and persistence (as measured by students continued enrollment) in college?

2. How did participation in the Pathways Through College Program impact students’ interest, readiness, and efficacy to successfully meet the demands of college work and persist as perceived by administrators, teachers, and students who participated in the program?

**Organization of the Thesis**

The first Chapter of the Thesis provides the introduction, problem of practice, significance of the problem, the intellectual and practical goals of the study, the two research questions, and the theoretical framework informing the design of the study, including the collection and analysis of data. The second Chapter of the Thesis presents a review of the literature in relationship to the problem of practice. The third Chapter presents the research design of the study including the research questions, methodology, data collection, plan for analysis, and a statement regarding the protection of human subjects. Chapter 4 presents the research findings, including the results of the quantitative analysis and thematic analysis of interviews and focus groups with program administrators and students, respectively. And
Chapter 5 presents a discussion of the findings, including their relationship to the theoretical framework, literature review, implications for practice, and next steps.

**Theoretical Framework**

Two theories were used to inform the design, data collection, and data analysis of this study. The first theory reviewed for this research endeavor was Bandura’s Social Learning theory. As Bandura (2006) states, “Most human behavior is learned observationally through modeling: from observing others, one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action” (p.1). Social Learning Theory states that people learn from each other resulting in a change in behavior. The interaction can be the result of observation, imitation, and modeling. The Pathways Through College Program exposed students to college level work and the college environment. The program was designed in this way so that students could see what behaviors are necessary for success in the college environment.

The second theory is Tinto’s model for institutional departure. As stated by Young and Redinger (2001), “Tinto's (1987) model of institutional departure is based on academic and social integration. The greater the amount of integration, the greater the probability of retention” (p.3). Tinto states that students depart from college for three reasons: academic difficulties, inability of individuals to resolve their occupational or educational goals, the inability of the individual to become or remain incorporated in the intellectual and social life of the institution (Tinto, 1993). The Pathways Through College Program exposed students to college level work and the college environment. The program was designed in this way so that once students arrived on the college campus as college students they would be able to ingrate and be successful.
**Social learning theory.** Social Learning Theory states that human behavior is influenced by a three-way relationship between cognitive factors, environmental influences, and behavior. According to Bandura (1997), "Social learning theory approaches the explanation of human behavior in terms of a continuous reciprocal interaction between cognitive, behavioral, and environmental determinants" (p.1). In a study by Howard, T. (2003) there were three factors that influenced college aspirations of students involved in the study: parents, teachers and counselors, and students’ own personal view of their college aspirations. Parents and schools are responsible for creating an environment for a student to be prepared for college and to see themselves as capable of going to college.

As stated by Abbot (2011) Social Learning Theory focuses on the learning that occurs in a social context. The theory is based on the belief that people learn from each other in a variety of ways. The ways in which people learn from each other include observational learning, imitation, and modeling.

Bandura states that the modeling process has several steps. The steps in the process include; attention, retention, reproduction, and motivation. In order for learning to take place for an individual who is observing a modeled behavior, the individual must pay attention to the features of the desired behavior. Once an individual has paid attention to the desired behavior they must retain what they, have observed. Humans store these observed behaviors in the form of mental images or verbal descriptions. After individuals have retained the observed behavior they must have the ability to reproduce the action. Individuals must convert the mental images and verbal descriptions into appropriate actions. According to Bandua a person’s ability to reproduce a behavior improves with practice. Finally in order for a person to reproduce a
behavior there must be a motivating factor. These motivating factors act as incentives for the person to reproduce these desired behaviors,

According to Ormrod’s Human Learning (1999), there are four general principles for Social Learning Theory. Abbot states that:

1. People can learn by observing the behaviors of others. They can also learn from observing the effect of the behavior as well.
2. Learning can occur without a change in behavior.
4. Social learning theory is often viewed as the bridge between behaviorist learning theories and cognitive learning theories.

Bandura suggested that the environment plays a role in reinforcing modeling of behavior. He suggests several ways that this may happen. First the observer is reinforced by the model. For example a student who studies more to fit into a certain group of students will be accepted by the group and thus reinforced by the group. Second the observer is reinforced by a third person. For example a student may be modeling the behavior of an outstanding student in the class or school. A teacher may observe the student displaying this behavior. The teacher may compliment the students for their behavior, thus reinforcing that behavior. Third, the behavior imitated can lead to reinforcing consequences. For example a student may observe another student requesting more challenging problems in a math class. The student may observe how the student who made the request enjoys working on the more challenging problems. The student requests more challenging problems as well and experiences the same enjoyment and satisfaction. Finally, consequences of the observed behavior affect the observer’s behavior vicariously. For example in a school students are rewarded for showing a particular behavior.
When other students witness the behavior and the reward for the behavior they themselves begin to show the behavior (Abbot 2011).

According to Bandura, learning occurs when individuals are exposed to various experiences in the social environment. As discussed earlier learning occurs as a result of observing and modeling behavior. When an individual has an opportunity to observe an effective model it gives the individual an opportunity to internalize skills that can be useful in a future setting. Conversely when an individual observes and ineffective model they are at a disadvantage when he or she gets to a future setting that requires them to possess and be able to apply certain advanced skills. (Burney, 2008).

**Tinto’s theory of departure.** Tinto’s theory of departure has been used by many institutions to understand why students depart from college. Tinto states that students depart from college for a number of reasons however he identifies three major reasons for the departure: academic difficulties, the inability of individuals to resolve their educational and operational goals, and their failure to become or remain incorporated in the intellectual and social life of the institution (Tinto 1993).

Tinto’s model of Institutional departure is based on Van Gennep’s anthropological “Rites of Passage” model. In this model Van Gennep states that when a person is moving from one community to another there are three phases: separation, transition, and incorporation (Young D., Redlinger L. 2001). In Tinto’s model in order for student to persist, students must separate from the group with which he or she were formerly associated, such as family members and high school peers, go through a period of transition “during which the person begins to interact in new ways with the members of the new group into which membership is sought and then adopt the values and behavior of the new group which in this case would be college” (Tinto
Tinto updated his theory in 1987 to include a longitudinal model of persistence that takes into account extra and intra campus variables, see figure 1. In order, for students to continue to persist they need integration from a variety of different sources either internal and external campus variables: academic performance, faculty, and student interactions, extracurricular activities and peer-group interaction.

Figure 1. Tinto’s longitudinal model of student departure (Tinto, 1975)

These variables also contribute to the ability of the student to integrate both academically and socially on the college campus. Tinto proposes that the academic and social integration are
complementary but independent processes. Academic integration represents a student’s ability to comply with the academic expectations to achieve passing grades. It is also the ability of the student to adjust to academic norms of the institution. For example, the school of mathematics values math over music. Social integration represents the student’s ability to adjust to the social environment of the institution. For example, a student must find the social environment of the school acceptable to his or her own personal preferences. The ability of the student to do this is heavily influenced by the student’s background, ambitions, and values. (Kuh, G., Kinzie, J., Buckley, J., Bridges, B., Hayek, H., (2006), p11). Tinto proposed that with an increase in academic and social integration, the student will have a greater commitment towards the goal of graduation (Bean 1983).

According to Tinto, each student enters college with a variety of experiences. These experiences range from family and community backgrounds, and personal attributes such as sex, race, and ethnicity. Students also enter with varying academic experiences that have influenced a student’s motivation toward an intellectual goal. These experiences have also influenced students’ self images and aspirations toward an intellectual goal.

Schools must create environments for students where they are exposed to curriculum and instructional practices that are challenging. These environments will give students the opportunity to develop these advanced academic skills that are required for success in college (Conley, 2001; Conley, 2006; Dounay, 2006a; Dounay, 2006b).

According to Kirst, first year college students often feel overwhelmed by the academic demands of college. This is largely because they have not been exposed to very rigorous curriculum in high school. This feeling of being overwhelmed leads too many not returning for their second year. According to the National Student Clearinghouse about 55 percent of the
students who graduate from Providence Public Schools enroll in college. According to the same source, approximately 77 percent of these students return for their second year. Providence Public Schools has been collecting this data for the past 10 years. The mission of Providence Public Schools is to prepare all students to succeed in the nation’s colleges and universities and in their chosen profession. Over the past 10 years there have been a large number of students who have been lost and have not made it to their high school graduation. There have also been a large number of students who did not return to college for their second year.

Dual enrollment programs gives students the opportunity to experience and observe skills for success in a college environment. A dual enrollment program is described as one where high school students are given the opportunity to take college classes for credit while being enrolled in high school. The idea is that by gradually exposing students to the demands of college students can observe and learn the behavior needed to be successful in the college environment. (Kirst et al., 2003) “Dual enrollment programs are also viewed as a strategy for keeping high school students, who might otherwise be disinterested in school and in danger of dropping out, engaged and motivated” (Hill, 2008, p. 4)

Relevance of the theoretical framework to the problem of practice. The intent of dual enrollment programs is to impact the skills and dispositions of students so that they are much more likely to persist and be successful in college. When students, have the opportunity to participate in a dual enrollment program they have the opportunity to develop the academic and social skills that are needed for success in a post-secondary environment. Dual enrollment programs that involve collaboration between the university instructors and teachers increase the probability that the experience that students will have will be closely aligned to the experience in college. Students that have the opportunity to participate in dual enrolment programs also have
fewer adjustment issues once they get to the post secondary environment because of the experience. In some communities dual enrolment programs serve as the vehicle to give students the opportunity to begin both academic and social integration. As Bandura states, people learn from observation. As a result students who participate in these programs have an opportunity to observe, retain, and reproduce the skills that are necessary for success at the post secondary level. The Pathways for Partnership Program has had this goal and intention since the beginning of the program. The students from Mount Pleasant high school had an opportunity to participate in this program during the years of 2007-2009.

Bandua’s Social Learning Theory states that people learn from each other resulting in a change in behavior. The interaction can be result of observation, imitation, and modeling. Tinto’s model for institutional departure. “Tinto's (1987) model of institutional departure is based on academic and social integration. The greater the amount of integration, the greater the probability of retention” (Young D., Redlinger L. 2001). The Pathways Through College Program exposed students to college level work and the college environment. The program was designed in this way so that students could see what behaviors are necessary for success in the college environment. The program was also designed in this way so that once students arrived on the college campus as college students they would be able to ingrate and be successful. It is through these two theoretical lenses that I analyzed to what extent did the Pathways for Through College Program increase college readiness in students at Mount Pleasant High School as measured by their enrollment and persistence in college.

**Chapter II: Literature Review**

Across the country there are many first year college and university students who find themselves unprepared for the demands of college. They find that college is different from high
school. The expectations and demands increase for students when they leave high school and enter college. Many high school graduates believed that their secondary schooling prepared them adequately for college only to find that this is not the case. This failure is due to a lack of exposure to challenging curriculum during high school (Karp et al., 2007; Kirst et al., 2003; Pearson, 2003). The relationships between teachers and students are different from high school to college. The skill sets required for success in college change as well. Students must enter with the ability to adapt and navigate their new environment in order to be successful. The type of preparation that students have had and experiences that they have been exposed to in high school are critical to equipping them with the ability to make this change once they enter college. If high school students are not exposed by observation or do not have experience with the skills necessary to be successful in college, it is very doubtful that they will develop the skills to be successful in college.

A review of the literature has confirmed that there is a serious problem with the preparation of students for college. This problem increases incredibly particularly amongst urban minority youth. (Martinez & Klopott, 2005; Conley, 2005, 2007a, 2007b, 2010; Karp & Hughes, 2008). There is currently a need for additional research to uncover and discover current strategies that have been used to address this issue (Martinez & Klopott, 2005; Karp & Hughes, 2008).

For the purposes of this chapter, the literature review was arranged in six sections. The first section provides an overview of the historical development of American Public Education as it relates to college readiness. The second section focuses on the goal of career and college readiness research and gives the definition of terms relating to college and career readiness. This section also addresses the predictors for college readiness. The third section explores the issue of
college readiness and college persistence for low income and minority students. The fifth section highlights the essential components of college readiness programs that have been successful in the area of college readiness. The sixth section describes the promise of dual enrollment programs.

**Historical Perspective**

The American public education system has a very rich history. It began soon after the revolutionary war of 1776. Thomas Jefferson stated that the survival of any democracy is based on an educated society for all. This philosophical belief was the foundation upon which many educational pioneers across this awesome country began to build their systems. Over the years there have been many debates and legal battles fought to determine “who” is included in the term all. In the 1800 in Massachusetts Horace Mann stated that Education then, beyond all other devices of human origin, is the great equalizer of the conditions of men, the balance-wheel of the social machinery. Based on this philosophical conviction there have been more battles fought to determine the kinds of programs, curriculum, requirements for teacher certification, etc. to determine, what is the best plan of action to give, “everyone” the type of education that he or she deserves.

Over the years, the social and political landscape has changed in America. As a result, of these changes, educational polices, and focuses have changed as well. During the period, 1900 - 1920 there was an increase in the number of immigrants that moved to America. During this time there were no child labor laws and families chose to send children to work rather than to school. During the Great Depression of the 1930’s child labor laws, imposing compulsory attendance of all children until age 16 was passed. Due this change, there was an increase in the number of students that the American Public education system had to support.
intention of managing this new influx of students many school systems began to give IQ tests to determine the eligibility to more rigorous course work. During this time, many female and minority students were denied their potential. Many suffered from the being exposed to the school’s tracking system.

In 1957 the Soviet Union launched its first space vehicle into orbit. This prompted an unbelievable surge for reform within the American Public Education System. “Since all children were required to attend school, legislature enacted laws at federal, state and local levels placing reform programs into the enlarging school curriculum. Such reformers considered education as a part of the social sciences. Because of this connection, the schooling process can become part of the social pressure of the larger environment. The post Sputnik era witnessed an outcry that the ills of the society were a result of the schools. Commentators remarked that schools did not teach reading well, the school were segregated and disenfranchised a segment of the American population, the schools did not counsel students into science and math, and the schools were soft.” (Hiatt p. 2).

In 1983 a report was produced called a Nation At Risk. This report documented that America’s place as the leader of the free world was at stake. The document states although there are many contributing factors to this dilemma, one of the problems has to do with the educational system. The conclusions from the report state the decline in educational performance is largely due to the way the educational process itself is conducted. The conclusions were grouped into four categories: content, expectations, time, and teaching.

**Findings Regarding Content:** By content we mean the very "stuff" of education, the curriculum. Because of our concern about the curriculum, the Commission examined
patterns of courses high school students took in 1964-69 compared with course patterns in 1976-81.

**Findings Regarding Expectations:** We define expectations in terms of the level of knowledge, abilities, and skills school and college graduates should possess. They also refer to the time, hard work, behavior, self-discipline, and motivation that are essential for high student achievement.

**Findings Regarding Time:** Evidence presented to the Commission demonstrates three disturbing facts about the use that American schools and students make of time: (1) compared to other nations, American students spend much less time on school work; (2) time spent in the classroom and on homework is often used ineffectively; and (3) schools are not doing enough to help students develop either the study skills required to use time well or the willingness to spend more time on school work.

**Findings Regarding Teaching:** The Commission found that not enough of the academically able students are being attracted to teaching; that teacher preparation programs need substantial improvement; that the professional working life of teachers is on the whole unacceptable; and that a serious shortage of teachers exists in key fields. ([Nation At Risk, 1983](#))

In 1996 the fires for educational reform began to burn even brighter. In March of that year there was a meeting in Palisades New York of many business and political leaders to discuss the state of American Public Education. Many of these leaders were not happy with what schools were producing. There was a consensus that there must be a major over hall of the current system. Gerstner stated in 1996 that the better schools in the United Stated still needed to do better. He went on to state that all of the changes that have taken place in public
education had only gotten the country to where it was in the 1960’s. As stated by Gerstner (1996):

What institution in America — what institution in the world — would survive for long if it operated at 1960 levels? So here we are in 1996, being passed by other countries operating at post-1960, information-age levels, and what was once a problem is now a crisis that threatens the entire country. (p. 7)

In the 1990’s Trends in International Mathematics and Science Study (TIMSS) put in perspective how far behind the United States students were in math and science in comparison to the rest of the world. According to Rod Paige, fourth graders tested in 1995 scored on a par with the highest-performing nations in science, they ranked lower in mathematics than their peers in eleven nations, including Korea, Japan, the Czech Republic, and the Netherlands (Martin et al., 1997; Mullis et al., 1997). It was from this backdrop that the No Child Left Behind Act (NCLB) was created and eventually signed into law. According to the United States Department of Education, NCLB has changed the educational landscape by focusing on, ensuring that students are learning, making school systems accountable, ensuring information is accessible and options are available, and by improving the quality of teachers. When making school systems accountable the writers of NCLB believed that by holding all students accountable to high academic content standards student achievement for all students would increase. These academic content standards would furthermore lead to high school reform initiatives. The writers also believed that if student achievement increased then access to colleges and universities would also increase for “all” students.

The world has changed drastically in the past 100 years. At this time holding a high school diploma is not enough to compete in this global economy. ‘During his first address to a
joint session of Congress in February 2009, President Barack Obama emphasized the national priority to improve educational attainment. He stated, “In a global economy, where the most valuable skill you can sell is your knowledge, a good education is no longer just a pathway to opportunity. It is a prerequisite” (Field, 2009, p.1) Consequently, the President called on every American to pursue at least one year of postsecondary education” (Hooker & Brand, 2009)

The issue of college readiness is wide-spread across our country. As stated by Barton (2005),

Many young people in the United States lack the basic qualifications necessary to get into college. Right out of the gate, roughly a third of the high school-age population is not ready for college because they fail to graduate on time. They are, for the most part, condemned to wander through life like lost travelers, without guidance or goals (p. 3).

This pattern of lacking in college readiness is not unique to Providence Public Schools but is also evident across the country due to the number of college freshmen who have to take remedial courses.“Consider the remediation rates for beginning college students: according to a 2008 U.S. Department of Education report, 21 percent of all entering freshmen reported taking at least one remedial course” (Berkner, Choy, Hunt-White p.78). According to Conley (2006),

“College readiness can be defined operationally as the level of preparation — without remediation—in a credit-bearing general education course at a postsecondary institution that offers a baccalaureate degree or transfer to a baccalaureate program” (p. xx).

**Goal of College and Career Readiness Research**

College and Career Readiness research is a very hot topic in the educational community today. The college readiness research is currently has three major goals. According to Conley, the first goal of college readiness research is to determine what it takes to succeed in entry-level
college courses. In the quest to answer this question, the following three questions would have to be explored.

- What makes a college course a college course?
- What are the content of key general education courses?
- What are the key cognitive strategies and key content knowledge necessary to succeed in entry-level college courses?

Conley states that the second goal of college readiness research is to unpack the complexity of the United States postsecondary system. In order to reach this goal the following two questions would have to be answered.

- How does “college ready” differ across institution types?
- What are the differences in general education courses among different types of postsecondary institutions?

Finally, Conley states that the final goal of college readiness research is to analyzes more closely the claims that college and career readiness are the same. With the intention of reaching this goal the following two questions would have to be answered.

- Is baccalaureate readiness the same as readiness for a two-year certificate?
- How do both compare to career pathways that require neither?

**Definition of Terms**

Students who are considered “at risk” are those who’s probability to withdraw from college is above average due to a combination of causes of failure in school and beyond (Martin 1999). As a result a number of strategies have been created to help students be better prepared for college. Career Academies are school within a school that provides college prep curriculum that is based on a career. College Prep High schools where the curriculum is closely related to
college curriculum. Dual Enrolment programs are programs where students have the opportunity to take classes on a college campus while earning high school credit. Early College programs are programs in which students begin to earn high school and college credit in 9th grade. Finally Pre-College programs are programs that are not college level. However these programs are designed to give some students a better chance at succeeding in college level material. (Salinas 2007).

Predictors of College Readiness

George W. Bush stated that at least two years of college are needed to function in today’s workforce (Kelderman, 2004). This idea has been confirmed by many groups (Armstrong, 2005). However, the truth has been nationally that for every 100 ninth grade students only 68 will graduate from high school. Of the 68 who graduate from high school only 40 will enroll in some post secondary institution. Even more disturbing is that only 27 out of the original 100 will return for their second year. These numbers are representative of what is happening nationally (National Center for Public Policy and higher Education, 2004). According to George D. Kuh, success in college is strongly related to precollege academic preparation and achievement as well as family income and parent education.

The High School Survey of Student Engagement (HSSSE) had been created in an attempt to uncover some of issues relating to student engagement in high school. The High School Survey of Student Engagement is an annual survey that has been designed to be administered to students in grades nine through 12. In 2004 the survey was administered to 90,530 students from 103 high schools across 26 states. The number of respondents has increased since that time. The survey assesses the level and dimensions of student engagement in high school. The survey also assess to what extent are students engaged in activities associated with high levels of
learning. The survey provides administrators with data on student beliefs about learning, attitude about their school experience and behaviors in his or her learning environment. The High School Survey of Student Engagement suggests that there are four predictors of college readiness; study habits, reading, writing, and mathematics (HSSSE Report, 2005).

Students in high school will state that they plan to go to college. However many of them are not engaging in the practices that will prepare them to do well in college. A general guideline is that for every hour of class students should study two to three hours outside class. The HSSSE suggests that high school students are currently studying for two to three hours per week to prepare for all of their classes (HSSSE Report, 2005). This practice will not prepare students for the 13 to 14 hours of studying per week for the average first year college freshman at a four year university. It will also not prepare them for the 11 hours of studying per week for the average two year college student with fewer than 30 credit hours completed (Kuh, 2005).

Another finding from the survey is that students reported only studying two to three hours per week and received A’s and B’s for grades. Seven out of 10 seniors surveyed in the college prep track reported that they did not take a math class their senior year nor did they write a paper longer than five or more pages. Only about half reported that they put forth a great deal of effort or did their best in their school work. The survey findings suggest that many high school seniors are not prepared academically for demands of college level work. The work that they are exposed to in high school is not helping them to develop the habits of mind and heart that will enable them to persist with the more challenging intellectual task in college (Kuh, 2007).

Students must be proficient readers if they are to be successful in college. According to, the 2005 HSSSE survey data, 78 percent of students reported that they spent three hours or less reading assigned material. The other one-fifth reported that they spend no time on assigned
reading. The seniors in a college preparation track (honors, dual enrollment) reported spending more than four hours per week reading assigned material. Only 2 percent of students reported devoting 11 or more hours per week to reading assigned material. Both the Community College Survey of Student Engagement (CCSSE) and the National Survey of Student Engagement (NSSE) record the amount of time students spend reading for their classes. As said by both surveys, first year college students reported reading five or more text books, books, or book-length packets of course materials during a school year. This reported amount is far greater than what most high school students have been exposed to in a given year (HSSSE 2004).

Students must be adept to writing substantive papers of more than five pages in length if they are to be successful in college. More than one-third of first year college students at four year colleges and just under half of liberal arts colleges reported that during their first year of college they had to write five or more papers of five to 19 pages in length (NSSE, 2004). Also 18 percent of all students surveyed reported that they had to write at least one paper that was longer than 20 pages in length their first year of college (HSSSE 2005). The 2004 HSSSE reported that 71 percent of senior survey respondents stated that had written three or fewer papers or reports of more than five pages in length. Only 5 percent of seniors in high school respondents had written 10 papers longer than five pages in an academic year. As a result there exists a significant gap in what students are expected to do in terms of writing in high school and the expectation for the amount of writing when they get to college.

The level of math proficiency that students enter college is a predictor of college success. The National Governors Association (2005) reported that math is an area that high school needs to improve upon. This is a fact based on the 22 percent of first year college students who have to take remedial math courses when they enter college (Basmat, Laurie, & Greene, 2003). Students
who enter this remedial track are excluded from bachelor’s degrees that require higher mathematics. As a result high schools must get their students to take courses beyond Algebra II while in high school. The HSSSE reports that the vast majority of students nationally take fewer math classes in their senior year than in previous grades. The number of students more likely to take math classes during their senior year rose for students in college preparation classes. However 18 percent of students in this category still did not take any mathematics classes their senior year.

**Issues of College Readiness for Low Income Minority Students**

The literature is clear that who students are and where they attend prior to entering a post secondary institution makes a difference in their chances or graduating from a post secondary institution. The gap continues to grow between Whites and Blacks and Whites and Latinos in terms of being college ready (Braswell et al. 2001). According to ACT only 21 percent of African Americans, 33 percent of Hispanics and 33 percent of high school graduates with family incomes below $30,000 have college level reading skills (ACT 2006). The high school graduation rate of African Americans is 77 percent, Latinos 57 percent in comparison to Whites at 82 percent. The college participation rate of African Americans and Latinos is 35 percent, trailing the participation of Whites at 43 percent (Carter & Wilson 1997).

The quality of the academic experience that students (especially minority) are exposed to affects their level of success in college. Students who have been exposed intense academic classes in high school do better in college regardless of who they are, or how much money they have, or where they go to college (Florida Department of Education 2005; Gladieux and Swail 1998, Horn and Kojaku 2001; Martinez and Klopott 2003; Warburton, Bugarin, and Nunez 2001). Students who complete four years of math, science, and English in high school stay on
track to graduate from college at a rate of 87 percent in comparison to the 62 percent of students who do not complete that sequence (Adelman, 1999; Warburton, Burgarin, and Nunez 2001). Completing algebra II, pre-calculus, trigonometry, and calculus- is the greatest high school predictor of success in college. (Adleman 1999, 2006). African American and Latino students from low socioeconomic who attend public high schools with high minority populations are less likely to have access to advanced math and science courses. They are also less likely to take advanced placement examinations (Kuh, Kinzie, Buckley, Bridges, & Hayek 2006). These low participation rates may explain the low enrolment and high drop out from post secondary institutions from the urban low income minority community.

Enrollment and completion rates in post secondary education are impacted by parental level of post secondary education. According to the 2005 NSSE, approximately one in three college students come from families where neither parent had any post secondary education (NSSE, 2005). Students who have parents who completed college by a rate of 85 percent are far more likely to enroll in college. Student who had parents with less than a high school education had a 45 percent rate of enrolling in a post secondary institution. First generation college students are far less likely to enroll in courses that will prepare them for college for example, advance math classes and, advance placement classes. A painstaking high school curriculum can increase the number of first generation students who persist through college (Nunez, 1998). Students who were exposed to rigorous curriculum in high school were more likely to do well in college and less likely to enroll in remedial courses in college (Kuh, Kinzie, Buckley, Bridges, & Hayek 2006). However students who had a parent who had a bachelor’s degree were five times more likely to earn a bachelors degree themselves than first generation college students (Pascarella & Terenzizi, 2005). First generation student also have less family support that second or third
issues of college persistence for low income minority students

A student’s ability to persist through college is also impacted by the student’s educational aspirations and family support. However in the minority and low income community the issue of persistence is impacted by a number of other factors. African American and Hispanic Students are less likely to persist to graduation that White and Asian students (U. S. Department of Education 1997). According to Choy and Chen, first generation students are less likely to graduate because they earn less credit their first year. This is due to the fact that they have to enroll in more remedial classes are more likely to repeat courses and are less likely to choose a major their first year (Choy 2005; Chen 2005).

A student’s ability to persist through college is also impacted by the student’s educational aspirations and family support. In families where college and post secondary conversations and activities begin as early as eighth grade the possibility of college completion increases (Swail et al. 2005). Hamrick and Stage state that among White eight graders who attended low-income, high minority schools parental expectations was one of the highest predictors of college success. The educational aspirations amongst first generation students are the best predictor of first semester GPA (Naumann, Bandalos, & Gutkin 2003). High school teachers can diminish the educational aspirations of students. Many teachers do not believe that certain groups of students can achieve at high levels on rigorous work. As a result they lower their expectations for these students (Us Department of Education, 2004). Some studies indicate that Latino parents place
nearly twice as much emphasis on college that their African American and White counterparts. However the reality is that the participation in the college preparation activities do not line up with the expectations (Immerwahr, 2000). In African American communities conversations about college with parents and peers appear to have a smaller impact student enrollment in college and persistence through college (Bank, Slavings & Biddle 1990). In low income, high minority schools African American eight grade students who had higher grades combined with co-curricular activities had higher aspirations for college attendance (Hamrick & Stage, 2004).

In the study A Tug of War for Our Minds:”African American High School Students' Perceptions of Their Academic Identities and College Aspirations,” Howard reported that the role of parents, schools and the students own academic identity had an impact on their college aspirations. In the study the students stated that parents were one of the most powerful influences on their academic identities. Students with positive academic identities constantly discussed their parents expectations of them to go to college. Students perform better and are more likely to succeed when families are involved and supportive. This level of parental involvement and expectation can offset some of the negative impacts of poverty to a degree (Chrispeels & Rivero, 2001). Another theme that came through the study was that parents of students in urban setting do want their children to go to college.

The students also stated that the expectations that teachers and counselors had of them had an impact on their view of themselves. Howard sited another study where teacher-centered classrooms, perceived racism and discrimination and a lack of personal teacher centered relationships had a negative impact on how students viewed themselves and were contributing factors to student failure. The students constantly mentioned that teacher expectation has a tremendous impact on how they view him or herself academically.
Finally the students in the study stated that the formation of their academic identities was developed by their own interest in college. The students equated the term academic identity as being smart because of their college aspirations. They viewed themselves as college material. The students made statements that there academic identity was the same as their college aspirations. Some students who were not college-bound still believed that they had a strong academic identity.

**College Readiness Programs**

College readiness has an operational definition as the level of preparation —without remediation—in a credit-bearing general education course at a postsecondary institution that offers a baccalaureate degree or transfer to a baccalaureate program (Conley, 2007). “Students that posses mastery of key cognitive strategies, key content knowledge, academic behaviors, and contextual knowledge would be defined as being college ready” (Epic, p. 18 2007).

According to, the American Youth Policy forums’ study entitled Success at Every Step; there are four major components that should be included in every college readiness program. The first major component is that a foundation for growth must first be established where a student has learned to master the following skills:

- Academic Knowledge
- Academic Success Behaviors
- Technical Knowledge and Skills
- Communication Skills
- Problem Solving
- Critical-Thinking
- Social Skills and Teamwork
- Goal-Setting
• College knowledge
• Self Advocacy Skills.

The second major component is that short-term outcomes must be achieved at the secondary level. These outcomes can be grouped into three categories: Academic, Planning for College and Careers and Personal Resources outcomes. Students must achieve the following academic outcomes in order to be college ready. They must achieve and maintain steady intellectual development over four years of high school resulting from the study of increasingly challenging, engaging, and coherent academic content. They must maintain on time progression through high school. Students should take advanced classes while in high school. Students must achieve their high school diploma or GED. In order for students to plan effectively for college they, must be exposed to the college application and financial aid process. They must also be exposed to college and career options to develop their aspiration. Students must view themselves as a personal resource. They must understand the impact of living a healthy lifestyle while reducing risky behaviors. They must also understand the value of being engaged in the campus activities outside academics. Students must also demonstrate personal leadership to take advantage of the opportunities available to them.

The third major component is that intermediate outcomes must be completed at the postsecondary level. These immediate outcomes can be grouped into three categories: Academic, Career-Related and Personal Resources outcomes. Every college readiness program must have as its first Academic bench mark for success is student enrollment in a postsecondary program. The next steps in the progression are achievement, persistence ending with degree completion. Programs must evaluate themselves based on this most important progression. The secondary outcome is related to careers. Questions that program evaluators should ask themselves could be: What is the employment status of the students who participated in the
college readiness program? What are the earnings of participants? What occupational degree or industry credential has the participants of the program attained? In terms of personal resources outcomes students who participate in college readiness programs should reach a place of independence and financial responsibility.

The American Youth Policy forums’ study entitled Success at Every Step states that the final component that must be included in a college readiness program is that three long-term objectives should be established by the program. The three long term objects should be future career success, opportunities for growth in civic engagement and participation in the democratic process with a commitment to lifelong learning. The ultimate goal for college readiness programs is to give students an opportunity to go to college so that they can secure jobs that will give them the ability to take care of themselves and a family. The hope is that these students will ultimately want to shape their communities and become a part of the social fabric within the community they may live and work in. The expectation is also that in due course these students will take some responsibility for their community and participate in the democratic process to help to transform their community. A final long term outcome is that these students will become lifelong learners and will have the skills to continue to explore any opportunity that they choose (Hooker, Brand 2009)

The Promise of Dual Enrolment Programs

High School reform has moved to the forefront of the educational agenda for many in the federal government, local government, superintendents, and school boards. The call for dramatic reform has been fueled by the large numbers of high school drop outs, the low academic achievement of many high school students leading to the increasing number of graduates that have to take remedial courses during their first year of college. These trends are even more
distinct in large urban cities and are seen primarily in the students in the African American and Hispanic community (Quint, 2006).

Dual Enrolment programs have gained the interest of educational researchers to determine if these programs could be a viable solution to the problem of college readiness. Dual Enrolment programs are opportunities for high school students to earn college credit while still enrolled in high school. Students can take the classes on the college campus with college professors or they can take the courses at their high school with a teacher who has been trained to teach the college level material. There has often been some concern with the later model by the credit granting university with respect to academic rigor, fidelity, and integrity. Nevertheless, in 2002-2003 71 percent of high schools in the United States offered dual enrollment options for their students (Swanson, 2007). Many of the courses were offered on college campuses with 55 percent of the colleges who sponsored dual enrollment programs still offered their courses on high school campuses.

Dual enrollment programs, improves the probability that a student will continue to pursue and persist to graduation from a post secondary institution for a number of reasons. Swanson concludes in his research that students who participate in dual enrolment programs will enter their first year of school in advanced standing. As a result they will need fewer credits to persist to their second year. The probability of students persisting is also due to the fact that students would be exposed to rigorous academic content that would have prepared them for future college level work (Swanson, 2007). Dual enrolment programs also help to reduce the college financial cost placed on students and their families. This fact will also help to increase the likelihood that students who participate in dual enrolment programs will not only enroll in a post secondary institution but will also persist to graduation.
In 2006 the Governor of the State of Rhode Island K-16 Council contracted with Jobs for the Future to conduct and in-depth analysis of the states’ dual enrolment programs in Rhode Island. Jobs for the Future, was also charged to with providing recommendations for developing dual enrollment approaches as a strategy for improving the transition from high school to college. During this period members from the educational, business, and community leaders met to discuss how to meet the demand of the state’s economy for a highly trained workforce.

In 2004-2005 the Jobs for the Future report stated that the state had as many as 4000 students currently participating in dual enrolment programs. However the programs were not currently designed to increase rates of college degree achievement. The report also noted that in Rhode Island the current system did not promote participation in dual enrolment programs by low-income students Figure 2. Figure 3 shows the participation rates by high school in dual enrolment programs in 2004-2005. Please not that in Providence that is the largest district in Rhode Island had only two high schools with 40 students participating.
Figure 2. Percentage of Early Enrollment Program Participation by Free/Reduced Lunch Composition of High School
## Appendix C

Participant Rates by High School in the Early Enrollment Program, 2004-05

<table>
<thead>
<tr>
<th>High School</th>
<th>Number Enrolled in Dual Enrollment</th>
<th>Total School Enrollment</th>
<th>Percent of Students in Dual Enrollment</th>
<th>Percent of Free/Reduced Price Lunch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Falls</td>
<td>9</td>
<td>1036</td>
<td>0.87%</td>
<td>61.87%</td>
</tr>
<tr>
<td>Central</td>
<td>24</td>
<td>1647</td>
<td>1.46%</td>
<td>68.65%</td>
</tr>
<tr>
<td>Classical</td>
<td>16</td>
<td>1088</td>
<td>1.47%</td>
<td>43.84%</td>
</tr>
<tr>
<td>Shea Senior</td>
<td>30</td>
<td>1153</td>
<td>2.60%</td>
<td>55.77%</td>
</tr>
<tr>
<td>West Warwick</td>
<td>57</td>
<td>1119</td>
<td>5.09%</td>
<td>14.21%</td>
</tr>
<tr>
<td>Woonsocket</td>
<td>50</td>
<td>1965</td>
<td>2.54%</td>
<td>35.63%</td>
</tr>
<tr>
<td>Barrington</td>
<td>70</td>
<td>1095</td>
<td>6.39%</td>
<td>1.92%</td>
</tr>
<tr>
<td>Burrillville</td>
<td>27</td>
<td>878</td>
<td>3.08%</td>
<td>17.08%</td>
</tr>
<tr>
<td>Chariho Regional</td>
<td>131</td>
<td>1248</td>
<td>10.50%</td>
<td>10.62%</td>
</tr>
<tr>
<td>Coventry</td>
<td>97</td>
<td>1904</td>
<td>5.09%</td>
<td>7.46%</td>
</tr>
<tr>
<td>Cranston East</td>
<td>42</td>
<td>1721</td>
<td>2.44%</td>
<td>34.02%</td>
</tr>
<tr>
<td>Cranston West</td>
<td>99</td>
<td>1781</td>
<td>5.56%</td>
<td>7.47%</td>
</tr>
<tr>
<td>Cumberland</td>
<td>74</td>
<td>1536</td>
<td>4.82%</td>
<td>5.27%</td>
</tr>
<tr>
<td>East Greenwich</td>
<td>33</td>
<td>735</td>
<td>4.49%</td>
<td>4.22%</td>
</tr>
<tr>
<td>East Providence</td>
<td>112</td>
<td>2029</td>
<td>5.52%</td>
<td>22.42%</td>
</tr>
<tr>
<td>Exeter-West Greenwich</td>
<td>96</td>
<td>741</td>
<td>12.96%</td>
<td>9.31%</td>
</tr>
<tr>
<td>Lincoln Senior</td>
<td>37</td>
<td>1085</td>
<td>3.41%</td>
<td>8.94%</td>
</tr>
<tr>
<td>Middletown</td>
<td>32</td>
<td>719</td>
<td>4.45%</td>
<td>15.44%</td>
</tr>
<tr>
<td>Narragansett</td>
<td>38</td>
<td>524</td>
<td>7.25%</td>
<td>8.78%</td>
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<tr>
<td>North Providence</td>
<td>176</td>
<td>1185</td>
<td>14.85%</td>
<td>17.69%</td>
</tr>
<tr>
<td>North Smithfield</td>
<td>39</td>
<td>837</td>
<td>4.66%</td>
<td>8.00%</td>
</tr>
<tr>
<td>Pilgrim</td>
<td>22</td>
<td>1364</td>
<td>1.61%</td>
<td>24.78%</td>
</tr>
<tr>
<td>Ponaganset</td>
<td>36</td>
<td>990</td>
<td>3.64%</td>
<td>10.10%</td>
</tr>
<tr>
<td>Portsmouth</td>
<td>38</td>
<td>1078</td>
<td>3.53%</td>
<td>4.36%</td>
</tr>
<tr>
<td>Rogers</td>
<td>43</td>
<td>708</td>
<td>6.07%</td>
<td>36.58%</td>
</tr>
<tr>
<td>Scituate</td>
<td>16</td>
<td>541</td>
<td>2.96%</td>
<td>5.73%</td>
</tr>
<tr>
<td>Smithfield</td>
<td>286</td>
<td>885</td>
<td>32.32%</td>
<td>4.07%</td>
</tr>
<tr>
<td>South Kingstown</td>
<td>87</td>
<td>1282</td>
<td>6.79%</td>
<td>10.76%</td>
</tr>
<tr>
<td>Tiverton</td>
<td>42</td>
<td>736</td>
<td>5.71%</td>
<td>10.46%</td>
</tr>
<tr>
<td>Toll Gate</td>
<td>34</td>
<td>1191</td>
<td>2.85%</td>
<td>11.42%</td>
</tr>
<tr>
<td>Westerly</td>
<td>18</td>
<td>1143</td>
<td>1.57%</td>
<td>20.12%</td>
</tr>
</tbody>
</table>

*Source: Early Enrollment Program (Rhode Island College) and Rhode Island Department of Education.*

**Figure 3.** Participation by High school in Early Enrollment Program 2004-2005
Jobs for the Future (Hill, 2008) made the following six recommendations to the Governors K-16 council.

- All students have an opportunity to receive up to a semester (four courses) of college credit
- As is now the case, most students will continue to bear much of the cost of college courses, but the state will offer incentives for low-income dual enrollees to encourage their participation.
- College courses are aligned with general education or concentration requirements of state public postsecondary institutions or with courses required to receive an industry certificate or Associates degree in a career area.
- A limited number of college courses may be taken on college campuses
- Dual enrollment enables acceleration through dual credit. That is, high school-required courses are replaced by equivalent or more advanced college courses. (For example, calculus is a course that is likely to be equivalent at the high school or college level.)
- Dual enrollment is aligned with the state’s high school diploma system. (Jobs for the Future, 2006)

In response to the recommendations the Pathways Through College Initiative was launched in 2008. The program was initiated by the Rhode Island Board of Governors for Higher Education. The Pathways Through College Program is a collaboration between Mount Pleasant High School and Rhode Island College. The goal of the dual enrolment program was to promote college readiness and to increase the college aspirations among underrepresented
students in higher education. The secondary goal was to test the program out and refine the strategies that were implemented.

**Chapter III: Methodology**

There are many minority students in urban centers who graduate from high school unprepared for college. Many districts invest millions of dollars in curriculum and teacher professional development as means to solving the problem. However, after many strategic plans have been implemented and after millions of dollars has been spent the fate of many urban public school graduates remains the same. They are still not prepared for the rigors of college. The intent of this study is to explore to what extent the Pathways for Through College Program increased college readiness in students at Mount Pleasant High School as measured by their comparative annual GPA and persistence in college. This chapter presented the research questions, and methodology. The methodology is divided into three sections; site and participants, data collection, data analysis.

**Research Questions**

This study sought to answer the following two questions:

1. To what extent did the Pathways Through College Program increase Mount Pleasant High School students’ college readiness (as measured by their comparative annual GPA) and persistence (as measured by their continued enrollment) in college?

2. How did participation in the Pathways Through College Program impact students’ interest, readiness, and efficacy to successfully meet the demands of college work and persist as perceived by administrators, teachers, and students who participated in the program?
Regarding the first question, it is significant to note that the students included in this study were students who graduated from Mount Pleasant High School that attended Rhode Island College (RIC) in the fall of 2007, 2008, 2009. The Pathways Through College Program was conducted for three years, 2007, 2008, 2009, allowing a select number of high school seniors to engage in a small number of dual enrollment classes at RIC, as well as participate in a small number of college readiness classes at the high school. The Program was implemented with three different cohorts during this time.

According to Conley, college readiness has an operational definition as the level of preparation – without remediation – in a credit-bearing general education course at a postsecondary institution that offers a baccalaureate degree or transfer to a baccalaureate program (Conley 2007). With this definition in mind, one can look at college readiness in a variety of ways, but two were used in this study in relationship to whether students’ participation in the Pathways through College Program impacted their college readiness. Did students who participated in the Pathways through College Program have and maintain a higher annual GPA than those from Mount Pleasant who did not participate. And did those students participating in the Pathways through College Program at Mount Pleasant persist in from year-to-year in college more so than those Mount Pleasant students who did not participate.

**Rational for the Mixed Method Case Study Design**

This study was a case study using a mixed methods approach. As defined by Tashakkori and Teddlie (2003), “We use the term *mixed methods research* here to refer to all procedures collecting and analyzing both quantitative and qualitative data in the context of a single study” (p. 10). The reason a mixed methods approach had been chosen for this research was to expand the scope of this project to offset the limitations of doing only a qualitative or quantitative study
(Blake 1989; Greene, Caracelli, and Graham 1989, Rossman and Wilson 1991). The data used in this study came from archived data provided by the Office of Institutional Research at RIC, the annual GPA’s and records of persistence as documented at RIC, interviews with teachers and administrators involved in the Pathways through College Program at Mount Pleasant, and, finally, participating students themselves. The target population for this study was first time, fulltime, part-time and first- year students who graduated from Mount Pleasant High school and attended Rhode Island College.

As mentioned above, some of the data used in this study came from the archived data provided by the Office of Institutional Research at Rhode Island College in Providence Rhode Island. The data assembled by the Office of Institutional Research for use in this study did not include student identifiers for the purpose of protecting students’ identity and did include data collected from earlier student focus groups. This study used data collected from interviews with program administrators and program guidance counselor. Interviews were conducted, with a “focus on participants’ meanings and context” (Maxwell & Loomis, 2003, p. 10) as they related to their perception of participants’ readiness, interest, and efficacy to successfully engage in college work and persist in college. Where possible, interviews and focus groups with students who participated in the program were also conducted to gather data on the program’s impact on students’ readiness, interest, and efficacy to successfully engage in college work and persist in college as self-reported by them.

**Site and Participants**

**The Program and Program Context**

The Goal of the Pathways Through College Initiative was to increase college readiness in underserved and low-income students who were underrepresented in Rhode Island’s colleges
and universities. The program had its genesis and was launched originally as the Twin Tracks program as a result of a series of recommendations made in a June 2006 report commissioned by the Governors’ PK-16 Council. There were numerous stakeholders that were engaged in the collaboration and strategic planning of this initiative: “The Rhode Island Board of Governors for Higher Education (RIBGHE), Jobs for the Future (JFF), Academic Vice Presidents and/or their designees from each of Rhode Island’s three institutions of higher education, the Rhode Island Department of Elementary and Secondary Education (RIDE), and the Governor’s Office” (Hill, 2008, p. 3). The program was implemented at Mount Pleasant high school in collaboration with Rhode Island College. The site of this study is Mount Pleasant High School located in Providence Rhode Island. Mount Pleasant High School is one of four large comprehensive high schools in the Providence Public School Department. The school serves more than 1600 students annually graduation rate of 57.9 percent in 2006 and the dropout rate of 29 percent that same year (Providence Public Schools, 2010, p. 25). According to the National Student Clearinghouse in 2006, only 50 percent of the students who graduate from Mount Pleasant High School enrolled in college (Providence Public Schools, 2010 p. 25). According to the same source, only 57 percent of these students return for their second year (Providence Public Schools, 2010 p. 25).

Population

The target population for this study was Mount Pleasant High School graduates who entered Rhode Island College in the fall of 2007, 2008, 2009. Access to this data was obtained from the Office of Institutional Research at Rhode Island College after making a request for the data. The graduation rate for Mount Pleasant High School for the 2006 academic year was 57.9 percent and the dropout rate for that same year was 29 percent (Providence Public Schools,
Sixty-Six percent of the students at Mount Pleasant high School qualify for free and reduced lunch, 25 percent are African American, 58 percent are Hispanic, 11 percent are White and 6 percent are Asian. Thirteen percent are identified as English Language Learners and 23 percent are identified as in need of Special Education Services (Providence Public Schools, 2007). The graduation rate for Mount Pleasant High School for the 2006 academic year was 57.9 percent and the dropout rate for that same year was 29 percent (Providence Public Schools, 2010, p. 25).

Sample

The study investigated the impact in participating in the Pathways Through College program had on first semester GPA of students who graduated from Mount Pleasant High School. The study also investigates the impact in participating in the Pathways Through College program on persistence to the second year. Purposive sampling was used for this study. “Purposive sampling is one of the most common sampling strategies that groups participants according to preselected criteria relevant to a particular research question...Sample sizes, which may or may not be fixed prior to data collection, depend on the resources and time available, as well as the study’s objectives.” (Ulin, 2004, p.5).

Data Collection: Procedures and Instruments for Data collection

Secondary data provided by the Office of Institutional Research at RIC. This study included secondary data that has already been collected by the Office of Institutional Research at Rhode Island College. The Office of Institutional Research assembled the data for the study by removing student identification numbers and replacing him/her with artificial numbers created for this study. The researcher received the data in an Excel file from the Office of Institutional
Research at Rhode Island College. The data included the 6 data points as presented in Table 1 and provided by Office of Institutional Research.

Table 1

*Data points from the Office of Institutional Research at Rhode Island College*

<table>
<thead>
<tr>
<th>Mountain Pleasant Graduates</th>
<th>Pathways/ Non Pathways</th>
</tr>
</thead>
<tbody>
<tr>
<td>End of year Cumulative GPA (for each year completing college)</td>
<td>Sex</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>Persistence in College (Year, 2, 3, &amp; 4)</td>
</tr>
</tbody>
</table>

**Secondary data: focus group with enrolled RIC students who participated in the Pathways through College Program.** As part of the Mount Pleasant High Schools desire to evaluate the degree to which the Pathways through College Program may have impacted students experience in college and their level of college readiness and persistence in college, a focus group was conducted with three former Mount Pleasant students who participated in the Program and continued to be enrolled at RIC. Permission to access and use this focus group for the purpose of this study was pursued.

**Primary data collection: Interviews with administrators and teachers who participated in the Pathways through College Program.** Primary data was collected from interviews with administrators, focus groups with participating teachers, and (where feasible) focus groups with former students that participated in the program students. The aim was to inquire with each group their perspectives on the degree to which the program impacted students college readiness. These topics include but are not limited to, reading, writing, mathematics preparation, time management, study skills, self management, and the desire to take more rigorous courses which are all seen as keys to college readiness (Achieve, 2005).
Data Analysis: Procedures and models for data analysis

**Question 1:** To what extent did the Pathways Through College Program increase Mount Pleasant High School Students’ college readiness in students as measured by their persistence in college and annual GPA? Mount Pleasant High School graduates who subsequently attended Rhode Island College in the fall of 2007, 2008, 2009 will comprise the study population, along with the program director, program administrator and guidance counselor participating in the program at the time. The Pathways Through College Program was conducted for three years, 2007, 2008, 2009. The Program was implemented with three different cohorts during these years.

According to Conley, college readiness has an operational definition as the level of preparation – without remediation – in a credit-bearing general education course at a postsecondary institution that offers a baccalaureate degree or transfer to a baccalaureate program (Conley 2007). For the purpose of this study, the annual GPA of former Mount Pleasant students participating in the program was compared to those students who did *not* participate in the program. In addition, a statistical comparison of college persistence between former Mount Pleasant students who participated in the program and who did not participate was conducted. To determine differences in annual GPA, term-by-term t-tests and an ANOVA was employed, with the independent variable being annual GPA and the dependent variable being participation in the program. To assess the degree in which the program may or may not have impacted students’ persistence in college, a Fisher Exact test was employed, with the variables being participation in the program (or not) and persistence in college (or not). Many studies that have been conducted indicate that participation in a dual enrollment program has had a positive impact on student achievement in college (Jackson, 2007; Karp et al., 2007; Peng, 2003;
Swanson 2008). In addition, according to Katheryn Sullivan-Ham (2010), further studies have also indicated that the GPA of students that participate in dual enrollment programs is significantly higher than those who did not participate in dual enrollment programs.

To answer the second research question, a qualitative analysis of the interviews with participating administrators and teachers was employed, as well as the focus groups conducted with former Mount Pleasant students currently enrolled at RIC. The data collected through interviews and focus groups was analyzed using coding methods that include but were not exclusive to first and second cycle coding as presented by Saldana (2009). According to Saldana, coding leads you from the data to the idea and from the idea to all of the data that is related to that idea (Saldana, 2009, pg 8).

During first cycle the data was coded in order to identify and produce initial categories. During the second cycle of coding the data was re-categorized and organized in order to refine the categories into major themes. The categories that emerge from both first and second cycles of coding from focus groups with students and interviews with administrators and teachers informed the research questions.

Validity and Credibility

This study focused on Mount Pleasant High School students that participated in the Pathways Through College Program and looked at how the program impacted their college readiness in comparison to those from the same school that did not participate in the program. One of the limitations of this study was the sample size. In an effort that the conclusions drawn from the study are valid, the study used controls for the interviews and reviewed the methodologies and consistent coding practices to ensure the consistency of the results. (Creswell, 2007; Leedy & Ormond, 2005).
The study was limited to one urban high school. This limited the external validity of the results. However the results from this study may inform superintendent, school board members, principals, and other policy makers about the impact of Dual Enrolment programs on college readiness for urban youth.

**Protection of Human Subjects**

Regulation 45 CFR 46, requires colleges, universities, hospitals, research institutes, and other organizations that conduct human research and receive federal funding to establish local Institutional Review Boards (IRBs) (Seidman, 2006, p. 59). The researcher developed an IRB for the Human Subjects Review Board at Northeastern University seeking permission for this research project. The researcher completed an IRB application that included a brief description of the aim of the research, the nature of the participants, the research methodology, the researcher’s qualifications to do research, the risks and benefits involved in the research, and how the researcher will obtain informed consent from the potential participants (Seidman, 2006). The data for the students that participated in this study was obtained from Rhode Island College. The program director, program administrator, guidance counselor and students that participated in the interviews and focus groups were invited to participate via letter (see Appendix C – Appendix F). All participants were also given adequate information about the research procedure, the purpose of the research, the risks and benefits through unsigned consent documents as well as a signed informed consent form (See Appendices G), and were given the opportunity to ask questions about the research. The primary researcher informed each participant that they had the right not to participate and that they could stop their participation at any time.

All participants’ information is held in the strictest of confidence. No other individual
has seen any identifying information regarding any participant who volunteered to be part of this study. A coding system was used to protect the identities of individuals participating in the focus groups and interviews. The researcher was the only person who knew the coding system. As suggested by Creswell (2009), all participants will be offered access to a preliminary copy of any publication that comes out of the research.

**Conclusion**

In summary, the intent of this study was to examine the impact of a dual enrollment college program on students’ college readiness (as measured by comparative annual GPA) and their persistence in school. Hopefully, the analysis will identify elements of the program that can inform policy makers and educators on how to increase college readiness in minority urban youth. Participants will include students, teachers and administrators. The data collected will be from secondary data obtained from Rhode Island College and from face-to-face interviews and focus groups with administrators, teachers, and students participating in the program. Results from the study can be used to inform high school redesign teams and school district officials in an effort to increase college readiness in students.

**Chapter IV: Report of Research Findings**

**Purpose of the Case Study**

The purpose of this chapter is to present the findings of the study. The first section provides a brief review of the study’s context and defines technical terms associated with the study. The second section presents the findings in relationship to the first research question, which includes an analysis of the archived data provided by the Office of Institutional Research at Rhode Island College in relationship to the topic of the study and the first research question of the study. The third section presents the emergent themes as identified through an analysis of the
interviews and focus groups conducted for this study in relationship to the second research question. And, finally, the last section of this chapter provides a summary of the key research findings as assessed through an analysis of the data collected and reviewed.

**Research Questions**

The two research questions guiding the collection and analysis of data for this study are:

1. **To what extent did the Pathways Through College Program increase Mount Pleasant High School students’ college readiness (as measured by their comparative annual GPA) and persistence in college?**, and

2. **How did participation in the Pathways Through College Program impact students’ interest, readiness, and efficacy to successfully meet the demands of college work and persist as perceived by administrators, teachers, and students who participated in the program?**

**Study Context**

In 2007 the Pathways Through College Initiative was launched at Mount Pleasant. The program was initiated by the Rhode Island Board of Governors for Higher Education. Jessica Grier, the Director of the program at the time, described the spirit behind the program as follows:

In 2006, Governor Carcieri commissioned a report from Jobs for the Future. The two key findings in that report, commissioned to essentially get more low income at risk. The focus of the report was looking for programs that existed that poor kids and students of color might be able to take advantage of. They found that there are actually were a lot of programs, but lo and behold, mostly white, upwardly-mobile students will take
advantage. They asked me to run a program that had already been born and it was called Twin Tracks. It was a partnership between Mount and RIC.

The Pathways Through College Program was a collaboration between Mount Pleasant High School and Rhode Island College. The goal of the dual enrollment program was to promote college readiness and to increase the college aspirations among underrepresented students in higher education. The secondary goal was to test the program out and refine the strategies that were implemented. The students from Mount Pleasant high school had an opportunity to participate in this program during the years of 2007-2009.

When asked, School Program Administration described how students were selected to participate in the program as follows:

Well for the first year; they were self selected. And then for the second year, it was more like they had to fill out applications, write essays on reasons why they want to do it and there was a review committee from Rhode Island College to select the students. We felt students needed to know what the idea of the dual enrollment was and actually that it was a level of self decision to stay in the program and commitment was number one. Grading or GPA wasn’t a factor and it was actually an opportunity for all seniors who wanted to commit to the program, and for any that were planning to move on into a four-year college. Being persistent was also an important criterion. If a student signs up for a class in high school and doesn’t like it, they try and switch out. They find it too difficult for them. No, this was a commitment for the entire semester and/or year.

The researcher obtained the data from the Office of Institutional Research for Rhode Island College. There were a total of 78 (n = 78) Mount Pleasant high school graduates that
attended Rhode Island College as freshman during the 2007-2009 academic years. There were 34 Pathways students and 44 Non-Pathways students.

**Research Question #1: To what extent did the Pathways Through College Program increase Mount Pleasant High School students’ college readiness (as measured by their comparative annual GPA) and persistence in college?**

Regarding the first question, it is significant to note that the students included in this study were students who graduated from Mount Pleasant High School that attended Rhode Island College (RIC) in the fall of 2008, 2009, and 2010. The Pathways Through College Program was conducted for three academic years, 2007-2008, 2008-2009, and 2009-2010, allowing a select number of high school seniors to engage in a small number of dual enrollment classes at RIC, as well as participate in a small number of college readiness classes at the high school. The Program was implemented with three different cohorts during this time, those seniors graduating from Mt. Pleasant in 2007, 2008, and 2009 and subsequently enrolling at RIC the following Fall semester.

**Comparing Pathways and Non-Pathways incoming academic abilities based on a comparison of their high school SAT scores.** The data set that was retrieved from the Office of Institutional Research at Rhode Island College included the students SAT scores in Verbal, Math, and Writing. Two determine the academic equivalence of students enrolling at RIC between the Pathway participating students and non-Pathway students, a two-sample t-test assuming equal variances was conducted. Figure 4 shows the mean scores for Pathways and Non-Pathways students in comparison to the national average for their respective years using a bar graph and presenting the data, respectively. According to this data both the Pathways and non-Pathways students scored below the national average on each section of the SAT for their
respective years. Tables 2-4 below, show the mean, standard deviation and the results of the t-test to compare the SAT scores of Pathways and Non-Pathways students. The t-test results for the Verbal, Math and Writing for all three cohorts indicate no significant difference in the Pathways and Non-Pathways.

Figure 4. 2007, 2008, 2009 Mean SAT scores for Pathways and Non-Pathways students in comparison to the National Average.¹

Table 2

*Mean SAT Verbal scores and T-test results for differences between Pathways and Non-Pathways students*

<table>
<thead>
<tr>
<th></th>
<th>Pathways</th>
<th>Non-Pathways</th>
<th>t - value</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>M= 404.6, SD = 67.0</td>
<td>M=409.3, SD = 65.8</td>
<td>t(24) = -0.18</td>
<td>p = 0.86</td>
</tr>
<tr>
<td>2008</td>
<td>M= 439.2, SD = 68.0</td>
<td>M=396.9, SD = 77.3</td>
<td>t(23) = 1.45</td>
<td>p = 0.16</td>
</tr>
<tr>
<td>2009</td>
<td>M= 398.2, SD = 61.1</td>
<td>M=373.3, SD = 53.4</td>
<td>t(21) = 0.99</td>
<td>p = 0.33</td>
</tr>
</tbody>
</table>

Table 3

*Mean SAT Math scores and T-test results for differences between Pathways and Non-Pathways students*

<table>
<thead>
<tr>
<th></th>
<th>Pathways</th>
<th>Non-Pathways</th>
<th>t - value</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>M=413, SD = 70.3</td>
<td>M= 426.7, SD = 70.3</td>
<td>t(24) = -0.47</td>
<td>p = 0.64</td>
</tr>
<tr>
<td>2008</td>
<td>M=427.5, SD =97.3</td>
<td>M=403.3, SD =103.1</td>
<td>t(22) = 0.63</td>
<td>p = 0.53</td>
</tr>
<tr>
<td>2009</td>
<td>M=379.09, SD =53.8</td>
<td>M=370, SD =52.2</td>
<td>t(21) = 0.41</td>
<td>p = 0.69</td>
</tr>
</tbody>
</table>

Table 4

*Mean SAT Writing scores and T-test results for differences between Pathways and Non-Pathways students*

<table>
<thead>
<tr>
<th></th>
<th>Pathways</th>
<th>Non-Pathways</th>
<th>t - value</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>M=398, SD =51.2</td>
<td>M= 412, SD =71.9</td>
<td>t(24) = -0.54</td>
<td>p = 0.59</td>
</tr>
<tr>
<td>2008</td>
<td>M=452.5, SD =113.1</td>
<td>M=389.2, SD =85.3</td>
<td>t(23) = 1.59</td>
<td>p = 0.13</td>
</tr>
<tr>
<td>2009</td>
<td>M=393.6, SD =92.3</td>
<td>M=390, SD =68.3</td>
<td>t (20) = 0.11</td>
<td>p = 0.91</td>
</tr>
</tbody>
</table>

These results indicate that there were no significant differences between the academic preparation of students in reading, math, and writing, as evidenced in a comparison of their
reading, math, and writing SAT scores.

Comparing Pathways and non-Pathway students’ preparedness for college work based on a comparison of their term-by-term GPAs. For the purpose of this study, the Rhode Island College (RIC) term-by-term GPA of former Mount Pleasant students participating in the program was compared to those students who did not participate in the program. The comparison was undertaken as an indicator of the degree to which students were prepared to successfully engage in the college courses. In addition, a statistical comparison of college persistence between former Mount Pleasant students who participated in the program and who did not participate was also conducted, as an indicator of the degree to which students were also able to successfully pursue college-level work.

To determine differences in annual GPA, an ANOVA was employed, with the independent variable being annual GPA and the dependent variable being participation in the program. In addition, to assess preparedness for college-level academic work a t-test was also used to determine whether there were any significant differences between the GPAs of Pathway and non-Pathway students for each term enrolled. The results are presented below in Tables 5-7 and Figures 5-11 by cohort.

Cohort 1 differences in GPA across all terms. As can be seen in Table 5 and Figures 5 and 6, there were no significant differences between the cumulative GPAs of all Pathway vs. non-Pathway students across terms except for Terms 1 & 2, with Pathway students obtaining nearly a grade better than non-Pathway students term 1 (GPA 3.13 vs. 2.26, respectively) and more than ½ a grade better than non-Pathway students term 2 (GPA 2.94 vs. 2.25, respectively).

While Pathway students continued to obtain a better cumulative GPA in Terms 3 and 4, these differences diminished over time and through Terms 5-8 were also found not to be significant.
Overall, however, Pathway students were found to have a higher GPA across all terms than non-Pathway students as tested through a one-way, between-subjects analysis of variance, $F(1, 26) = 2.456, p = .024$. The major difference was found to be in the first four Terms of college, particularly Term 1 and then Term 2.

Table 5

*Cohort 1 Mean GPA results for Pathways and Non-Pathways Students and the t-test result of differences in mean GPA by semester*

<table>
<thead>
<tr>
<th>Cohort 1</th>
<th>Fall 08 Term</th>
<th>Spring 09 Term</th>
<th>Fall 09 Term</th>
<th>Spring 10 Term</th>
<th>Fall 10 Term</th>
<th>Spring 11 Term</th>
<th>Fall 11 Term</th>
<th>Spring 12 Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Pathway n=9</td>
<td>3.13</td>
<td>2.94</td>
<td>2.78</td>
<td>2.72</td>
<td>2.58</td>
<td>2.37</td>
<td>2.88</td>
<td>2.90</td>
</tr>
<tr>
<td>All Non-Pathway n=17</td>
<td>2.26</td>
<td>2.25</td>
<td>2.34</td>
<td>2.47</td>
<td>2.63</td>
<td>2.59</td>
<td>2.85</td>
<td>2.62</td>
</tr>
<tr>
<td>T-test</td>
<td>t=3.56</td>
<td>t=2.32</td>
<td>t=1.53</td>
<td>t=1.01</td>
<td>t=-0.14</td>
<td>t=-.72</td>
<td>t=-.10</td>
<td>t=.67</td>
</tr>
<tr>
<td>Only Pathway enrolled</td>
<td>3.30</td>
<td>3.06</td>
<td>2.90</td>
<td>2.82</td>
<td>2.81</td>
<td>2.77</td>
<td>2.74</td>
<td>2.77</td>
</tr>
<tr>
<td>all 6 Terms n=8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Only non-Pathway</td>
<td>2.87</td>
<td>2.84</td>
<td>2.73</td>
<td>2.79</td>
<td>2.89</td>
<td>2.92</td>
<td>2.91</td>
<td>2.95</td>
</tr>
<tr>
<td>enrolled all 6 Terms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>n=10</td>
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</tr>
<tr>
<td>T-test</td>
<td>3.13</td>
<td>2.94</td>
<td>2.78</td>
<td>2.72</td>
<td>2.58</td>
<td>2.37</td>
<td>2.88</td>
<td>2.90</td>
</tr>
<tr>
<td>n=9</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Figure 5. 2008 Mean GPA results for Pathways and Non-Pathways Students

Figure 6. 2008 Mean GPA results for Pathways and Non-Pathways Students that were enrolled for all eight terms

**Cohort 1 differences in GAP across all Pathway and non-Pathway students enrolled for all eight terms following initial enrollment.** Unfortunately, only three Pathway and six non-
Pathway students remained enrolled at RIC for all four years after entering in the fall of 2008. When comparing their cumulative GPAs by term, a similar pattern was found, with the three Pathway students obtaining a higher GPA than non-Pathway students Terms 1-4, with the greatest difference being Term 1 and then Term 2. But because of the small sample size, a test for significance of such differences could not be conducted.

**Cohort 2 differences in GPA across all terms.** As can be seen in Table 6 and Figures 7 and 8, there was significant differences between the cumulative GPAs of all Pathway vs. non-Pathway students across all terms except for year 2, with Pathway students obtaining nearly a grade better than non-Pathway students term 1 (GPA 3.13 vs. 1.88, respectively) and more than ½ a grade better than non-Pathway students term 2 (GPA 2.98 vs. 2.28, respectively). Pathway students continued to obtain a better cumulative GPA in Terms 3 and 4, however these differences were found not to be significant. Pathways obtained nearly a grade better than non – Pathways students for term 5 (GPA 3.11 vs. 2.61, respectively) and more than ½ a grade better than non-Pathways students term 6 (GPA 3.20 vs. 2.53, respectively. Overall, Pathway students were found to have a higher GPA across all terms than non-Pathway students as tested through a one-way, between-subjects analysis of variance, $F(1, 24) = 8.813, p = .007$. The major difference was found to be in all Terms of college, with the exception of terms 3 and 4.
Table 6

*Cohort 2 Mean GPA results for Pathways and Non-Pathways Students*

<table>
<thead>
<tr>
<th>Cohort 2</th>
<th>Term GPA</th>
<th></th>
<th>Term GPA</th>
<th></th>
<th>Term GPA</th>
<th></th>
<th>Term GPA</th>
<th></th>
<th>Term GPA</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fall 09</td>
<td>Spring 10</td>
<td>Fall 10</td>
<td>Spring 11</td>
<td>Fall 11</td>
<td>Spring 12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Pathway</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n=12</td>
<td>3.13</td>
<td>2.98</td>
<td>3.12</td>
<td>3.11</td>
<td>3.15</td>
<td>3.20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Non-Pathway</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N=14</td>
<td>1.88</td>
<td>2.28</td>
<td>2.61</td>
<td>2.61</td>
<td>2.50</td>
<td>2.53</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>T- test</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Only Pathway enrolled all 6 Terms (N=8)</td>
<td></td>
<td>t =3.23 p= &lt;.05</td>
<td></td>
<td>t =2.37 p= &lt;.05</td>
<td></td>
<td>t =1.88 p= 0.07</td>
<td></td>
<td>t =1.76 p= .1</td>
<td></td>
<td>t =2.24 p= &lt;.05</td>
</tr>
<tr>
<td>Only Non-Pathway enrolled all 6 Terms (N=10)</td>
<td></td>
<td>3.24</td>
<td>3.14</td>
<td>3.15</td>
<td>3.15</td>
<td>3.19</td>
<td>3.20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>T- test</strong></td>
<td></td>
<td>t = 2.37 p= &lt;.05</td>
<td></td>
<td>t =2.4 p= &lt;.05</td>
<td></td>
<td>t =1.92 p= &lt;.05</td>
<td></td>
<td>t =1.81 p= &lt;.05</td>
<td></td>
<td>t =2.22 p= &lt;.05</td>
</tr>
</tbody>
</table>

*Figure 7* 2009 Mean GPA results for Pathways and Non-Pathways Students
**Cohort 2 differences in GAP across all Pathway and non-Pathway students enrolled for all 6 terms following initial enrollment.** Eight Pathway and ten non-Pathway students remained enrolled at RIC for all four years after entering in the fall of 2009. When comparing their cumulative GPAs by term, a similar pattern was found, with the eight Pathway students obtaining a significantly higher GPA than the ten non-Pathway students Terms 1-6.

**Cohort 3 differences in GPA across all terms.** As can be seen in Table 7 and Figures 9 and 10, there was not a significant differences between the cumulative GPAs of all Pathway vs. non-Pathway students across all terms. Unlike Cohorts 1 and 2, Cohort 3 did not have a significantly higher GPA than the non-Paths students. The t-test failed to reveal a difference between Pathways and Non-paths students for this cohort of students. The one-way, between-subjects analysis of variance failed to reveal a significant difference in the GPA of Pathways and Non-Paths students for 2010, $F(1, 22) = .450, p = .509, \alpha = .05$
### Table 7

*Cohort 3 Mean GPA results for Pathways and Non-Pathways Students*

<table>
<thead>
<tr>
<th>Cohort 3</th>
<th>Term GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fall 09 Term</td>
</tr>
<tr>
<td>All Pathway</td>
<td></td>
</tr>
<tr>
<td>n=11</td>
<td>2.76</td>
</tr>
<tr>
<td></td>
<td>n=11</td>
</tr>
<tr>
<td>All Non-Pathway</td>
<td></td>
</tr>
<tr>
<td>n=13</td>
<td>2.52</td>
</tr>
<tr>
<td></td>
<td>n=13</td>
</tr>
<tr>
<td><strong>T- test</strong></td>
<td><strong>t = .69</strong></td>
</tr>
<tr>
<td></td>
<td><strong>p = .49</strong></td>
</tr>
<tr>
<td>Only Pathway</td>
<td></td>
</tr>
<tr>
<td>enrolled all 4 Terms</td>
<td>n=8</td>
</tr>
<tr>
<td></td>
<td>2.75</td>
</tr>
<tr>
<td>Only Non-Pathway</td>
<td></td>
</tr>
<tr>
<td>enrolled all 4 Terms</td>
<td>n=9</td>
</tr>
<tr>
<td></td>
<td>2.94</td>
</tr>
<tr>
<td><strong>T- test</strong></td>
<td><strong>t = -.49</strong></td>
</tr>
<tr>
<td></td>
<td><strong>p = .62</strong></td>
</tr>
</tbody>
</table>

*Figure 9. 2010 Mean GPA results for Pathways and Non-Pathways Students*
Comparing Pathway and non-Pathway students’ preparedness for college work based on retention in college. To assess the degree in which the program may or may not have impacted students’ persistence in college, a Fisher Exact Test was also employed, with the variables being participation in the program (or not) and persistence in college (or not). It is important to note that the numbers listed in the tables 8-10 below were as reported by Rhode Island College. For students that were not enrolled, records provided by Rhode Island College did not indicate if the student had completely dropped out of school or transferred to another institution of higher education.
### Table 8

**Cohort 1 College preparedness for college work based on Retention**

<table>
<thead>
<tr>
<th>Cohort 1</th>
<th>Enrolled 2008</th>
<th>Retained year 2</th>
<th>Retained year 3</th>
<th>Retained year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pathways</td>
<td>11</td>
<td>7</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>63%</td>
<td>63%</td>
<td>36%</td>
</tr>
<tr>
<td>non-Pathways</td>
<td>17</td>
<td>14</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>82%</td>
<td>52%</td>
<td>35%</td>
</tr>
<tr>
<td>Fisher Exact</td>
<td></td>
<td><em>p = .25</em></td>
<td><em>p = .44</em></td>
<td><em>p = .63</em></td>
</tr>
</tbody>
</table>

### Table 9

**Cohort 2 College preparedness for college work based on Retention**

<table>
<thead>
<tr>
<th>Cohort 2</th>
<th>Enrolled 2009</th>
<th>Retained year 2</th>
<th>Retained year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pathways</td>
<td>12</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>75%</td>
<td>66%</td>
</tr>
<tr>
<td>Non-Pathways</td>
<td>14</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>71%</td>
<td>71%</td>
</tr>
<tr>
<td>Fisher Exact</td>
<td></td>
<td><em>p = .59</em></td>
<td><em>p = .56</em></td>
</tr>
</tbody>
</table>

### Table 10

**Cohort 3 College preparedness for college work based on Retention**

<table>
<thead>
<tr>
<th>Cohort 3</th>
<th>Enrolled 2009</th>
<th>Retained year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pathways</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>81%</td>
</tr>
<tr>
<td>Non-Pathways</td>
<td>13</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>84%</td>
</tr>
<tr>
<td>Fisher Exact</td>
<td></td>
<td><em>p = .66</em></td>
</tr>
</tbody>
</table>
The Fisher Exact test was employed, with the variables being participation in the program (or not) and persistence in college (or not). For all three cohorts the significance value that was calculated for each year was not greater than the threshold value of 0.05 (see tables 8 - 10). Hence the test revealed that persistence in college did not differ based on participation in Pathways program or not.

**Summary.** Looking at the differences of GPA across all terms for Cohorts 1, 2, and 3 indicated that Pathway participating students may have been better prepared to meet the expectations of college-level work than non-Pathway participating graduates of Mt. Pleasant High School. Cohort 1 and 2 Mt. Pleasant students participating in the Pathway program had a higher GPA than non-Pathway participating students. For cohort 1, these differences were significant for both Terms 1 & 2. And for cohort, these differences were significant for all Terms except Year 2. However, there was no parallel finding in Cohort 3 Mt. Pleasant students entering RIC. As for differences in college retention over time, there were no differences between the Mt. Pleasant Pathway and non-Pathway participating students enrolled at RIC.

**Research Question #2: How did participation in the Pathways Through College Program impact students’ interest, readiness, and efficacy to successfully meet the demands of college work and persist as perceived by administrators, teachers, and students who participated in the program?**

In this section, the themes derived from a thematic analysis of focus groups with Pathway participating students, a combined interview with the administrator and a teacher in the program, and an interview with the program director are presented.
Transcripts were coded using In Vivo coding for the first cycle to ensure that the actual language and voices of participants were honored (Saldana, 2009). Structural coding (Saldana 2009) was then used to categorize the data and establish themes that were evident across different groups.

The themes derived from this analysis for each group and individual are presented below.

**Students.** As presented in Table 11, five themes were identified as being a significant factor in increasing the college readiness of Mt. Pleasant students that participated in the pathways through college program, as perceived by them. A description and presentation of each theme is provided below.

Table 11

*Themes Identified in Student Focus Groups*

- Students appreciated the opportunity to experience the difference in college teaching and learning.
- Participation in the program helped students understand college instructors’ expectation for college work.
- Participants in the program developed habits and behaviors that would help them succeed in college.
- Participants in the program developed a “Yes I can go to college” attitude.
- The program prepared them for the college culture.

*Students appreciated the opportunity to experience the difference in college teaching and learning.* Students in the first focus group stated that being in the college environment as a result of participating in the Pathway program gave them the opportunity to interact with the professors from the college, including the opportunity to have one-on-one interactions with the professors. They mentioned that this was very different from their high school experience where
there were almost 30 students in the class and that teachers spent most of their time trying to maintain control. They also expressed that they felt for the first time adults were genuinely interested in moving them forward and that it was not like high school where you just another face in the class. For example, as one student said, “What I took away was that it was easy to take education for granted at Mount Pleasant because everything felt so generic.” The participants stated that they could feel the excitement and enthusiasm that the professors had for their content. They continued to state that this excitement was contagious. The students stated that because of this excitement and enthusiasm, they developed the excitement and enthusiasm for the subject and wanted to learn more. Students also expressed that being in the college environment helped them to focus. For example, one student stated:

“When you’re in a more professional environment, as a college classroom, you really get to know that everyone around you is focused. Everyone around you is there to learn and it’s much easier for the professor to get what they want to get across to the students. We really got to learn to really focus."

Similarly, another student commented, “You know in Mount Pleasant or any kind of inner city public school, it’s hard to get a school experience at all. Pathways helps out a lot, in terms of it opens you up to up to that college experience, that different experience.”

*Participation in the program helped students understand college instructors’ expectation for college work.* Some students shared that prior to the program they would turn in anything to their high school teacher and get credit for it. They expressed that their teachers really did not have high expectations for them. They affirmed that you could really get by in high school by simply showing up. One student said, “I had to do like papers, actual papers, like more than two pages long for the first time.” Another student described a situation where the
professor had given an assignment. Students turned in the writing assignment only to find that the majority did the assignment incorrectly. The professor told them once again what she had expected from them. She used some student examples to go over what was expected and then she told them to do it again. Here a student expressed the value of this experience in the Pathway program:

   I just feel like that opened people's eyes as to when a professor says this is what I want, that's what you have to do, not just my name is DJ, blah, blah, blah, hand it in and get the credit. It's definitely not like that when you get to college.

   Reading and writing are critical skills for success in college. The students discussed having to read complete books for the first time as a result of the program. They also described how they had to balance the new reading demands with their regular school demands. They stated that this expectation helped them to make the transition. Writing is the means that students are evaluated in almost every course at the postsecondary level. Students are expected to write a lot in college and in a relatively short space of time. When describing the impact of the program here a student describes how the Pathways Program prepared him to meet the writing demands of college:

   I think I would have been pretty screwed had I not done Pathways because it's like seeing the people I went to high school with come into college and kind of like complain about having three-paged papers that were due the next day because they haven't done page papers before. I wasn't as nervous as I would have been if I had not done Pathways. I was ready for what college demanded. If I did not have Pathways I would’ve dropped out of something.”
Participants in the program developed habits and behaviors that would help them succeed in college. Students shared that they valued the program because it exposed them to the habits and behaviors they needed to be successful in college. The students expressed that the program demanded more from them than what was demanded from their high school. The students described having to balance the new workload from their college classes with their high school classes. The students stated that participation in the Pathways program helped them to develop better time management skills. Students described having to balance the two workloads (high school and college work), as well as sports and a social life. They stated that they learned how to prioritize. They learned delayed gratification. And they learned how to achieve their goals. One student, for example, describes how their skills were honed as follows:

If I didn’t just learn how to organize what I needed to do and prioritize my obligations I would have failed in everything. Because when you're trying to maintain or achieve a higher GPA in high school and trying to get all the stuff done for college, and it’s first time, doing college work, it can be overwhelming. We had to learn how we must assign and dedicate time to certain things, so at the next level, we can get everything done. Not just to get it done, so that we can get it done but to get it done and done well.

The students stated that they learned how to say no. The students described that on the college campus there is a lot of freedom. They stated that there was a party every weekend. They described that some students partied every weekend and wanted them to participate. One student stated, “its really about learning to say no and doing what you have to do first before you can do what you want to do.” They stated that through the program they learned to self-manage themselves. They stated that the program director told them that this was a skill that they need to mastered and that no one on the college campus was going to be there to tell them where they
needed to be and when. She went on to tell them that no one was going to tell them when and how to study either. The students expressed that they learned to self manage through the use of a planner. The students stated that the program helped them to know what was really important. One student stated, “The parties are going to be there and the social life was going to be there.” But their education was an opportunity that they could not afford to waste.

The students also stated that they program helped them to take advantage of their recourses. Participants spoke about meeting and developing relationships with professors that went on well after the class ended. One student stated, “When I came to college, there were professors everywhere. You had advisors, and all these different people. Some of my peers saw them as just professors and ended the relationship after the semester was over, oh but I did not.” The students discussed that these relationships were valuable for the future when applying for jobs and even for graduate schools.

**Participants in the program developed the “Yes I can go to college” attitude.** The participants in the program described that the program had a very supportive environment. They expressed that being surrounded by so many positive people was inspirational. When they saw their peers working hard they said that it inspired them to work hard. They saw how their peers were being successful in the college environment and it inspired them to succeed in the college environment as well. Here one student describes the impact of the program:

Being surrounded by people who want to do better, it will inspire you. That’s what it did for me. Just being around you guys, just always made you smile and they put me in a positive mind set. Now we are in college, where it can be really stressful, if you got five classes, you got two jobs. And just remembering moments from Pathways and just being
surrounded by these people let me know that you can do it. The only person that can stop you is yourself. Pathways taught me that.

The students also expressed that the program increased their self-confidence. One of the students described feeling just as good as some of the other students who had graduated from high schools in more affluent communities:

So I feel like when we went to Mount Pleasant, we didn't have the same education and the same level of it as other kids from other places. I feel like we were almost at the same level, having gone through Pathways. So I feel like being some of those classes, I was like, wow, look at this guy, he just came from high school and he knows all this and I just learned it through Pathways.

The participants in the program described that the program helped to demystify the college experience. The students expressed that the Pathways program exposed them to college work. Through the program they were brought onto the college campus to see the environment. They had an opportunity to interview students about if they could do it all over again what would they do differently. They had the opportunity to interact with professors. They stated that through all of these experiences the college experience was demystified.

*The program prepared them for the college culture.* Students that do not understand or don’t know how to navigate in the college system often get frustrated and are unsuccessful in the system. The students described that the Pathways program opened up to a world of support that helped them. Some of them described that their parents had not gone to college and that they were the first in their family to go. This is very common in urban environments. The program then in a way became their family and network of support for navigating the college culture.
They stated that the program helped them to feel welcome on the college campus. Here one student described the impact that Pathways had on his ability to integrate into the college culture:

College would have been a gigantic culture shock because RIC is different from Mount Pleasant. When you come here, everybody seems so much more professional. You don’t see people goofing off in the classroom. You don’t have to deal with the distractions. Usually, the library is packed every weekend because people are studying for their exams and you’re like, “What?” because you don’t know. If I didn’t have Pathways, to kind of show me what it's like to be there, it would have been a disaster.

Students added that when they first got to the college campus during the program they felt like the babies on campus. During their freshman year, however, they stated that they knew they had the “one-up” on the other students that came straight out of high school. They felt as though they had their freshman year already. They stated that they saw familiar faces, and they knew where to go on campus. They were in a position to take ownership of their education. The participants described that many of their peers that had graduated from their same high school struggled to make the transition and that many of them found themselves on academic probation. One of the students stated,

I see some of my friends who graduated from Mount Pleasant and came with me here. Oh, I don't know, a lot of them are now on probation. A lot of them are not even close to graduating in the spring. A lot of them, these five, six years, they're just wasting a lot of time. They're just not on the right course because I feel like, in Mount Pleasant, [it] probably didn’t prepare them as much as they should've, just like Pathways program did for us.”
One student stated that many of his peers still had a high school mindset. He went on to state that these students were more concerned about popularity and their “swag, their shoes and what people thought about them.” He said that the program really opened his eyes to what really matters.

**The program administrator and guidance counselor.** A review of the building administrator and guidance counselor transcript revealed three themes, as provided in Table 12. These themes spoke to the building administrator and guidance counselor’s perspectives of the Pathways program as benefiting Mt. Pleasant High Schools students’ transition and sense of confidence to be successful in college. A description and presentation of each theme as discussed by each is provided below.

Table 12

*Themes identified by the program administrator and guidance counselor*

- The program connected students with key people and resources on the college campus.
- The program increased students’ self-confidence about going to college.
- The program gave more students access and opportunity to higher education.

*The program connected students with key people on the college campus.* The Guidance counselor stated that through the program students were connected with key people and programs on the college campus. Students were introduced to professors, college advisors, financial aid officers and student leaders. They stated that as high school students the Pathways students had access to college writing labs and the Academic Success Center. They continued to stress the benefit of the students leaving the high school campus and going to the college campus. The guidance counselor stated that these key relationships and connections helped the
students make the transition to college. The program director added that the program, “increased the students self motivation to succeed because they had the support of the college campus and the support of the high school.” Here the Guidance counselor states how rewarding the program was for him because of the difference it made in students:

I think it was a very rewarding experience for me to participate in this because I got to see the kids and see what they were going through, the difficulties but also the successes. Some of the kids really flourished in the college setting and it was just nice to hear those stories and it just reaffirmed the fact that they could make it with a little bit of effort, a little bit of help, they can handle anything.

The program increased students’ self-confidence about going to college. The school administration saw a transformation take place in the students that participated in the program. They described how the students at the beginning of the program were very shy and unsure of themselves. But by the end of the program they were very confident that they could do college work and be successful in college. The program director mentioned,

I think Pathways prepared them for college because it did take them of the Mount Pleasant campus and put them on a university campus, a four-year school campus, along with no Mount Pleasant teachers but college professors into a setting where they would have to be more mature, be more self-motivated to succeed.

They commented that because the work was more demanding that students were able to identify their own strengths and weaknesses both academically and socially. They also described observing how the students were even more serious about their high school education when on the high school campus. The Guidance counselor stated, “I have seen these students evolve into more mature young people. They have a better idea of their own strengths and weaknesses
academically and socially, but overall I am certain that their level of self-confidence went up.” They described both a seriousness and appreciation for education on the part of the students as a result of the program.

**The program gave more students access and opportunity to higher education.** The program administrator expressed that he is a strong supporter of dual enrollment programs. He expressed that the data is clear that there were not many students from Mount Pleasant high school that were entering college. He said that this was a result of many reasons. He stated, for example, “For one reason or another, students don’t have the information or they [don’t] feel comfortable entering the higher education gate.” However, he did state that it was his belief that dual enrollment programs “actually opens the door and creates a stronger link between high school and college life.” He went on to say that dual enrollment programs actually help to expose students to the different perspectives on college. He said that for students to actually have the opportunity to take college classes while in high school is a wonderful opportunity. Students actually have a chance to get really prepared for the next level in spite of the deficiency of their high school programming.

**The program director.** In reviewing the transcript of the interview with the program director, three themes were identified as being a significant factor in supporting the participating Mt. Pleasant students to succeed in college. A description and presentation of each theme is provided in Table 12 and discussed by each is provided below.
Table 13

*Themes Identified in Program Director Interview*

- The program increased Mt. Pleasant high school students’ access and opportunity to higher education
- The program exposed students to college work while in high school
- The program gave students the attitudes and mindset and skills to advocate for themselves in college.

The program increased Mt. Pleasant High School students’ access to and opportunity to be successful in higher education. During the interview the director of the program was extremely passionate about the intent of the program. She stated at the beginning that the program’s goal was to increase the access and opportunity of underrepresented populations to college. She stated:

Here I am, I get handed the job that says, "Take everything you've learned and put into action a program that get students who nobody believes in, nobody being those from higher education and from the community and get them into college. Make them believe that they can do this." It was a no-brainer. I pulled out of every other job process I was in and said, "Yes please."

She stated that there were many dual enrollment programs in the state. However they were only being accessed and taken advantage of by upwardly mobile students in affluent communities. The goal of the Pathways program was to bring this opportunity to students that would normally not have that same opportunity. As a result there were over 60 students over a three year period, that had access to a dual enrollment program through Pathways that they would not have otherwise had the advantage of participating in.
The program exposed students to college work while in high school. The director of the program mentioned that some of the high school teachers did not believe that the students could actually do college work. Her response was that whether they can or cannot now, they will be expected to in a year. She commented on the fact that students at the high school were simply allowed to turn in anything for a grade. She commented on the fact that there were students that got an A in pre-calculus and could not add. And she added that, “We had a lot of kids come out of Mount Pleasant with A's in pre-calculus, who tested instantly into remediate low, remedial math courses at RIC and they were shocked.” She acknowledged that in the K-12 system that there were some struggles with overworked and under-motivated teachers. However she made it clear that she was not there for the teachers and that she would do whatever it took to get her students ready for the demands of college. She believed that the students would rise to the occasion. She believed that if you expected it then they would produce it. She also believed in giving the students support while they were making their transition. The director stated,

I'd love to say that we remediated all of their skills, but we didn’t. But that wasn't the goal of the program. The goal of the program was to get kids on to a campus that they’ve never been on and say, "You can do it.” I would say, in all three years, each and every single one of our 60 kids learned that lesson.

The program gave students the attitudes and mindset and skills to advocate for themselves in college. The director of the program stated that persistence in college begins with a sense of belonging that can lead to self confidence that will cause students to become their own self-advocates (see Figure 11).
The director commented that in the program students worked on self-advocacies skills and confidence building skills, and public speaking skills. However, before all of that, it was really about a sense of belonging. The director further commented that developing a sense of belonging is essential to students doing well in college and unfortunately, that sense of belonging is naturally cultivated into the upwardly-mobile student and that's not a color or class thing necessarily.

The director remarked,

Ask any adult in the community, someone who went to college or someone who didn’t, it doesn’t matter, about whether or not high school students should take a college class and there is a resounding, "No." The rationale behind that is because how could a high school student be academically prepared, especially one of those students, student of color, poor students, a student from a high school that’s identified by that community member as a dump.
She went on to add that mobility can come from a student whose parents are propelling them forward, but it's not as common as the student who's born on the escalator. She said she felt a personal obligation to right a wrong. She said prior to the program some students felt that they did not belong on a college campus. Others made statements they would not go because no one there looked like them or liked them. Still others said that a lack of finances was a reason why they could not go. She stated that her first priority was to build the belonging which leads to self-confidence and then focus on the students’ academic ability. She commented,

It sounds like a silly thing, but when a student comes on to a college campus and they're in the classroom, with a faculty member who's never going to bother to learn their name or where they come from. If they don’t know how to interact with adults, they don’t know how to ask questions, they don’t take advantage of office hours, they don’t stop after class, introduce themselves, so that they feel comfortable, they're not going to be successful. Rich, poor, black, white, it doesn’t matter. I guess the last thing I'd say is we developed through them the belief that a community can be supportive. A family can be a good thing. Each week we had our town meeting and we instilled in the students that they were part of something bigger than themselves.

During the interview the Director commented on the fact that many of our inner city students have a sense of self-reliance. She had to let the students know that although that may be good in some circumstances it was not the case in all circumstances. She commented on the fact that she told the students that when they faced adversity and felt alone that all they needed to do was look to their “class mates” for support if they could not get in touch with her. She helped the students understand that they needed to take responsibility for their own education and that was their responsibility and their’s alone. She made sure that the program gave the students this
identity so that they had the confidence to advocate for themselves during the journey. She stated that, without this skill “I think we would have more slip to the cracks most certainly. I think we would have had more get to college and just slam into a wall.”

Summary of the Findings

According to the results of the quantitative portion of this study, there was a significant difference in the comparative annual GPA of cohort 1 and cohort 2 Pathways and Non-Pathways students from Mount Pleasant High school that attended Rhode Island College. For cohort 1, Pathway students’ GPA was greater than non-pathway students the first four terms of college, and significantly so Terms 1 and 2. And for cohort 2, Pathway students’ GPA was greater for all 3 years recorded, and significantly so for years 1 and 3. Interestingly, there was no significant difference for any term (terms 1-4) for cohort 3. According to the results of this study, however, there was no statistical difference in Mt. Pleasant students staying in college between those who participated in the Pathways program and those that did not.

The findings from the qualitative portion of the study are compiled from the collective voices of the director of the program, the building administrator, school guidance counselor, and Pathways participating students. The themes derived from these three participating groups provided multiple perspectives on the impact the program had on the college readiness of the students that participated in the program, as perceived by them.

In sum, the interviews and focus groups indicated that the program had a positive impact on preparing the students that participated in the program for college. The student participants in this study had a positive opinion on the programs impact on their college readiness. The students appreciated the opportunity to experience the difference in college teaching and learning.
students also developed the habits and behaviors that helped them to be successful in college. The students also developed the “Yes I can go to college” attitude.

The program administrator, guidance counselor, and program director firmly believed that the Pathways program increased the college readiness and potential success of the Pathways students. Students were connected with key people and resources on the college campus. Students’ self confidence increased as result of the program. Students developed the attitudes, mindset and skills to advocate for themselves in college.

Chapter V: Discussion of Research Findings

Revisiting the Problem of Practice

The Providence Public School Department is the largest school district in the state of Rhode Island serving approximately 24,000 students, and serves the majority of all minority children in the state of Rhode Island. The mission of the Providence Public Schools is to prepare all students to succeed in the nation’s colleges and universities and in their chosen profession. Despite Providence’s mission to prepare students for college, the dropout rate for the Providence Public School Department is 26% and the graduation rate is 69%. According to the National Student Clearinghouse about 55% of the students who graduate enroll in college. According to the same source, approximately 77% of these students return for their second year (Providence Public Schools, 2010, p. 25). Providence Public Schools has been collecting this data for the past ten years.

Mount Pleasant High School is one of four large comprehensive high schools in the Providence Public Schools. The school is currently under corrective action because of its continued low achievement as measured by the Rhode Island State assessment, the New England Common Assessments Program (NECAP). One of the indicators that is measured by the
NECAP is the school’s graduation rates. The graduation rate for Mount Pleasant High School for the 2006 academic year was 57.9% and the dropout rate for that same year was 29% (Providence Public Schools, 2010, p. 25). According to the National Student Clearinghouse in 2006, only 50% of the students who graduate from Mount Pleasant High School enrolled in college (Providence Public Schools, 2010 p. 25). And according to the same source, only 57% of these students return for their second year (Providence Public Schools, 2010). There has been a national effort to identify the school and non-school factors at the K-12 level that contribute to this growing problem of students not being prepared for college (Howard, 2003, p. 3). There have also been many, states, school districts, and schools that have tried different programs in an attempt to increase the college readiness in their students.

In 2006 Mount Pleasant High school had found that their students were unprepared for their college and career goals. Acknowledging this fact, the school welcomed the opportunity to work in collaboration with the Rhode Island Board of Governors for Higher Education and Rhode Island College to implement a new program with funding from the Nellie Mae Foundation called Pathways Through College with the explicit purpose of better preparing Mt. Pleasant students for college. The program was implemented in the 2007-2008, 2009-2010, and 2010-2011 school years at the high school. In short, the Rhode Island Pathways Through College initiative was a one year dual enrollment pilot project aimed at increasing the number of low-income and minority students that enroll and succeed in college (Hill, 2008). The goal of the program was to promote college readiness and increase aspirations by offering a program which included academic/educational, financial assistance, professional/career development, social/psychological and community support to high school seniors. Dr. Geier, Director of Early College Access programs through the Rhode Island office of higher education stated, “very few
of my kids had ever been on the Rhode Island College campus because they didn’t think they belonged or deserved to be there. Pathways Through College helps them believe they can go to college.”

The purpose of this study is to add to the body of research on college readiness by way of assessing the degree to which the Pathways through College program impacted the college readiness of the program’s participants and their persistence in college. The study was designed to answer the following two research questions:

3. To what extent did the Pathways Through College Program increase Mount Pleasant High School students’ college readiness (as measured by their comparative term-by-term GPA) and persistence in college?

4. How did participation in the Pathways Through College Program impact students’ interest, readiness, and efficacy to successfully meet the demands of college work and persist as perceived by administrators, guidance counselor and students who participated in the program?

Review of the Methodology

This study is a case study using a mixed methods approach. The data used in this study came from archived data provided by the Office of Institutional Research at RIC, the annual GPA’s and records of persistence as documented at Rhode Island College, interviews with program administrator and guidance counselor involved in the Pathways through College Program at Mount Pleasant, and, finally, participating students who enrolled at RIC themselves. All data was then coded for significant themes and analyzed.

This chapter will be broken down into the following sections: summary of findings, a discussion of the findings in relation to the theoretical framework, a discussion of the findings in
relation to the literature review, a conclusion, the significance of the study, limitations, and next steps.

**Summary of Findings**

According to the results of the quantitative portion of the study, there was a difference in the comparative term-by-term GPA of Pathways and Non Pathways students from Mount Pleasant High school that attended Rhode Island College during the 2008-2012 academic years. There was a statistically significant difference in term-by-term GPAs between Pathways and non-Pathways participating students for cohort 1 (enrolling at RIC in fall 2008) and cohort 2 (enrolling at RIC in fall 2009). However there was no statistically significant difference for cohort 3 students (enrolling at RIC in fall 2010). As for students’ persistence at RIC during the terms studied, there was no significant difference between the Pathways and non-Pathways participating students.

The findings from the qualitative portion of the study are compiled from the collaborative voices of the director of the program, program administrator, guidance counselor and participating students as they reflected on their participation in the Pathways Through College Program. The collection of data from these three participating groups provided a look into the perceived impact of the program on the college readiness of the students that participated in the program.

In sum, the interviews and focus groups indicated that the program had a positive impact on preparing the students that participated in the program for college. In addition, participants in the focus groups and interviews made the recommendation that the program should be expanded to include more students. For example, one student commented,” I think every school should have it because it kind of prepares you for the thrust of college.” The director of the program
added that Mt. Pleasant could have become the first early college high school because the infrastructure was in place. The administrator and the guidance counselor also recommended that the program be expanded to accept more students from Mt. Pleasant and other schools as well. The administration also discussed that it was a shame that the program did not continue due to money. They stated that the initial program did not cost the school or Rhode Island College any money and that it was fully funded by an outside organization. They stated that they would have liked to see more support from the district office for the program. They stated, “All that was needed was willingness, commitment and really belief in the program.” They said that this was a wonderful opportunity for students and, in conclusion, wished that the program could come back.

Discussion of Major Findings

In review of all the findings and emergent themes across all interviews and focus groups, five themes emerged as major findings through the data collection and analysis portion of the study. The themes can be seen in Table14.

Table14

*Major finding that emerged from the interviews and focus groups*

- The Pathways program improved students’ appreciation for the opportunity to experience the difference in college teaching and learning.
- The Pathways Program helped students understand college expectations for work.
- The Pathways program helped students developed the academic habits and behaviors that would help them succeed in college.
- The Pathways Program prepared students for the college culture.
- The Pathways Program gave more students access and opportunity to higher education.
The Pathways program improved students’ appreciation for the opportunity to experience the difference in college teaching and learning. It has been argued that students’ intellectual desire and appreciation for education is a cognitive strategy required for success in college. Cognitive strategies speak to students’ habits of mind, which generally includes the habits of intellectual behavior that lead to the development and improvement of cognitive strategies. These include: intellectual openness, inquisitiveness, interpretation, analysis, reasoning, problem formation, problem solving, and communication (Conley 2007). The students that participated in the Pathways Through College Program described how the program increased their intellectual openness and inquisitiveness. Conley (2007) describes intellectual openness as being when a student possesses curiosity and a thirst for deeper understanding. This type of thinking helps students to understand how knowledge is constructed and helps students deal with the novelty and ambiguity often encountered in the study of new subjects and new materials. During the focus groups and interviews participants described how the Pathways Program had helped to improve the cognitive strategies of the students that participated. One student stated, “the professors were genuinely excited about what they were teaching. That gets you excited about learning.” Another student stated, “On the college campus you get to have a one-on-one interaction with the professors. It’s a more professional environment where people are there to learn.”

Effective communication skills are also a cognitive strategy. Many of the students described having to take a public speaking class while being in the program. They described how this class helped them become better communicators in and within the college environment. One student stated, “Public speaking was a challenge for me because I was a shy person. That
class brought me out of my comfort zone and it made us all comfortable with speaking in front of each other in a college environment.”

Conley also identifies precision and accuracy as another useful cognitive strategy whereby a student knows exactly what type of precision is appropriate for a task and the subject area (Conley 2007). Students in the program described how the program helped them to understand the college standard. One student stated that in high school you could hand in whatever and get credit. She stated, “when a professors says they want the work a certain way you need to do it that way because that is what they expect.”

**The Pathways program helped students understand college expectations for work.**

The program director mentioned that many of the students in the program had many gaps in their core subject knowledge. She went on to state that it was not the programs explicit intent to address these core subject knowledge gaps but to expose students to the demands of college work so that they could see their own gaps in their college preparation prior to the program.

Reading is a critical skill for success in college. The students discussed having to read complete books for the first time as a result of the program. They also described how they had to balance the new college level reading demands with their regular school demands. They stated that this reading expectation helped them to make the transition when they got to college. Writing is the means that students are evaluated in almost every course at the postsecondary level. Some of these include: writing, research, evaluate source material, access information from a variety of locations and written argumentation. Students are expected to write a lot in college and in a relatively short space of time. When describing the impact of the program one student commented, “I think I would have been pretty screwed had I not done Pathways because it's like seeing the people I went to high school with come into college and kind of like complain about
having three-paged papers to do the next day. I would have freaked out so much about school that I would’ve had to drop out or something.” Another commented, “the program demanded more. It was way more intensive than a high school curriculum.” Another stated, “I never really started doing homework until I started Pathways because you were forced to do your work.”

The Pathways program helped students develop the academic habits and behaviors that would help them succeed in college. Academic Behaviors include the metacognition, mastery of skills, note taking, self-management skills: time management, study skills, goal setting, self-awareness, and persistence. The Pathways Program was designed to improve the academic behaviors of students. The program director stated that programs mission was to develop the “Yes I Can” attitude in students. The students developed this attitude by being exposed to the college environments and by professors having high expectations for them. The guidance counselor commented that he saw the Pathways students mature over time. He stated that the program helped students identify their own strengths and weaknesses both socially and academically as a result of the program. The students described the program as demystifying the college process. Many of them stated that when they had arrived on the college campus for the first time as true freshman they felt “ready”.

One student describes how the program prepared him, “Yeah. I guess I feel like the level that Pathways set, that was the level that I wanted from college and it’s like, okay, if I can do this, then I can do anything.” The students also spoke about how the program helped them to stay in college. They described other students that had graduated from their school but did not participate in the Pathways program as “struggling with the transition,” to college. Some of the students then described how many of their fellow high school graduates had dropped out of college as a result. One of the student participants stated that there are many students that don’t
even start college for one reason or another. He went on to say that there were others that started but took time off and never returned.

**The Pathways Program prepared students for the college culture.** The Pathways program gave students the contextual awareness to understand the college culture. Conley describes contextual awareness as a very broad category. Contextual skills and awareness factors encompass the privileged information necessary to understand how the college operates as a system and a culture. Students that do not understand or that don’t know how to navigate in the system often get frustrated and are unsuccessful in the system. Contextual Skills and awareness is sometimes called “college knowledge.” This theme includes sub categories such as: teamwork, communication with others, college options, college culture and expectations, admissions requirements and placements, testing, college types and missions, affording college, college culture, and relations with professors. The director of the program stated that she hoped that the students that participated in the program would develop self advocacy skills, confidence, and articulation. She stated that tasks were designed for students to develop and hone these important skills. The program administrator and guidance counselor involved in the program both stated that they saw a difference in the Pathways students and non pathways students. The stated that these students were more confident in their ability to do college work. They also stated that they saw a difference in how they approached high school as well. The students described how the program helped them to interact with professors, take advantage of resources, and taking ownership for their education. Here one student describes how the program helped him to develop as another described the “one-up” on other freshman students:

“To me, the transition would definitely have not been as smooth. To me, it would've been like, If you want to go to the pool, just jump right into the deep end. That's it, like
it's all for you. With Pathways, it was like we started from the other side and slowly went to the deep end and just prepared us.”

Both the program administrator and the director of the program discussed how they saw a difference in the students that participated in the program, because the program helped to demystify the college culture.

The Pathways Program gave more students access and opportunity to higher education. Both the program director and the administrator commented on the fact that the program gave more students access to college. The program director discussed that many of the dual enrollment programs in the state were accessed by white, upwardly mobile students and that many of the student from underrepresented populations did not have access to the opportunity. The Pathways program gave the opportunity to over 60 students from one of the lowest performing high schools in the state. The building administrator commented that students that attended college prior to the program, “they felt like they either weren’t prepared, they didn’t feel prepared to move on to college or they didn’t feel that they were college level material because they really didn’t feel like they were at that level to begin with.” He went on to say that students from the Pathways program were different. The guidance counselor commented, “These students were not like the timid senior. They were prepared. They knew they could handle anything.” The guidance counselor stated, “it was a very rewarding experience for me to participate in this because I got to see them go through the difficulties and then the successes.” They all commented that it was great to be a part of this program because of the opportunity it gave to the students.
Discussion of the Findings in Relation to the Theoretical Framework

The two theories used to inform the design, data collection, and analysis of data for this study were Bandura’s Social Learning Theory and Tinto’s Theory of Institutional departure. Each of these theories served as a lens to investigate the impact on the students that participated in the Pathways program.

Bandura’s social learning theory. Bandura (2006) states as outlined in Chapter 2, “Most human behavior is learned observationally through modeling: from observing others, one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action” (p.1). Social Learning Theory states that people learn from each other resulting in a change in behavior. The interaction can be the result of observation, imitation, and modeling. Bandura also suggested that the environment plays a role in reinforcing modeling of behavior. He suggested four ways that this may happen. First the observer is reinforced by the model. For example a student who studies more to fit into a certain group of students will be accepted by the group and thus reinforced by the group. During the focus groups students commented that the Pathways program provided an inspirational atmosphere. One student commented, “I see my fellow classmates doing well and working hard it makes me want to work hard because I did not want to be left behind.”

Second the observer is reinforced by a third person. For example a student may be modeling the behavior of an outstanding student in the class or school. A teacher may observe the student displaying this behavior. The teacher may compliment the students for their behavior, thus reinforcing that behavior. During the interviews the program director talked to the students about commitment to the program, doing homework and would praise those students that followed through. Those who could not commit would be counseled out of the program.
Third, the behavior imitated can lead to reinforcing consequences. For example a student may observe another student requesting more challenging problems in a math class. The student may observe how the student who made the request enjoys working on the more challenging problems. The student requests more challenging problems as well and experiences the same enjoyment and satisfaction. During the focus groups students described having to interview students on campus about the student’s college journey. They asked questions about what things would they do differently. One student stated that during those interviews he was encouraged to take more difficult classes while in high school. The guidance counselor also commented that he saw a desire to engage in more rigorous course work increase in the Pathways students. Students also spoke about seeing students in the library regularly which in turn they knew they needed to do if they were going to be successful at the college level. Finally, consequences of the observed behavior affect the observer’s behavior vicariously. For example in a school students are rewarded for showing a particular behavior. When other students witness the behavior and the reward for the behavior they themselves begin to show the behavior (Abbot 2011). The Pathways program gave students the opportunity to be on a college campus to see how college students behave and interact in the college setting. All participants in the study mentioned that because these Pathways students were in a professional environment and they saw other students that were serious about learning their behavior had been impacted. These students saw what it was going to take to be successful and adjusted their behavior to meet the new expectation.

Tinto’s theory of institutional departure. Tinto's (1987) model of institutional departure is based on academic and social integration. The theory states that the greater the amount of integration into the college environment, the greater the probability of retention in the
Participants in the focus groups and interviews agreed that the program increased the college readiness of students. And the comparative results of Pathway and non-Pathway participating students could be argued to evidence this, at least for cohorts 1 and 2, and as particular evidenced by their significantly greater GPA the first 2 terms in college. Students stated that they were more accustomed to the college environment because of the program. And students commented that they were better able to make the transition from high school to college because, as one student said, “it was like we already had our freshman year.”

Tinto states that students depart from college for three reasons: academic difficulties, inability of individuals to resolve their occupational or educational goals, the inability of the individual to become or remain incorporated in the intellectual and social life of the institution (Tinto, 1993). Tinto’s model of Institutional departure is based on Van Gennep’s anthropological “Rites of Passage” model. In this model Van Gennep states that when a person is moving from one community to another there are three phases: separation, transition, and incorporation. In Tinto’s model in order for student to persist, students must separate from the group with which he or she were formerly associated, such as family members and high school peers, go through a period of transition “during which the person begins to interact in new ways with the members of the new group into which membership is sought and then adopt the values and behavior of the new group which in this case would be college” (Tinto 1993, p.93). During the focus group one of the students spoke about having to leave old friends from high school who appeared to be jealous that he was in the Pathways program. Another commented about having to reject feeling of rejection because they were no longer about of the “crowd” because they needed to spend more time studying because of the program. Another spoke about having to say no to some people that wanted to party when the Pathways student knew that it was time to
The Pathways students commented on the students from their high school that were not able to make the transition to college because they had the same “high school mindset”. They stated that they were more concerned about what they had on and their “swag” than getting their work done.

Tinto’s 1987 updated theory included a longitudinal model of persistence that takes into account extra and intra campus variables. In order, for students to continue to persist they need integration from a variety of different sources either internal and external campus variables: academic performance, faculty, and student interactions, extracurricular activities and peer-group interaction. These variables also contribute to the ability of the student to integrate both academically and socially on the college campus. During the interviews, students spoke about taking advantage of their resources. One student in particular who was a graphics design major mention that he stepped out of his comfort zone and applied to become the head of the school news paper during his second year. He stated that he got the position and it has been an incredible experience. He said that he would not have had the confidence to do that if it had not been for the Pathways program. The program director kept encouraging students to take advantage of their resources and to take ownership for their education. She encouraged students that were struggling in math to take advantage of the professor’s office hours. The guidance counselor also commented on the fact that students had access and utilized the study skills center.

Tinto proposes that the academic and social integration are complimentary but independent processes. Academic integration represents a student’s ability to comply with the academic expectations to achieve passing grades. It is also the ability of the student to adjust to academic norms of the institution. For example the school of mathematics values math over
music. Social integration represents the student’s ability to adjust to the social environment of the institution. For example a student must find the social environment of the school acceptable to his or her own personal preferences. The ability of the student to do this is heavily influenced by the student’s background, ambitions, and values. (Kuh, G., Kinzie, J., Buckley, J., Bridges, B., Hayek, H., (2006), p11). Tinto proposed that with an increase in academic and social integration the student will have a greater commitment towards the goal of graduation (Bean 1983). One student commented that he was the first to enter college in his entire family. He stated that he could not rely on his parents to help him make the transition. He stated that he credits Pathways for the opportunity to learn about the college environment. The program administrator stated that programs like these are essential for giving students these types of opportunities to demystify the college culture because many of them are first generation high school graduates and college students.

According to Tinto each student enters college with a variety of experiences. These experiences range from family and community backgrounds, and personal attributes such as sex, race, and ethnicity. Students also enter with varying academic experiences that have influenced a student’s motivation toward an intellectual goal. These experiences have also influence students’ self images and aspirations toward an intellectual goal. The program director, program administrator, guidance counselor, and students all commented that the Pathways Through College Program exposed students to college level work and the college environment. The program was designed in this way so that students could see what behaviors are necessary for success in the college environment. The program was also designed in this way so that once students arrived on the college campus as college students they would be able to ingrate and be successful.
Many dual enrollment programs, like Pathways, have gained the interest of many educational researchers and educators as possible solution to the problem of college readiness. Dual Enrolment programs are opportunities for high school students to earn college credit while still enrolled in high school. Dual enrolment programs, improves the probability that a student will continue to pursue and persist to graduation from a post secondary institution for a number of reasons. First, students who participate in dual enrolment programs will enter their first year of school in advanced standing. Second, these students are exposed to more rigorous academic content that would have prepared them for future college level work (Swanson, 2007). Third, dual enrolment programs also help to reduce the college financial cost placed on students and their families. Fourth, participating students are exposed to the academic behaviors that are necessary for college success.

**Discussion of the Findings in Relation to the Literature**

This section presents the findings of this study as they relate to the literature review presented earlier. The literature focused on five main themes to inform this study:

1. The goal of career and college readiness research
2. The predictors for college readiness
3. Issue of college readiness and college persistence for low income and minority students.
4. Essential components of college readiness programs that have been successful in the area of college readiness.
5. The promise of dual enrolment programs.

Connections between the findings of this study to each of these five areas are reviewed below.

**Goal of college and career readiness research.** According to Conley (2006), there are three main goals to College and Career Readiness research. The first goal of college readiness
research is to determine what it takes to succeed in entry-level college courses. Students considered “at risk” are those who’s probability to withdraw from college is above average due to a combination of causes in school and beyond (Martin 1999). As stated earlier all of the graduates from Mount Pleasant High School were considered “at risk” based on this definition. The graduation rate for Mount Pleasant High School for the 2006 academic year was 57.9% and the dropout rate for that same year was 29% (Providence Public Schools, 2010, p. 25).

According to the National Student Clearinghouse in 2006, only 50% of the students who graduate from Mount Pleasant High School enrolled in college (Providence Public Schools, 2010 p. 25). And according to the same source, only 57% of these students return for their second year (Providence Public Schools, 2010).

The Pathways Through College Program identified the components needed for at risk and underrepresented students to be successful in college. The Pathways program gave students their first experience with college level material. Many of the students struggled with the college level work during the program. All of the participants in the study spoke about the students having various gaps in reference to their overall college readiness. The Program was designed to expose students to the world of college and then give them the support needed to thrive in this new environment. The Pathways program gave students what they needed to be successful in their entry level college courses. The students in the first two cohorts out performed non-Pathways students during their first year of college. The findings from this suggest that dual enrollment programs have the potential to increase the college readiness in students.

**Predictors of college readiness.** George D. Kuh states, success in college is strongly related to precollege academic preparation and achievement as well as family income and parent education. The High School Survey of Student Engagement (HSSSE) had been created in an
attempt to uncover some of issues relating to student engagement in high school. The High School Survey of Student Engagement suggests that there are four predictors of college readiness; study habits, reading, writing, and mathematics (HSSSE Report, 2005). The findings from this study confirm these two ideas. Participants from the focus groups and interview identified that the Pathways Through College Program improved the students’ skills in writing, reading, academic behaviors, and self advocacy. The students from the program emphasized that the level of expectation and demand that was placed on them by the college and the college professors helped them to make the transition. The students made it a point to stress that the level of expectation from their large urban high school was extremely lower than that of the college professors. Many of them during the interview made statements that they would not have been able to make the transition if they had not been prepared by the program. Participants in the study mentioned that student had to develop study habits because of the increased work load. These study habits helped students make the transition. According to the director Pathways students indicated that their homework and study time had increased as result of being in the program.

**Issues of college readiness for low income minority students.** The literature is clear that who students are and where they attend prior to entering a post secondary institution makes a difference in their chances of graduating from a post secondary institution. Unfortunately, the gap continues to grow between Whites and Blacks and Whites and Latinos in terms of being college ready (Braswell et al. 2001). Students who were exposed to rigorous curriculum in high school were more likely to do well in college and less likely to enroll in remedial courses in college (Kuh, Kinzie, Buckley, Bridges, & Hayek 2006).
Mount Pleasant High School had approximately 1,200 students, and continued to be comprised of a largely minority population, with 78% of the students living below the poverty line (Providence Public Schools, 2010, p.9). Of the 1,200 students, 58% were Hispanic, 27% were African American, 9% were Caucasian, 6% were Asian, and 1% were Native American (Providence Public Schools, 2010, p.9). Mount Pleasant High school is under corrective action because of its continued low achievement as measured by the Rhode Island State assessment, the New England Common Assessments Program (NECAP).

Many low income minority students are the first generation to graduate high school and even consider college. Due to the lack of preparation in high school many of them get to college with high hopes and dreams only to have them shattered not because intellectually they could not do the work but because of their poor academic preparation. During the focus groups students stated that it was customary in their high school to pass in anything with your name on it and you could get credit. There were students in the program that had A’s in pre-calculus in high school that tested into remedial math when they got to college. The participants in this study noted that many of their peers that had graduated the same year form their same school that attended Rhode Island College struggled during their freshman year. The participants stated that it was due to them not being prepared for college. For example participants in the study noted that they were asked to write a paper longer than five pages for the first time during the program. They were also asked to read entire books for different courses at the same time. They had to think about managing their time. These are part of the formula for being college ready. The results of this study show that dual enrollment program such as Pathways can help minority youth overcome the poor academic preparation that they may have been exposed to from their inner city high
school. As mentioned earlier Cohorts 1 and 2 outperformed the Non-Pathways students during their first year by over ½ a letter grade.

**Issues of college persistence for low income minority students.** The literature states that a student’s ability to persist through college is also impacted by the student’s educational aspirations and family support. However, in the minority and low income community the issue of persistence is impacted by a number of other factors. African American and Hispanic Students are less likely to persist to graduation that White and Asian students (U. S. Department of Education 1997). According to Choy and Chen, first generation students are less likely to graduate because they earn less credit their first year. This is due to the fact that they have to enroll in more remedial classes are more likely to repeat courses and are less likely to choose a major their first year (Choy 2005; Chen 2005). The participants in this study mentioned that as the years progressed they noticed that many of the students that they had graduated with did not return the following year. Many of them remarked that they could not keep up with the work and continue. The Pathways students mentioned that the program exposed them to the college environment thus preparing them for what to expect. And they stated that the lessons learned in the program prepared them throughout their college academic careers. For example one student mentioned that the program exposed him to the new reading demand in college. Another student stated that without the program he would have been at a major disadvantage. One student mentioned that as he was sitting in a class with another freshman who had come from a more affluent community, “I felt just as good as him because of Pathways.”

The literature also points out that a student’s ability to persist through college is also impacted by the student’s educational aspirations and family support. Participants in this study mentioned that the program gave them the “I can to this attitude.” They viewed themselves as
The students affirmed that because they were successful in the program they knew that they could now handle the college environment. The students stated that the program was a great resource for him because no one in his family at the time had gone to college. He said that he could not ask them any questions. But he could ask questions of the people that he met in the program for example professors, counselors etc.

**College readiness programs and the promise of dual enrolment programs.** Conley (2007) suggests that the operational definition of college readiness be about the level of preparation – without remediation – to engage in a credit-bearing general education course at a postsecondary institution offering a baccalaureate degree or opportunity to transfer into a baccalaureate program. “Students that posses mastery of key cognitive strategies, key content knowledge, academic behaviors, and contextual knowledge would be defined as being college ready” (Epic, p. 18 2007).

Dual Enrolment programs are opportunities for high school students to earn college credit while still enrolled in high school. Swanson concludes in his research that dual enrollment programs improves the probability that a student will continue to pursue and persist to graduation from a post secondary institution for a number of reasons:

1. Students will enter their first year of school in advanced standing.
2. Students would be exposed to rigorous academic content that would have prepared them for future college level work.
3. Dual enrollment programs also help to reduce the college financial cost placed on students and their families.

The goal of the Pathways Through College dual enrollment program was to promote college readiness and to increase the college aspirations among underrepresented students in higher
education. The secondary goal was to test the program out and refine the strategies that were implemented. The findings of this study suggest that The Pathways Dual Enrollment program improved college readiness as measured by their GPA. The findings also confirm that this program exposed students to college work which in turn prepared them to make the transition to college.

**Limitations**

The greatest limitations of this study were the small number of participants. The total number of participants in the program was sixty eight (n=68). However only seven former Pathway students were able to participate in focus groups (n=7). The small sample utilized for this study dramatically limits the results in being generalized or transferred to other populations and contexts. As only seven students contributed during the focus group data collection period, these discussions can only help to explain and understand their specific experience as related to their college readiness. Without a larger sample, it is not possible to reliably link the students’ feedback or experiences to the social learning and institutional departure themes identified. Another limitation to the study is that the study is limited to one urban high school. This will limit the external validity of the results as well. More data is needed in order to better understand whether these results were unique to these participants’ backgrounds, attitudes, and beliefs.

Future research is needed in order to better understand the importance of the Pathways Through College Program and its impact on college readiness for the students at Mount Pleasant High school. Future studies would also provide practitioners with a better understandings about how to design college readiness interventions for students especially those in urban centers.
Finally, additional qualitative and quantitative data such as surveys would strengthen the data collection when determining the impact of the Program to improve college readiness.

Significance of the Study to the Field

In considering the significance of these findings and applying them to the problem of practice, it appears that the Pathways Through College Program has the potential to at least partially address the lack of college readiness in minority students. There are districts that are struggling to prepare students for today’s demands. There are students who get to college and are not prepared for the rigors of college. As a result many students lacking appropriate preparation for college are forced to take remedial courses in order to successfully meet the expectations of college work. Many of these students use their financial aid on remedial courses and then do not have enough to aid to pay for their senior year. Program like the Pathways Through College Program could be beneficial to superintendents, school officials and policy makers in supporting students’ college readiness, as measured by their persistence in college. The Pathways Through College program focused on low-income and underserved students which represent many of the students in our urban centers. As the research suggests there is a disconnect between what schools are focusing on and what students actually need in college. School officials must have a way to identify and evaluate the college readiness of their strategic plans. The Pathways Program could be a model to help answer the questions of lack in college readiness that could be funded with Race to the Top dollars.

Next Steps

With the lack of resources and the very challenging dynamic in our urban high schools, dual enrollment programming presents a tremendous opportunity to get students college ready. The participants in the interview offered suggestions based on their own experiences. The
Director of the program emphatically stated that the program should have never stopped. She stated that in her opinion the program should have been reformulated so that the program could be taken to scale district wide. And the per pupil allocation for each student should follow the students in order to pay for their college costs. She also suggested that students should be enrolled in the program while remaining on the sending schools roster so that the student could still participate in high school extracurricular activities.

The school administration suggested that there be more alignment between the high school and college courses. They acknowledged that the program was beneficial to students. However they did mention having difficulty giving high school credit for some of the college courses based on the fact that it was difficult to show the alignment between the two.

The students overwhelmingly agreed that the program should be resurrected and expanded. They specifically suggested that the program be expanded to the lower performing large comprehensive high schools first. Here one of the students gives her suggestion for the next step in the program:

I feel like, the Pathways program was one thing that opens your eyes to how education really is and the role that it plays in your life because I don’t know where I'll be if I wasn't in school right now. I even don’t know what I'll be doing right now. I think the program should be expanded because not just a small group of people should be found. Others should have this opportunity.

The students also suggested that the program should be an entire year that starts the summer prior to their senior year and progresses through the summer after graduation. They stated that the more time in the program the better prepared students would be for the demands of college.
Conclusion

By reviewing and analyzing the data collected from the Office of Institutional Research at Rhode Island College and from both individual and focus group interviews, this study investigated the degree to which the Pathways Through College Program had an impact on the college readiness of participating students. In fact, all of the participants in interviews and focus groups stated that participating in the Pathways Through College Program had a positive impact on the participating students’ college readiness. In addition, a comparison of the Pathway participating and non-Pathway students’ GPA suggests that the program did in fact make a significant difference, at least for the first 2 cohorts of students enrolling at RIC in the program. Unfortunately, similarly, retention in college over time did not indicate a difference.

This study also documented suggestions that could strengthen the impact of dual enrollment programs. For example, it was reported that students believe that expanding the program to more high schools and lengthening the program to an entire year would serve two purposes. First more students would have an opportunity to take advantage of the tremendous opportunity. Second more students would have more time to develop critical skills needed for success in college.

A program such as this could be taken to scale within the Providence Public School Department, if not other urban settings serving low-income and minority youth. As voiced by the students, program administrator, guidance counselor, and program director; Everyone should have the access and the opportunity to the Pathways Program so that they can make the very best of their college experience after graduating from high school.
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Appendix A
Permission Letter Superintendent of Schools

July 5, 2012

Dear Dr. Susan Lusi,

As you know I am currently enrolled in a doctoral program at Northeastern University and am in the process of completing the dissertation stage of the program. My research is focused on the college readiness. The project title is: The Case Study of a Dual Enrollment Intervention in an Urban Comprehensive High School. The practical goal of this study is to identify the degree to which dual enrollment programs can be beneficial to superintendents, school officials and policy makers in supporting specifically urban minority students’ college readiness, as measured by their persistence in college.

The study is designed to use a mixed methods approach and requires that I conduct focus groups and interviews to gather qualitative data from some of the administrators and teachers that participated in the Pathways Through College program conducted at Mount Pleasant High School during the 2007 – 2010 school years. Therefore, I am requesting permission to elicit the participation of these administrators and teachers from Mount Pleasant High school.

This program evaluation study will allow me to investigate whether the Pathways Through College Program met its intended outcomes of increasing college readiness and college persistence in students at Mount Pleasant High School. I plan on analyzing persistence and GPA data obtained from Rhode Island College Center for Institutional Research, as well as conducting interviews and focus groups of participants. I also plan to analyze secondary data collected by the program directors that implemented the program initially.

I believe this program evaluation study will only serve to benefit the Providence Public Schools as it should indicate both strengths and weaknesses of the Pathways Through College Program allowing for further refinement of the program.

If you have any questions regarding this study, please contact me directly at (401) 580-2654 or via e-mail at moseley.r@husky.neu.edu or the chairperson of my committee, Dr. Chris Unger at Northeastern University, (857) 272-8941. Thank you in advance for your time. I look forward to hearing from you regarding this request for permission.

Sincerely,
Rudolph Moseley, Jr.
Doctoral Candidate, College of Professional Studies
Northeastern University, Boston
K-12 Supervisor of Science
Providence Public Schools
Appendix B

Letter Requesting Data from Rhode Island College

July 5, 2012

Dear Jennifer Ellis

As you know I am currently enrolled in a doctoral program at Northeastern University and am in the process of completing the dissertation stage of the program. My research is focused on the college readiness. The project title is: The Case Study of a Dual Enrollment Intervention in an Urban Comprehensive High School. The practical goal of this study is to identify the degree to which dual enrollment programs can be beneficial to superintendents, school officials and policy makers in supporting specifically urban minority students’ college readiness, as measured by their persistence in college.

The study is designed to use a mixed methods approach and requires that I collect secondary data on students that participated in the Pathways Through College program conducted at Mount Pleasant High School that attended Rhode Island College. Therefore, I am requesting data on the students from Mount Pleasant High School that attended Rhode Island College during the 2007-2010 school years. I am requesting GPA, and college standing after subsequent years. I am also requesting data on students that may currently not be attending the college. For this data set please list if students have graduated, transferred (to what school), or dropped out completely.

This program evaluation study will allow me to investigate whether the Pathways Through College Program met its intended outcomes of increasing college readiness and college persistence in students at Mount Pleasant High School. I also will be conducting interviews and focus groups of participants. I also plan to analyze secondary data collected by the program directors that implemented the program initially.

If you have any questions regarding this study, please contact me directly at (401) 580-2654 or via e-mail at moseley.r@husky.neu.edu or the chairperson of my committee, Dr. Chris Unger at Northeastern University, (857) 272-8941. Thank you in advance for your time. I look forward to hearing from you regarding this request for permission.

Sincerely,

Rudolph Moseley, Jr.
Doctoral Candidate, College of Professional Studies
Northeastern University, Boston
K-12 Supervisor of Science
Providence Public Schools
Appendix C  
Initial Participant Recruitment Letter – e-mail

July 5, 2012

Dear Colleagues,

As you know I am currently enrolled in a doctoral program at Northeastern University and am in the process of completing the dissertation stage of the program. This proposal has been reviewed by the Northeastern Board of Institutional Research (IRB #12-08-38). My research is focused on the college readiness. The project title is: The Case Study of a Dual Enrollment Intervention in an Urban Comprehensive High School. The practical goal of this study is to identify the degree to which dual enrollment programs can be beneficial to superintendents, school officials and policy makers in supporting specifically urban minority students’ college readiness, as measured by their persistence in college.

I am currently looking for teachers and administrators that participated in the Pathways Through College Program that was implemented at Mount Pleasant High School during the 2007-2010 academic years. The purpose of the evaluation is to investigate to what extent did the Pathways Through College Program increase Mount Pleasant High School Students’ college readiness in students as measured by their persistence in college and annual GPA. The evaluation will also investigate how participation in the Pathways Through College Program impact students’ interest, readiness, and efficacy to successfully meet the demands in college work and persist as perceived by administrators, teachers and students in the program.

By participating, you would aid improving dual enrollment programming. Participating in this study would entail participating in an interview and/or focus group.

At this time, I am simply looking for an initial interest response from students, administrators and teachers that participated in the Pathways Through College Program. Please be aware that agreeing or not agreeing to participate in this study will have no reflection on your work within the district as a teacher or administrator whatsoever. Also, any participation in the study will be completely confidential; names and other personal information will not be used.

Please respond via e-mail to moseley.r@husky.neu.edu if you are interested or have any questions. Thank you in advance for your time.

~Rudolph Moseley Jr.
Appendix D

July 5, 2012
First –E-mail
Dear Student,

I am a former Administrator from Mount Pleasant High School but am currently enrolled in a doctoral program at Northeastern University and am in the process of completing the dissertation stage of the program. My research is focused on the college readiness. The project title is: The Case Study of a Dual Enrollment Intervention in an Urban Comprehensive High School. The practical goal of this study is to identify the degree to which dual enrollment programs can be beneficial to superintendents, school officials and policy makers in supporting specifically urban minority students’ college readiness, as measured by their persistence in college. I got your e-mail address from the Office of Institutional Research at Rhode Island College.

I am currently looking for students that participated in the Pathways Through College Program that was implemented at Mount Pleasant High School during the 2007-2010 academic years. The purpose of the evaluation is to investigate to what extent did the Pathways Through College Program increase Mount Pleasant High School Students’ college readiness in students as measured by their persistence in college and annual GPA. The evaluation will also investigate how participation in the Pathways Through College Program impact students’ interest, readiness, and efficacy to successfully meet the demands in college work and persist as perceived by administrators, teachers and students in the program.

By participating, you would aid improving dual enrollment programming. Participating in this study would entail participating in an audio recorded, interview and/or focus group. You must be 18 years old to participate in the 60-90 minute focus group interview.

At this time, I am simply looking for an initial interest response from students, that participated in the Pathways Through College Program. Also, any participation in the study will be completely confidential; names and other personal information will not be used.

Please respond via e-mail to moseley.r@husky.neu.edu email if you are interested or have any questions. Thank you in advance for your time.

~Rudolph Moseley Jr.
Doctoral Candidate, College of Professional Studies
Northeastern University, Boston
K-12 Supervisor of Science
Providence Public Schools
Appendix E

July 5, 2012
Second –E-mail
Dear Student,

This is my first follow up e-mail. I am a former Administrator from Mount Pleasant High School but am currently enrolled in a doctoral program at Northeastern University and am in the process of completing the dissertation stage of the program. My research is focused on the college readiness. The project title is: The Case Study of a Dual Enrollment Intervention in an Urban Comprehensive High School. The practical goal of this study is to identify the degree to which dual enrollment programs can be beneficial to superintendents, school officials and policy makers in supporting specifically urban minority students’ college readiness, as measured by their persistence in college. I got your e-mail address from the Office of Institutional Research at Rhode Island College.

I am currently looking for students that participated in the Pathways Through College Program that was implemented at Mount Pleasant High School during the 2007-2010 academic years. The purpose of the evaluation is to investigate to what extent did the Pathways Through College Program increase Mount Pleasant High School Students’ college readiness in students as measured by their persistence in college and annual GPA. The evaluation will also investigate how participation in the Pathways Through College Program impact students’ interest, readiness, and efficacy to successfully meet the demands in college work and persist as perceived by administrators, teachers and students in the program.

By participating, you would aid improving dual enrollment programming. Participating in this study would entail participating in an audio recorded, interview and/or focus group. You must be 18 years old to participate in the 60-90 minute focus group interview.

At this time, I am simply looking for an initial interest response from students, that participated in the Pathways Through College Program. Also, any participation in the study will be completely confidential; names and other personal information will not be used.

Please respond via e-mail to moseley.r@husky.neu.edu email if you are interested or have any questions. Thank you in advance for your time.

Rudolph Moseley Jr.
Doctoral Candidate, College of Professional Studies
Northeastern University, Boston
K-12 Supervisor of Science
Providence Public Schools
Appendix F

July 5, 2012
Final –E-mail
Dear Student,

This is a final reminder: I am a former Administrator from Mount Pleasant High School but am currently enrolled in a doctoral program at Northeastern University and am in the process of completing the dissertation stage of the program. My research is focused on the college readiness. The project title is: The Case Study of a Dual Enrollment Intervention in an Urban Comprehensive High School. The practical goal of this study is to identify the degree to which dual enrollment programs can be beneficial to superintendents, school officials and policy makers in supporting specifically urban minority students’ college readiness, as measured by their persistence in college. I got your e-mail address from the Office of Institutional Research at Rhode Island College.

I am currently looking for students that participated in the Pathways Through College Program that was implemented at Mount Pleasant High School during the 2007-2010 academic years. The purpose of the evaluation is to investigate to what extent did the Pathways Through College Program increase Mount Pleasant High School Students’ college readiness in students as measured by their persistence in college and annual GPA. The evaluation will also investigate how participation in the Pathways Through College Program impact students’ interest, readiness, and efficacy to successfully meet the demands in college work and persist as perceived by administrators, teachers and students in the program.

By participating, you would aid improving dual enrollment programming. Participating in this study would entail participating in an audio recorded, interview and/or focus group. You must be 18 years old to participate in the 60-90 minute focus group interview.

At this time, I am simply looking for an initial interest response from students, that participated in the Pathways Through College Program. Also, any participation in the study will be completely confidential; names and other personal information will not be used.

Please respond via e-mail to moseley.r@husky.neu.edu email if you are interested or have any questions. Thank you in advance for your time.

~Rudolph Moseley Jr.
Doctoral Candidate, College of Professional Studies
Northeastern University, Boston
K-12 Supervisor of Science
Providence Public Schools
Appendix G

Informed Consent Document

Northeastern University, College of Professional Studies
Investigator Name: Rudolph Moseley Jr.
Title of Project: The Case Study of a Dual Enrollment Intervention in an Urban Comprehensive High School.

Informed Consent to Participate in a Research Study

Why am I being asked to take part in this research study? You have been asked to participate because you were a student, teacher or administrator who participated in the High School’s Pathways Through College program during the 2007-2010 academic years. You must be at least 18 years old to be in this research project.

Why is this research study being done? The purpose of this study is to determine if the Pathways Through College program achieved its goal of increasing students’ college readiness.

What will I be asked to do? The researcher will be looking for you to participate in either a one-on-one interview or focus group session that will be audio taped for transcription and analysis purposes only.

Where will this take place and how much time will it take? The interview or focus group session will last approximately one to two hours, and will take place at a school in the district or at Rhode Island College, whichever is most convenient for those participating, and at a convenient time for those participating.

Will there be any risk or discomfort to me? There are no foreseeable risks or discomforts to you for taking part in this study.

Will I benefit by being in this research? There are no direct benefits to you for participating in this study. However, your answers may help the researcher learn more about the impact of a high school college readiness program and ways to refine these programs in the future.

Who will see the information about me? Your part in the study will be handled in a confidential manner. Any reports or publications based on this research will use only group data and will not identify you, the school or any individual in any way. All audio-recordings will be destroyed following transcription and analysis.

Can I stop my participation in this study? Participation in this study is voluntary. You do not have to participate if you do not want to and you can refuse to answer any question. Even if you begin the study, you may quit at any time if you do not want to continue. Your participation or non-participation will not in any way affect other relationships (e.g., employer, school, etc.).
You may discontinue your participation in this research program at any time without penalty or costs of any nature, character, or kind.

**Who can I contact if I have questions or problems?** If you have any question or problem, please contact the student researcher, Rudolph Moseley at 401-580-2654 or moseley.r@husky.neu.edu. You can also contact the principle investigator overseeing the research, Dr. Christopher Unger at 617-373-2400 or c.unger@neu.edu.

**Who can I contact about my rights as a participant?** If you have any questions about your rights as a participant, you may contact Nan C. Regina, Director, Human Subject Research Protection, 960 Renaissance Park, Northeastern University, Boston, MA 02115. Tel: 617.373.4588, Email: irb@neu.edu. You may call anonymously if you wish.

**Will I be paid for my participation?** There is no compensation for participation in this study.

**Will it cost me anything to participate?** There is no cost to participate in this study.

You may keep this form for yourself. Thank you.
Appendix H

Focus Group Questions – Students

Interview Questions.

1. What it was like to be in the program?
   a. How did it help you?
   b. Can you give me an example?
2. How do you think the program better prepared you for college?
   a. Can you give me an example?
3. Do you think the program helped you to STAY in college?
   a. How?
   b. Please explain and offer specific examples.
4. What do you think would have happened to you if you did not participate in the program?
   a. Please explain and offer specific examples.
5. How do you see this experience as having benefited you in contrast to what you are seeing with some of your peers in the college?
   a. Please explain and offer specific examples.
6. Based on your experience, what recommendation would you have for school departments and colleges about the Pathways Program?
   a. Please explain and offer specific examples.
Focus Group and Interview Questions- Teachers Administrators and Director

**Interview Questions**

1. What motivated you to begin or participate in the program?

2. What were the criteria for selecting student to participate in the program?

3. How do you think the program better prepared students for college?
   a. Please explain and offer specific examples.

4. Do you think the program helped students to STAY in college?
   a. How?
   b. Please explain and offer specific examples.

5. Based on what you know of the students what do you think would have been the outcome had they not participated in the program?
   a. Please explain and offer specific examples.

6. Based on your experience what recommendation would you have for school departments and colleges about the Pathways Program?