

Caminos: Pre-College Access and Leadership Program  
Texas State University –San Marcos

Final Report 2010

## Executive Summary 2010

The Caminos Pre-College Access and Leadership Program is a summer academic institute designed to provide at-risk eighth grade students, Goodnight and Miller Middle Schools, with the opportunity to enhance their leadership skills, academic capacity, and earn high school credits in English, Algebra, and Technology. The students are stratified into three learning communities and receive instruction in two-hour blocks supplemented with tutoring. In addition, students receive two hours of daily leadership instruction, participated in educational field trips, and complete community service projects.

The academic results indicate that 45% of the students earned credits in Algebra, 58% earned credits in English, and 91% earned credits in Technology. In addition, 20% of the students who earned a “C” in Algebra are eligible for dual enrollment in Algebra and Geometry their freshman year. Of the 73 students that began the six-week program, 66 students (90%) completed the program. Participants, which completed the program, applied to a college on-line and inquired about financial aid and scholarships.

### Caminos: Pre-College Access and Leadership Program

In the United States alone, over 25% of the potential high school graduates drop out every year before graduating, where in some major cities the rate is up to 35% (IDRA, 2005). According to the research association, in the 2008-2009 school year Hispanics in Hays County had a 39% attrition rate. Researchers also predict that by the year 2020, approximately 25% of all students, in the United States, will be living in conditions of poverty and approximately 50% of students will be of racial and/or ethnic minority backgrounds (Demaray & Malecki, 2002). Unfortunately, graduation outcomes for minority students are often worse than for non-minority students. For example, the National Center for Education Statistics (2007), reported that, 5.3% of White non-Hispanic students, 8.4% of African American students, and 21.4% of Hispanic students, dropped out of school. School dropout rates continue to be a challenge for all Texas public schools.

Statistics such as these have created widespread concern about students who are at risk of either not graduating from school or of graduating without the necessary academic, social, and emotional skill to function as productive citizens and workers (Donmoyer & Kos, 1993).

Furthermore, there is great concern within the Hispanic community. The number of Hispanic students is rapidly increasing in U.S. schools. Data from the U.S Census (2000) indicates that the Hispanic population has increased by 57.9% since 1990 and is a significantly younger population. It is predicted that the Hispanic population, as a group, will be characterized by a constant process of socio-cultural change as new immigrants

and their children, and multi-generational U.S born Hispanics and their children, continue adapting to life in the United States as well as the U.S. education system. The rapid growth rates and age of the Hispanic community alone, underscores the need to have a better understanding of their adjustment process within the U.S educational system. Most school districts will agree a major problem lies with students not having the necessary knowledge for success and school districts are now raising the bar of expectations. Educators are finding with low expectations students are not successful, but with extensive support and high expectations, students excel.

### *Characteristics*

For all seven program years starting in 2004 through 2010 participants were recruited through two central Texas junior high schools. School counselors and teachers recommended students for the program based on meeting the at-risk criteria, socioeconomic status, and their enrollment in Algebra Readiness.

Identification of the at risk students for Caminos was determined by Texas Education Agency's coding system. Their home campuses first identified students and descriptive codes were used to identify the reasons for at risk status. Nine indicator codes were used for the 2010 cohort. Six percent of the students were code 2 meaning they did not maintain an average equivalent to 70 on a scale of 100 in two or more subjects in the foundation curriculum during a semester in the preceding or current school year and were not maintaining such an average in the current semester. Eleven percent of the students were labeled code 3, which states students did not advanced from one grade level to the next for one or more school years. Forty-one percent of students were coded 4 which is described as one who did not perform satisfactorily on an assessment instrument

administered to the student under TEC Subchapter B, Chapter 39 and who has not in the previous year or current school year subsequently performed on that instrument or another appropriate instrument at a level equal to at least 110 percent. Code 6 is defined as a student that has been placed in an alternative education program in accordance with TEC 37.006 during the preceding or current school year, of which six students, at nine percent, were identified. Six percent were coded 8 described as currently on parole, probation, deferral prosecution, or other conditional release. Code 10 is defined as a student of limited English proficiency, as define by TEC sec. 29.052, of which eight percent were identified. There were also eleven percent of students coded 11 as defined in the custody, care, or referral to the Department of Protective and Regulatory Services. Six percent of students also coded 13 as defined by having resided in the preceding school year or resides in the current school year in a residential placement facility in the district, including a detention facility, substance abuse treatment facility, emergency shelter, psychiatric hospital, halfway house, or foster group home. In addition, two participants were labeled dyslexia, five special education students, and three students as 504 pertaining to students with disabilities not labeled special education as defined by the Texas Education Agency and national standards.

Another indicator besides At Risk that we use to identify students that are potential dropouts is economically disadvantaged. These students qualify to be economically disadvantaged thought parents income. If they are considered economically disadvantaged then they are placed on free or reduced lunch through the school system. This year, 85% of all CAMINOS participants are labeled economically disadvantaged.

### *Classroom Practices and School Programs*

In the 1960's a change in education leaning towards social economic status and other factors are being factored into solutions for closing the floodgates of dropouts in the United States. According to the Texas Education Agency, the graduation rate of those students who enter high school has risen to 88.6% in 2007. Although the success rate is rising overall, statistically, there are still gaps within the different socio-economic and ethnic groups with solutions ranging from after school to summer programs.

For many school districts during the latter part of the twentieth century, the solutions were directed towards helping these students obtain their diploma in alternative manners. Although these alternatives worked for some students, often most did not complete the programs. Padilla shows in his report that school should provide a positive atmosphere where students would become successful with building positive relationships between fellow students and faculty. When students are absent and are not on task because of the lack of presence, the consequences of 'punishment' can lead to students building a negative feeling towards school (Padilla, 2007).

Jack Taylor from Florida State University argues that activities have huge positive effects on at-risk students and their ability to build positive self-esteem and feeling toward the school community. He states, behavior and conditions that define a child as at-risk are part of a self-perpetuating cycle of failure across generations, a cycle of failure that often manifest itself through school dropouts (Taylor, 2007). Students who are given opportunities with successful experiences in one academic area are encouraged to stay in school and succeed in others, thus fostering an enthusiasm for higher education.

Lisa Fratt with District Administration Magazine found school districts attacking the problem through math. A big factor in at-risk students completing high school and enrolling in college is their failure to understand algebra. Algebra wields an incredible amount of power in U.S. schools. It is the gatekeeper to higher math classes that commonly opens the door to postsecondary education and greater lifetime earnings (Fratt, 2007). Educators feel that all incoming freshmen need to have some foundation in algebra if they are to be successful in high school. Most standardized tests used in high schools have algebra as a basic requirement for understanding; universities across the nation consider algebra as a basic course needed for any degree.

With these strategies in mind, the Caminos Pre-College Access Leadership program was developed in order to help bridge the gap between high school and higher education opportunities for ethnic minority youth, who are considered to be at-risk. Caminos, a six-week academic program, was specifically designed for at-risk students to understand and experience the college environment. Furthermore, this program intended to expose at-risk students to one type of university experience, in order to inspire, give confidence, and better prepare students for high school and in turn, higher education.

A main objective of the program was to increase the number of at-risk junior high school students enrolling in college bound curriculum once in high school. A secondary goal was to foster a feeling of success in academic areas prior to entering high school and thus create a positive, goal oriented start to high school. Furthermore, through follow-up the students throughout their high school careers, it is predicted that 80% of the participants will enroll in college bound curriculum; 80% will take the PSAT in their junior year of high school; 80% will be engaged and complete a community based

project; and 75% will enroll and attend a college or university after completing high school.

### *Participants*

In 2010, the seventh year of the Caminos program, seventy-five students were accepted into the program. Three students choose not to attend the program, resulting in seventy-two participants. Six students did not complete the program for various reasons. Two students left due to custody changes resulting in moving to another city. Another student left due to anxiety of being away from family members. Two others departed as a result of family leaving for an extended time to visit relatives. The remaining student believed they could not manage the academic work, and pressure to complete the program successfully. Of the Sixty-six students 100% completed the six-week program.

Of the student participants who finished the program 47% (N=31) were males and 53% (N=35) were females. Ethnically, the participants identified themselves as 70% Hispanic, 4% White, and 12% Black. In addition 14% of the students who classified themselves as having two ethnicities. The birthplace of participants born in the United States was 94%, while 6% were born outside of the United States. Students who had a father living within the home were 58%. Family size ranged from 2 to 13 members residing in the same household; 21% with 2-3 members, 61% with 4-6 members, 14 % with 7-10 members and 4% with 11 or more.

Regarding the 2010 participant's family educational attainment level, 36% of the mothers, and 27% of the fathers reported graduating from high school. Sixteen percent of parents reported attaining a GED. Furthermore, 20% of the parents completed a middle

school education. Eight percent of the 2010 cohort will be first generation high school graduates.

### ***Program***

In collaboration with San Marcos High School and Texas State University at San Marcos, the Caminos Pre-College Leadership Program was designed for at-risk students to have the possibility to acquire leadership skills, reinforce their academic abilities, obtain high school credit in three academic classes, and experience the college environment. The program was divided into two site sections, one San Marcos High School, the other Texas State University. Students became acquainted with their new surroundings with classes held at the local high school. The objective was to allow participants the opportunity to become accustomed with the schools' layout, policies, and procedures. Students were able to meet administration, office, and teaching staff. This permitted a level of comfort to those who were apprehensive about high school. The three-week experience also provided structure for expectations students would receive over the next four years.

The three-week stay in college dorms was intended to demystify the university experience, inspire, encourage and better prepare students for higher education. The students experienced the college environment at Texas State University, living in campus dorms and taking classes at the university. The Caminos program covered all expenses of room and board, books, transportation, and accident insurance. Eight full-time resident advisors were available to assist the students in their course work, adjusting to college

life, and their overall surroundings. The resident advisors also served as teacher assistants in and out of the classroom and accompanied the students at all times.

The program also covered expenses for recreational events and weekend field trips to educational locations in the central Texas area. Weekend trips included visits to a high tech computer company, and museums. These trips augmented the students overall educational experience by exposing them to career opportunities, culture and connections to their content area subject matter. Discussions and writing responses were assigned upon return to both practice the writing process and to connect the experiences to learning. Additionally, students participated in a service project at Aquarena Springs where they learned about the natural river environment while helping to clean the river surroundings. Students gained the experience of improving their immediate environment as well as contributing positively in a productive manner.

Small learning communities were established in order to maximize student teacher interaction and increase individual attention to student learning needs. During the 2010 program, the students were divided into three learning communities establishing a 25 to 1 ratio. The students were assigned to the learning communities with the conscious decision of having one made up of students with limited English proficiency, another consisting of students with learning disabilities, and a all female group. The female learning community was formulated to test recent research on homogeneous grouping of females and its effect on mathematical success. This placement allowed teachers to assist students more effectively.

The six-week program consisted of three different components: academic, leadership, and recreational. The academic component of the program included 2 hours of

daily instruction in Algebra I, English I, and Media Technology. Each course was developed and taught by one public school teacher. Two college facilitators assisted the teachers with majors in the field on study for each course.

The Algebra curriculum combined the many facets of mathematical instruction including discovery and exploratory learning, problem solving, graphing, reasoning, statistical analysis, modeling, and discerning patterns. Additionally, students were frequently grouped or paired to promote cooperative instruction. TI-84 calculators were also given to all students and instructed daily relative to the ongoing topics. The subject matter covered included the following: Mathematical vocabulary and terminology; Linear functions – graphing linear equations, finding slopes and y-intercepts, graphing inequalities, parent linear functions and comparison of linear functions, patterns of functions, proportional reasoning, distributive property, combining like terms, solving equations using known formulas, solving systems of equations graphically and algebraically, generating and interpreting linear equations, Statistical Analysis – stem and leaf plots, measures of central tendency, box and whisker plots; Quadratics – introduction to radical expressions, exploring quadratic equations, parent quadratic functions and comparison of quadratic functions, finding zeros by factoring, completing the square, quadratic formula and graphing; Laws of Exponents. The students were ultimately assessed with the 2002 End-of-Course examination.

Beginning in 2007 the program incorporated the use of a TI Navigator system, which allowed the students to connect individual calculators to a hub that transmitted responses between the teacher and the student, and projected the results on an overhead projector to be viewed by the class. Homework assignments were also sent and received

with this device. This innovative technology proved to be an effective tool at engaging the students and providing immediate feedback from the teacher.

In 2009 Connective Math (CMP), and A&M Consolidated High School Algebra I curriculum was integrated into the course. The combination of hands-on learning and new approaches to mathematical concepts increase knowledge of algebraic ideas and skills.

The English curriculum included instruction in the four Texas Essential Knowledge and Skills (TEKS) components of reading, writing, listening, and speaking. Students were taught then asked to demonstrate their abilities to analyze a visual representation, literary and expository passages for multiple-choice questions. During the six-week course, the students were given direct instruction on the writing process including planning, drafting and completion of written compositions through the organization of logical arguments. Students were required to write short essays for open-ended questions.

The curriculum included readings from selected stories, dramas, novels and poetry. Freshman literature books were used to prepare the students in making personal, text-to-text, and text to world connections to guide them on how to find and use textual evidence to support their opinions. The students were required to keep a personal journal, to take notes, and to make oral presentations. Additionally, in 2006 the teacher incorporated the Spring Board curriculum to assist in learning new vocabulary, analogies, and grammar. The students were required to read outside of class and to do homework daily. Various strategies were incorporated to form more appropriate response answers and help prepare participants for the triplet type TAKS released test. Integrated in 2009

students were required to read and analyze “To Kill a Mocking Bird” by Harper Lee. Daily quizzes and class discussions were given to check for understanding. In addition, online programs such as ReadWriteThink.org and Brain Pop were included into the curriculum to reinforce language arts components. The programs allowed students to increase knowledge in fluency, word recognition, grammar, comprehension, vocabulary, genre study, and critical analysis.

The Technology Applications course developed technology and keyboarding skills with application to personal or business situations focusing on word processing, spreadsheets, databases, desktop publishing, presentation management, and emerging technologies. Students were able to describe computer hardware, operating systems, and networks. They also selected and utilized the appropriate software and technologies to produce documents and projects. Students explored Texas colleges and universities and prepared a presentation about their chosen school. Each student established an account at [applyTexas.org](http://applyTexas.org) and practiced applying to any participating Texas college.

The Technology Application course also focused on technology standards, which included information acquisition, problem solving and communication through the use of various programs. Through the study of technology applications, related terms, concepts and data entry, the students engaged in learning how to make informed decisions about technology and creating products through practical application of software programs such as Microsoft Office. In 2007 the introduction of media technology through the use of Mac Books and iLife applications were incorporated into the curriculum. In 2009 software application systems, Microsoft Office 2007, Introductory Concepts and Techniques, and Windows XP were integrated into the curriculum. Participants received

instruction in current technology implementation. Students became proficient in Word, Excel, Access, PowerPoint, Publisher, Windows XP, and Internet search engines.

The CAMINOS leadership model was used to train and empower youth, and focuses on three areas of growth and development including home, school, and community. The model focuses on ten key principles of leadership, key social skills and an action plan to implement a community service project. There are activities and key theoretical concepts, which have been created to facilitate the learning process. The model combines two approaches in disseminating the content to student participants. First, cognitive theoretical information has been compiled and has been constructed in a manner that engages each participant at a personal and communal level. There are various lessons involving group building, problem solving, decision-making, active listening, meeting/greeting, and action planning that are introduced and reinforced through the use of activities. Journaling is critical in providing a forum for students to synthesize key aspects of the CAMINOS experience along with receiving peer feedback. The second approach is the use of experiential activities. The model incorporates various icebreakers, new games and ropes course challenges to reinforce content and information used to empower students. These two approaches are combined to facilitate the growth and development of each student's leadership abilities and maximize the individual and group experience of the camp.

Students performed a community service project at the San Marcos River at Aquarena Springs during the program. The leadership component taught students self-discipline and behavioral parameters needed to succeed. Consultants in a two-hour block facilitated the leadership program.

**Results**

In its seventh year the program results reflected a 91% (N=60) passing rate of all students in Technology (Chart 1). As for the English course, 58% (N=38) of all students passed the course with 61% of them female and 39% of them male. This was an increase from the 2009 results. Consultation with the English teacher revealed that forming an all female group assisted in creating dialogue for class discussions. Overall writing skills continued to be a significant weakness for the 2010 cohort. Furthermore, tutorials with time on task while in residence on the college campus helped increase performance for those who passed assisting in higher results. In 2009, the standards of the overall grade point average increased by 10 points for the Algebra class. In order for students to acquire the credit, they needed to receive an average of 80 or higher. Students who did not meet this criteria and scored between a 70 and 79 would be enrolled in dual classes of Algebra and Geometry their freshman year. In Algebra, 45% (N=30) of the students passed to earn credit for the course. (Chart 1) Of those passing, 40% were female (Chart 2) and 60% were male (Chart 3). Furthermore, 20% of the participants received overall scores to place them in dual mathematics classes. Of those 46% were female and 54% were male. Of the females who either received the Algebra credit or were recommended for the dual class 73% participated in the all female learning community. A conference with the Algebra teacher concluded the increase in students passing rates to having an additional mentor, a change in curriculum, homogeneous grouping, and new theories applied to math.

Overall results for 2010 reflect that 8% (N=5) of the students earned no credits, 21% (N=14) of the students earned one high school credit, 41% (N=27) earned two

credits and 30% (N=20) were able to successfully earn all three high school credits (Chart 4). Credits under the previous standards would have increased to 45% of the students earning all three credits.

### ***Implications for Practice, Theory and Future Program Development***

Throughout the six-week program, several unique characteristics were noted, through observation, which would most likely improve the success of such intervention programs. As literature suggests, students greatly need to be nurtured, supported, and mentored by teachers and staff. Many Caminos participants sought out mentorship, direction, and support from their teachers and staff, which overall to motivate students to stay on task.

Observations concluded that a majority of the students were technology literate and enjoyed interactive work. As the literature suggests, having various new structures and experiential learning experiences can improve the success of such type of intervention program. In previous years, the Caminos program integrated innovative and experiential learning experiences with Podcast, iPhoto, and Garage Band through the technology component, which students greatly enjoyed. In addition, the leadership team building experiences established discipline, focus, and time on task. Participants received nurturing experiences through relationships created between the Caminos staff and students. The program was designed to build self-confidence and strengthen focus in academic and leadership abilities. With the concept of education being the equalizer in our society, the Caminos programs fostered the idea that success can be achieved if students work hard and obtain a college degree.

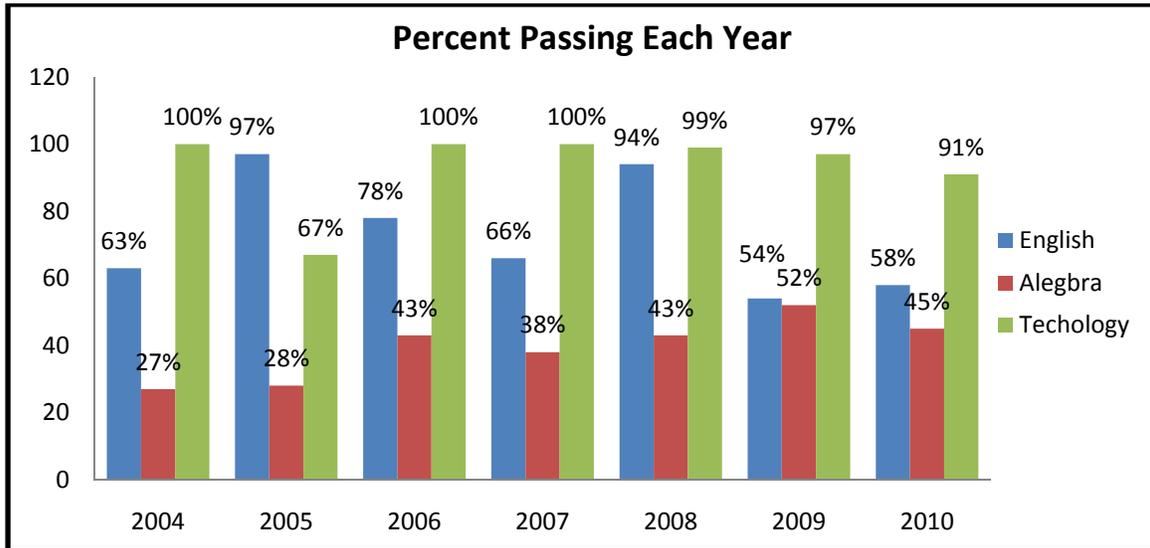
Upon further study, participants were found to have a disinterest in reading required novels. Although support and structure were given, a majority of students found it difficult to stay focused on literature. Suggestions given to increase love of literature included books on tape, books online, films, and visuals.

Furthermore, students who entered the program with learning disabilities will need continued support and intervention. Of the 5 students who received no credits, 4 were labeled as special education, dyslexic, and 504. Discussion with this group of students and parents concluded students felt more comfortable with entering high school and challenges they will face with rigorous curriculum. The parents went on to state their children had been given a sound foundation by attending the CAMINOS program.

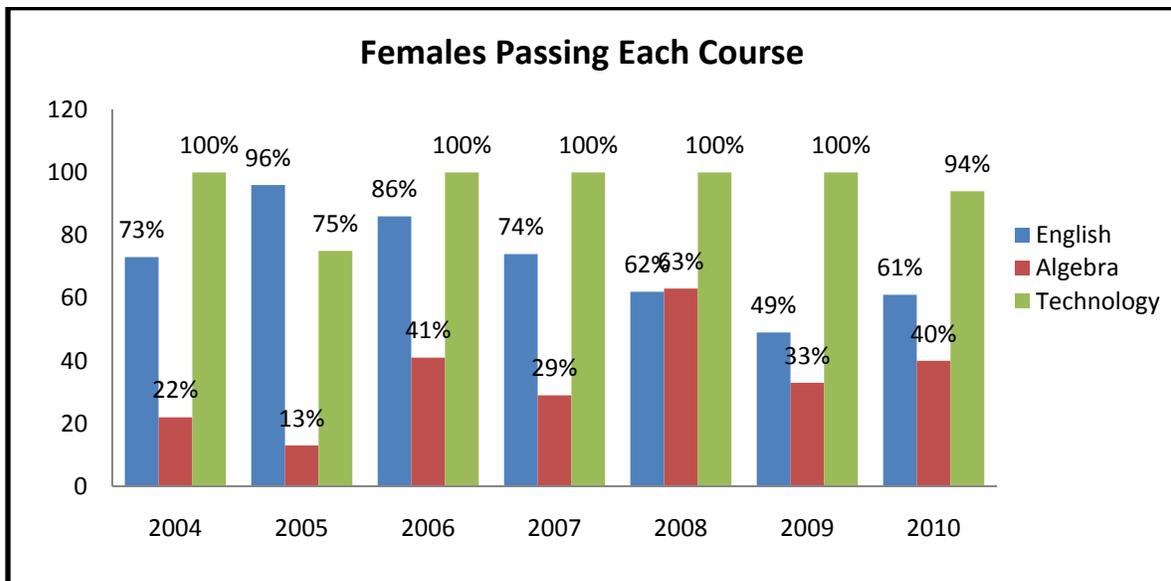
All students were instructed on the college application process and federal financial aid. Students also attended a class that discussed courses to take on their journey through high school. The importance of a GPA, scholarship deadlines, and standardized testing were also communicated. In 2009, participants were introduced to the online assistance of Ineedapencil.com. This online resource helps prepare high school students for the SAT's. It also gives them a road map for planning for college. In 2010 students and parents received information through a leadership presentation to assist in preparing for high school and college. In addition, students completed a Texas Common Application that is used to send to institutions around the state. Students researched and presented findings on several college campuses for more information on financial aid, course offerings, location, housing, and student life. The four most popular universities were UT, Texas A&M, Texas Tech, and Texas State. Harvard, Yale, and

Princeton were also researched as well as one technical and two culinary schools located in Austin.

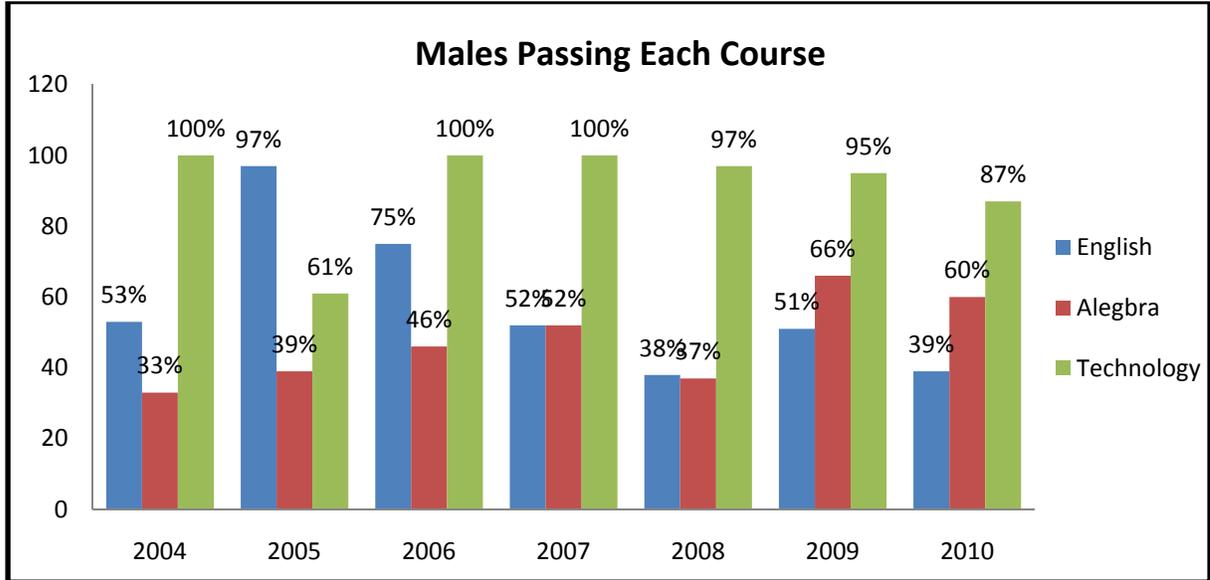
**Chart 1**



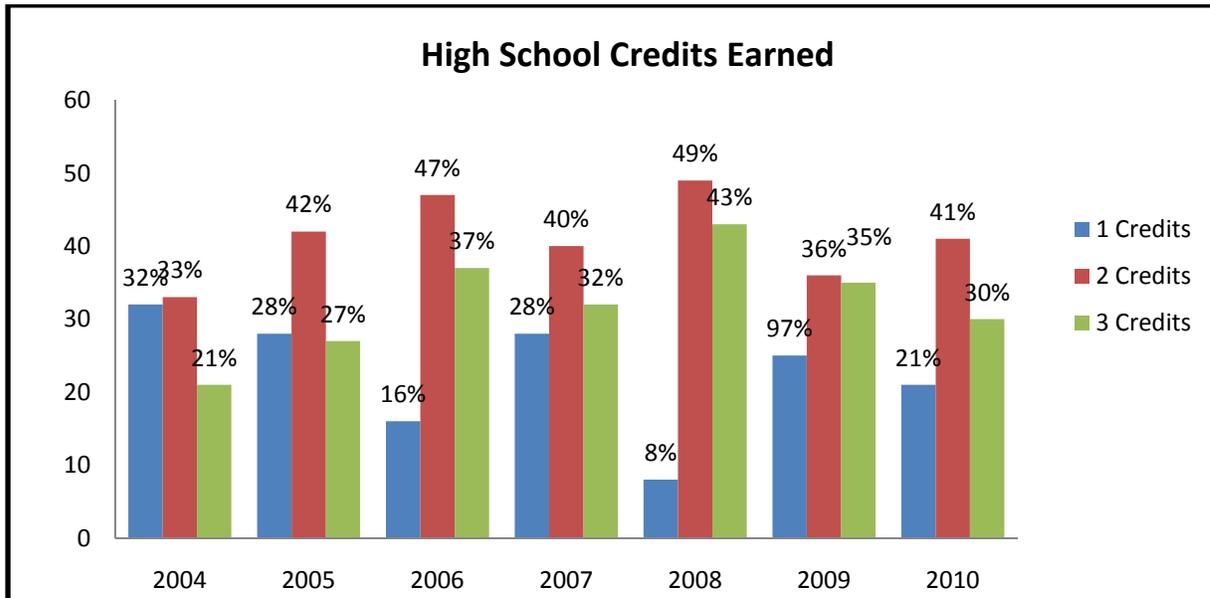
**Chart 2**



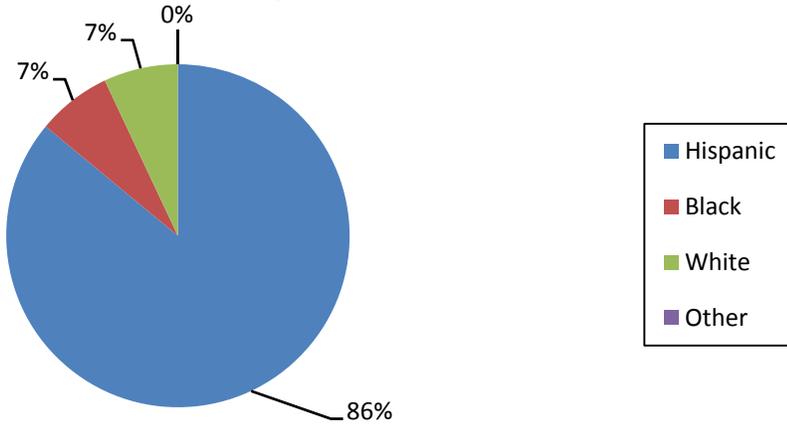
**Chart 3**



**Chart 4**



### 2004 Ethnic Representation



### 2005 Ethnic Representation

