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

Final Report 2007
Executive Summary

The Caminos Pre-College Access and Leadership Program is a summer academic institute designed to provide at-risk eighth grade students, Goodnight and Miller Junior Highs, 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 38% of the students earned credits in Algebra, 64% earned credits in English, and 100% earned credits in Technology. Of the 78 students that began the five-week program, 73 students (94%) completed the program. Participants, which completed the program, applied to a college on-line and inquired about financial aid and scholarships.
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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). In Hays County in 2005-2006 Hispanics had a 35% 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 (1999), reported that in 1998, 8% of White non-Hispanic students, 14% of African American students, and 30% of Hispanic students, dropped out of school.

Statistics such as these have created widespread concern about student 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. They are finding with low expectations students are not trying, but when extensive support and high expectations, students excel.

**Characteristics**

For all four program years starting in 2004 through 2007 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 and the fact that they were enrolled in Pre-Algebra.

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. Seven different codes were used for the 2007 cohort. One 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. The majority of the 73 students, 78%, were code 4 which is described as a student 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 four students were identified. One student was coded 7 having been expelled in accordance with TEC 37.007 during the preceding school year. Four students were in category eight 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 six students were identified. And finally, one student was coded 11 as defined in the custody or care of the Department of Protective and Regulatory Services.

**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. In Texas, the graduation rate of those students who enter high school is 76%. 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 argue 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’s 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 five-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 middle school students in 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 tracking the students throughout their high school careers, it is predicted that 80% of the participants will enroll in college bound curriculum; 80% will attend leadership classes one Saturday every month, throughout their high school career; 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 the fourth year of the Caminos program, 2007, seventy-eight students were accepted into the program. Two students were unable to complete the program due to family obligations such as finding a job to support the family, and providing childcare for younger siblings. Two students left the program for undisclosed reasons. One student was dismissed by the program director. Seventy-three students completed the five-week program.

The student participants who completed the program 42% were males and 58% were females. Ethnically, the participants identified themselves as 82% Hispanic, 10% White, 6% Black, and 2% as Other. The birthplace of a majority of participants born in the United States is 90%, while 10% were born in Mexico. Students who had a father living within the home were 70%. Family size ranged from two to ten members residing
in the same household; 21% with 2-3 members, 21% with 4 members, 47% with 5-6 members and 12% with 7 or more.

Regarding the 2007 participant’s family educational attainment level, 85% of the siblings having no college education, and 10% had some college education. Of the surveys conducted 5% of the students did not respond to this question.

**Program**

In collaboration with 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 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. Seven 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, museums, and a state park. 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 2007 program the students were equally divided into three learning communities establishing a 24:2 ratio. The students were assigned to the learning communities with the conscious decision of having one made up of students with limited English proficiency and another consisting of students with learning disabilities. This placement allowed teachers to assist students more effectively.

The five-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 consisted of daily two-hour sessions consisting of one hour of class instruction and one hour of problem solving. The course covered operation and qualitative reasoning, patterns, relationships, algebraic thinking, geometry and measurement. In addition, the course also covered symbolic reasoning, function concepts, relationship between equations and functions, tools for algebraic thinking and the
underlying mathematical process. During the 2007 program, the teacher 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.

The English curriculum included instruction in the Texas Essential Knowledge and Skills (TEKS) to improve student performance on the exit level TAKS test. 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. The curriculum included readings from selected stories, dramas, novels and poetry. Additionally, in 2007 the teacher incorporated the Spring Board curriculum to help improve vocabulary, affect more appropriate response answers and help prepare participants for the triplet type TAKS released test.

The Technology course, offered both program years, 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.
The leadership component was designed to uniquely reflect the new paradigms of leadership that honor and reflect culture and values. The curriculum assumed a “community” and “transformative” approach to leadership. Specifically, this paradigm explores the leadership development that expands on the concept of engaged and transformative leadership. The approach and curriculum focused on personal leadership development expressed through community service. 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 fourth year the program results reflected a 100% passing rate for all students in Technology (Chart 1). As for the English course, 64% (N=47) of all students passed the course with 74% of them female and 52% of them male. This was a drop from the 2006 results. Consultation with the English teacher revealed that writing skills were a significant weakness for the 2007 cohort. Several interventions were used to close the gap including intensive tutorial time with individualized instruction and several assignments involving multiple attempts at revision. Tutorials, with time on task while in residence on the college campus helped increase performance that may have otherwise resulted in even lower results. In Algebra, 38% (N=28) of the students passed to earn credit for the course. (Chart 1) Of those passing, 29% were female (Chart 2) and 52% were male (Chart 3). A conference with the English and Algebra teachers concluded the decline in students passing rates to having class one week less than the previous 2006 year.
Overall results for 2007 reflect that 100% of the students earned one high school credit, 40% (N=29) earned two credits and 32% (N=23) were able to successfully earn all three high school credits (Chart 4).

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

Throughout the 5-week program several unique characteristics were noted, through observation, which would most likely improve the success of such intervention programs. As the 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 seemed 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 different innovative structures, and experiential learning experiences can improve the success of such type of intervention program. 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 though 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.
All students were instructed on the college application process and completed an application to Tyler Junior College since no application fee was required. They also 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

Percent Passing Each Year

- 2004: English 63%, Algebra 27%, Technology 100%
- 2005: English 97%, Algebra 28%, Technology 100%
- 2006: English 78%, Algebra 43%, Technology 100%
- 2007: English 66%, Algebra 38%, Technology 100%


Chart 2

Females Passing Each Course

- 2004: English 73%, Algebra 22%, Technology 100%
- 2005: English 75%, Algebra 13%, Technology 100%
- 2006: English 86%, Algebra 41%, Technology 74%
- 2007: English 74%, Algebra 29%, Technology 100%

Chart 3

Males Passing Each Course

<table>
<thead>
<tr>
<th>Year</th>
<th>English</th>
<th>Algebra</th>
<th>Technology</th>
</tr>
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<tbody>
<tr>
<td>2004</td>
<td>53%</td>
<td>33%</td>
<td>39%</td>
</tr>
<tr>
<td>2005</td>
<td>61%</td>
<td>39%</td>
<td>39%</td>
</tr>
<tr>
<td>2006</td>
<td>75%</td>
<td>46%</td>
<td>46%</td>
</tr>
<tr>
<td>2007</td>
<td>52%</td>
<td>52%</td>
<td>52%</td>
</tr>
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</table>

Year

Chart 4

High School Credits Earned

<table>
<thead>
<tr>
<th>Year</th>
<th>1 Credit</th>
<th>2 Credits</th>
<th>3 Credits</th>
</tr>
</thead>
<tbody>
<tr>
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<td>32%</td>
<td>21%</td>
<td>32%</td>
</tr>
<tr>
<td>2005</td>
<td>33%</td>
<td>28%</td>
<td>27%</td>
</tr>
<tr>
<td>2006</td>
<td>42%</td>
<td>37%</td>
<td>37%</td>
</tr>
<tr>
<td>2007</td>
<td>40%</td>
<td>32%</td>
<td>32%</td>
</tr>
</tbody>
</table>

Year
2004 Ethnic Representation

- Hispanic: 86%
- African American: 7%
- White: 7%
- Other: 7%

2005 Ethnic Representation

- Hispanic: 75%
- African American: 12%
- White: 12%
- Other: 2%
At-Risk Students

2006 Ethnic Representation

- Hispanic: 83%
- White: 10%
- Asian: 3%
- Black: 2%
- Other: 2%