Intersecting Inequities:
Examining the Impact of Early High School Experiences on College Admissions through the Texas Higher Education Opportunity Project

Frances R. Spielhagen, Ph.D.
Assistant Professor
Education Division
Mount Saint Mary College
Newburgh, New York 12550

Introduction

The Texas Higher Education Opportunity Project has sought to examine the dynamics that affect the ways students approach and experience the college admissions process. Using the THEOP data collected by the Office of Population research at Princeton University, this research project examined the perceptions of the youngest members of the dataset, the Sophomores in Wave 1. The students' early high school experiences intersected with their knowledge of college admissions policies in general and the Top 10% law in particular and ultimately affected their goal-setting and post high school plans. The most significant factor was the perceived support of adults within the school community, specifically guidance counselors and teachers.

This study focused on survey responses from the sophomores in the Wave 1 dataset and centered on three important constructs: the students' academic courses, their awareness of the college admission process (specifically the Top 10% Law), and the support they perceived from relevant adults in their lives, i.e. counselors, teachers, and parents. Combined, these composite variables affect the college application process, the suitability of credentials for college application, and the selectivity of the colleges to which they apply. Understanding the paths and experiences of students before the

college admissions process becomes a critical event in their lives will provide a firmer grasp of the impact of the Top 10% Law on college admissions in Texas.

This examination of the THEOP Sophomore Wave 1 dataset has explored the early experiences of students, the level and types of courses they took, and their college aspirations. Sophomores are the "wise fools" of the high school environment. The word itself derives from two Greek words: *sophos* (wise) and *moros* (foolish). In many ways, students in tenth grade have learned to navigate their school environment. They may be wise in the ways of school operation, i.e., how to get from class to class and how to respond to their teachers' demands. School is school, and for many it is known territory over which they feel a certain sense of control. On the other hand, this feeling of empowerment can mislead them into a false sense of security, because decisions they have made prior to sophomore year and those they make in the next two years will determine the course of their future lives and aspirations. Simply put, they may be wise in the ways of the world they know and foolish about the world beyond high school.

Theoretical Framework

Research has explored the effects of course-taking on student attainment as well as other lines of inquiry that have examined the circumstances surrounding academic decision-making among high school students. In public high schools across the United States, longstanding policies of acceleration and tracking structure the academic profiles of students, especially among underserved populations. This is particularly true in the areas of mathematics and science, in which course-taking decisions made in grades 7 and 8 affect the content and the level of study in high school. In fact, the study of algebra is the gatekeeper to advanced courses in both mathematics and science in high school and

thereby preparation for college. Over the last decade, research into mathematics course-taking in relationship to college and career goals clearly points to the importance of algebra study for students in the early years of high school (Schiller and Muller, 2003; Gamoran and Hannigan, 2000; Smith, 1996.) Therefore, any examination of college admissions data also must take into account the road the student has traveled through high school, because early academic experiences, specifically studies in mathematics and science, affect interaction with the admissions process of colleges.

Despite the presumed race-neutrality of the top 10% law enacted in 1998, the THEOP studies have revealed disproportionate enrollment of Hispanic students in the selective colleges of Texas State University. Niu, Tienda, and Cortes (2004) affirm that the "challenge is to focus on raising college sights for students from poor schools and under-represented minority groups and to do so *early enough* (emphasis added) in their educational careers to make attendance at selective colleges a realistic possibility" (p. 30). Venezia (2004) found that students in non-honors classes in two Texas high schools clearly understood that they were being excluded from information regarding college admissions. Moreover, research into the effect of school composition, organization, and climate on student achievement (Boyle, 1966; Tienda, 1991) supports an examination of the local experiences of students within a global population, i.e. the THEOP dataset.

Analysis (Spielhagen, 2006) of mathematics course-taking patterns in a large southeastern school district reveals the benefits of early algebra study for all students as well as the link between math and science course-taking and future plans for college. Likewise, Gamoran and Hannigan (2000) and Smith (1996) found that algebra is a gatekeeper course and ultimately an indicator of future academic activity. Moreover,

Raudenbush, Fotiu, and Cheoung (1998) found that more affluent districts were more likely to provide algebra instruction to students in eighth grade than districts with fewer financial resources. Their results indicate "substantial evidence of inequality of access to these resources as a function of social background and ethnicity" (p. 265). This research leads to questions about the SES of the high schools in the THEOP dataset and students' knowledge of advanced math and science courses in those high schools. Additional questions about equity and access derived from the examination of a nationally representative sample of U.S. students involved in the TIMSS, from which the researchers concluded that variations "in students' exposure to specific mathematics topics raises concerns about access and equity for students" (Cogan, Schmidt, & Wiley, 2001, p. 325). Moreover, Valdez (2002), citing Oakes (1990), noted that Latino students often fail to enroll in high school algebra and other advanced math and science courses because of having been placed in lower academic tracks. Therefore, in the THEOP dataset, enrollment in math and science courses can serve as a delineator of potential opportunity.

A recent study by the author (Spielhagen, 2006) revealed that substantial benefit accrued to students who took algebra in eighth grade, because they stayed in the mathematics pipeline longer and were more likely to attend a four-year college. These findings also corroborate the recent analysis of state high school graduation requirements by Schiller and Muller (2003), who note that "the mathematics courses students take in high school affect their academic achievement and their admission to competitive postsecondary schools and professional programs" (p. 300).

A companion piece to the above-mentioned study (Spielhagen, 2005) underscores the importance of early mathematics experiences for academic success. Interviews with graduating seniors about their mathematics experiences provided important information about their high school course selection, their interactions with teachers and guidance counselors, and their college application process. The students in higher level math and science courses reported that those classes broadened their horizons beyond high school and provided a peer group with similar shared aspirations. Students placed in lower level math and science courses expressed regret about their perceived lack of academic opportunities because they had not taken advanced math courses and reported that their college selection and career plans were affected by their early mathematics experiences.

These findings support the findings of Gabelko and Sosniak (2002) who examined the efficacy of college recruitment outreach programs that have grown up in California in response to Proposition 209, which has barred race and gender preferences in university selection procedures. While examining specific outreach programs whose purpose are talent development, those researchers found that engagement in serious academic pursuits took precedence over demographic identifiers like race, class and ethnicity. Combined, these two studies offer a lens for understanding the experiences and perceptions of the sophomores in the THEOP dataset, specifically targeting the role played by their course selection (or placement) in tenth grade as it affected their expectation to attend college.

Stanton-Salazar and Dornbusch (1995) reported that educational goals correlate to the ties that Hispanic students have formed with institutional agents, i.e., teachers and guidance counselors, especially among students with higher grades, who are more likely

to aspire to college attendance. Moreover, most high school drop-outs leave school after tenth grade (at age 16, the legal age to leave school.) Catterall (1998) reported that dropouts frequently cite lack of positive interactions with their teachers as a contributing reason for dropping out of high school. Croninger and Lee (2001) later found that students from socially disadvantaged backgrounds benefit from the perceived assistance of their teachers. Students' connection with institutional agents (teachers and guidance counselors) combined with academic courses combine to foster awareness of the opportunities afforded by higher education and readiness for the college application process. It makes sense to explore how the connections students have made with institutional agents affect their decisions to remain in school, to continue to enroll in college-preparatory courses, and to aspire to attend college after high school.

Kirst and Venezia (2001) examined the communication of college admissions policies in central Texas to school personnel and to the students in the middle and high schools there. They found that most students need better information about college preparation, but that students in higher level courses acquire that information through the challenging content of their courses and their interactions with the teachers in those courses, who know college-level standards. Moreover, involvement in those courses frequently leads to recruitment efforts by universities. On the other hand, students in middle and lower level courses are precluded from these experiences. Bellessa Frost (2005) has already examined the THEOP Wave 1 Senior Cohort and has explored the relationship between the seniors' knowledge of college admissions policies and the involvement of their guidance counselors. An examination of the responses of students

in the sophomore cohort will add to understanding of the power and role of institutional agents, both counselors and teachers.

Looking outside the school environment, Venezia (1999) found that the parents of students in lower level courses may lack the experience to help them with course selection and college admissions. Valadez, J.R. (2002) examined social capital among Latino students, specifically deriving from parent involvement in student decision-making as related to mathematics course-taking. He concluded that despite efforts to increase connections between school and family, upper SES Latino students are more likely to enroll in higher level math and science courses than their lower SES counterparts, because the higher SES parents rely on their own educational and occupational experiences that advantage them over lower SES parents in advising their children. This finding further accentuates the importance of school personnel, especially teachers with whom they have daily contact, in raising and sustaining the aspirations for college, especially among the younger student population.

Methodology

The purpose of this research project was to examine the data behind the data, i.e., to explore the dynamics in place for students two years before their senior year, when they traditionally apply to college. Existing THEOP reports and ongoing additional examination of Waves 1, 2, and now 3, of the Senior data provide information about the perceptions and activities of students who have moved into the formal decision-making stage regarding college and life choices. Analysis of the Sophomore Wave 1 data offers essential understanding of the early stages of this college selection process. These understandings will enhance the findings derived from the Senior Surveys. For example,

the Wave 1 Senior Statewide Survey results reveal a decline in the level of mathematics course-taking from Algebra 1 to Calculus, courses that would constitute a credible transcript for college. Examination of math courses taken by the sophomores in Wave 1 may provide some understanding of this decline by showing which students are taking which courses in their sophomore year.

The THEOP Sophomore Wave 1 dataset contains several key components of the students' academic lives in tenth grade and their potential impact on their experiences in twelfth grade and beyond. Three key variables have been constructed for this study. The first variable is the **experience** of the students as evidenced by their course-taking in math and science. The second variable is their **knowledge** of the Top 10% Law and other college admissions information. Together, these variables combine to create a fuller picture of college attendance goal-setting among the various groups in the student population. Finally, responses related to perceived **support** from significant adults in their lives (parents, teachers, counselors) further enhance the profile of sophomores and their attitudes about college attainment. These variables were first examined individually and then in relationship to the students' responses regarding intention to go to college.

The findings in this report contain the first part of the original design proposed for this study, which required using merged data from Waves 1 and 2. Since it was not possible to obtain the merged data for this preliminary study, this original research design was modified to provide the maximum analysis allowed using revised research questions and the data in the Wave 1 alone. Figure 1 contains the revised design as it relates to Wave 1. The responses of the sophomores in the Wave 1 dataset provide compelling

insights into the factors that affect student goal-setting before they arrive at that point in high school when they apply for college.

Research Questions

Therefore, this research project examined the demographics of the Wave 1 Sophomore Dataset and their relationship to the critical variables of the knowledge, experiences, and support perceived by the students. Then, these variables were combined to explore the effect, if any, that they had on intention to go to college.

Three basic research questions were the foundation of this preliminary project:

- How does the academic experiences of the sophomores in the THEOP Wave 1 dataset, as evidenced by mathematics and science course-taking, affect their intentions to go to college?
- How does their knowledge of the Top 10% Law and other college admission information affect their intention to attend college?
- How does the support these sophomores perceived from institutional agents, i.e., counselors and teachers, affect their intention to attend college?

Methods

The underlying hypothesis of this research report is straightforward. The early experiences of students in Texas have intersected with the Top 10% college admissions policy to create a situation that precludes students from college attendance because of their early experiences. Using survey responses within the THEOP Wave 1 dataset, statistical analysis followed this basic plan:

- First, descriptive statistics provided basic information about student responses to questions concerning their experiences, knowledge, and support, as defined above.

Understanding of the composition of student responses about these key constructs is essential to understanding the interplay of those constructs in terms of the outcome variable, i.e., intention to go to college.

- Second, regression analysis explored the differences in knowledge, support, and experiences among specific groups within the population (by ethnicity and location/type of high school.) These analyses explain the ways in which the variables combined to explain the outcome variable of intention to attend college.

Within this basic process, exploration of the data was conducted in the following progression in order to obtain a clear picture of the dynamics at play within this dataset. The intention was to provide incremental and expanding understanding of the factors involved in the experiences of the sophomores.

- Data were first examined globally and by ethnicity over the entire Wave 1 Sophomore dataset.
- Then the data were divided into three categories that were constructed according to ethnic composition of the schools in the original sample. [Criteria for grouping the schools into these three categories derived from the percentages of ethnic population in the schools. Schools having at least 60% white students were considered "Predominantly White", and schools with at least 60% Hispanic students were labeled "Predominantly Hispanic". Schools with a range among the ethnic make-up of their population in which no one group comprised more than 55% of the population were labeled as "Balanced". Schools with a total population of less than fifty students were eliminated from the sample.]

- Tables and corresponding charts, whenever possible, were constructed using the overall findings first, then the findings according to ethnicity, and then according to school category, in an attempt to refine findings by the school settings in which the students functioned and provided their responses.

Findings related to Experience

"Experience" was defined as course-taking in mathematics and science. Mathematics course-taking followed traditional patterns (Algebra 1, Geometry, Algebra 2, Pre-calculus, and Calculus). By sophomore year, most of the students in the dataset, regardless of ethnicity, had already taken an Algebra 1 course. The percentage of students having already studied Algebra 1 ranged from a high of 94% of white students to 89.1% among "other Hispanic" students. The percentage of Chicano/Mexican students who had already studied Algebra 1 was 89.7%. Table 1 contains the break-down of prior course-taking by ethnicity.

The survey item about current course-taking reveals the placement of the sophomores at the time of the Wave 1 survey. Traditional curriculum design usually places Geometry after Algebra 1. In this dataset, the majority of students were studying geometry in their sophomore year. Smaller percentages were in Algebra 2, a higher level course and possibly an indication of the presumed ability of the students involved. Enrollment in Algebra 2 was associated with plans to attend college. Greater percentages of white students (30.6%) were in Algebra 2 as compared to other ethnicities (Black = 16.5%; Chicano and other Hispanic each = 22.9%). Table 2 displays the frequencies among ethnicities in current math courses at the time of the survey.

Additional analysis examined the course-taking patterns according to the three categories of schools as defined above: predominantly white, predominantly Hispanic, or Balanced. Across all three categories, most students were enrolled in Geometry, as reflected in the global dataset. In the predominantly white schools, a greater percentage of students were currently enrolled in Algebra 2, usually regarded as a more advanced course. Enrollment in Algebra 2 was lower in the predominantly Hispanic schools, and was at its lowest in the Balanced schools category. Table 3 contains the breakdown of mathematics courses completed by students in each school category. Additional examination of current enrollment in math and science courses was conducted to determine any differences across the three categories of schools. Table 4 displays the breakdown of math and science enrollment by school population. In general, enrollment in more advanced courses in sophomore year, i.e. in Algebra 2 and Chemistry, was greatest among students in the predominantly White schools, followed closely by predominantly Hispanic schools.

Findings related to Knowledge

"Knowledge" relates to students' understanding of the college admissions process as defined by two key variables: knowledge of the Top 10% Rule and general knowledge related to general college admissions policies, captured in the survey item of knowledge of class rank. The Top 10% Rule was relatively new when the survey was administered, so that knowledge of its potential effect on college admissions was likely not to have been widespread, especially among the younger student population. However, since it was a new regulation that had consequences for student attainment, it is important to

determine the level of knowledge among students of this important change in the college admissions policy in Texas.

Overall, in response to the prompt, *How much have you heard about the Top 10% Rule?* most of the sophomores (51.8%) in Wave 1 reported that they had *no knowledge* of the Top 10% Rule. Examination of the sophomores by school category revealed that percentages of the response "None" ranged from 44.4% in predominantly White schools to 58.7% in predominantly Hispanic schools. In other words, students in the predominantly white schools expressed greater knowledge of the Top 10% Rule, followed by students in the schools defined as having a balanced population, with students in the predominantly Hispanic schools expressing the least knowledge of the Top 10% Rule. Table 5 contains the percentages in the various school categories.

In the total Sophomore Wave 1 Cohort, when examined by ethnicity, white students expressed the greatest knowledge of the Top 10% Rule, followed at a great interval by their Black and Hispanic peers. These results are displayed in Table 6. Further examination (Table 7) of the responses by each ethnic group within the school categories revealed that even in predominantly Hispanic schools, Hispanic students, both Mexican Chicano and other Hispanic, expressed the least knowledge of the Top 10% Rule.

Findings related to Support

Originally "support" was defined as deriving from three sectors: parents, counselors, and teachers. However, descriptive analysis revealed that across the board for all ethnicities, over 90 % of students reported active support from their parents. Therefore, parental support was eliminated as a variable of consequence in this report.

Perceived support from institutional agents, i.e., counselors and teachers, varied little by ethnicity. In all the key reference groups (White, African American/Black, Mexican/Mexican American/Chicano, and other Hispanic), approximately 50% of students reported active encouragement about going to college from their guidance counselors. However, teachers emerged as an important source of encouragement for all ethnicities. Percentages of perceived active support were in the 70% range for all three groups, with 77.5% of white students reporting active encouragement and 79.4% for African American/Black students, and 79.5% for Mexican/Mexican American/Chicano students. Table 8 displays the summary of students' perceptions of the support they received from the adults in their lives.

Putting it all together

Having examined thoroughly the components of the variables of interest, the next stage involved combining those variables to see the extent to which they affected the outcome variable of plans after high school. To obtain a benchmark for comparison, three strong variables, as determined from the descriptive analysis, were combined into a regression formula in this order: Knowledge of the Top 10% Rule + Teachers' encouragement + Algebra 2 = How *far would you like to go in school?* (Survey prompt on the Sophomore Wave 1 survey.) The data in this sample have been adjusted for missing cases and weighted according to the prescribed weights in the set. In this model, the R-Square was relatively low and ranged from .056 to .086, increasing as each variable was added to the formula. Table 9 contains the results of this regression.

The regression analysis was then reconstructed to include potentially more powerful variables. In an attempt to define the concept of "Knowledge" more completely,

another regression was designed to include the students' knowledge of their class rank, an important factor in college admissions in general and certainly in computing their eligibility for Top 10% consideration. Class rank would be a critical variable in sophomore year, because it forms the basis for the rank the student attains when applying for college in senior year. This variable was combined with knowledge of the Top 10% Rule, level of mathematics taken, teacher encouragement, which had all been already delineated as important variables. This regression, contained in Table 10, resulted in an R-Square that ranged from .123 to .140, double the results in the previous model, but still relatively low.

Discussion

This preliminary study of the THEOP Sophomore Wave 1 dataset has revealed considerable variation in the experiences, knowledge, and support reported by the students at the time of the first survey. These variations combine to produce varying outcomes and expectations among those students. An important limitation of this preliminary report is the lack of examination of the Wave 2 results, through which we might track the responses of the students in tenth grade to connect with whether they were "Stayers" or "Leavers" in the second wave of data. Longitudinal analysis of the Wave 2 data could provide understanding of what happened to these students in high school. Logistic regression would be employed to determine the characteristics of the students who comprised each to the bifurcated populations within the Wave 2 dataset. However, in spite of this limitation, the Wave 1 data do provide a strong understanding of the characteristics of the population and the ways in which those characteristics interact too affect attainment at the stage at which the students responded to the survey.

The wide range of "Experiences" found in the sophomore population, defined as the mathematics and sciences courses in which students were enrolled in tenth grade, might serve as predictors of later attainment in high school. The majority of sophomores had already studied Algebra 1, presumably in ninth grade at the latest, so that potentially they had passed through that important gatekeeper course. The majority of students were in Geometry in sophomore year.

Examination of the "Level of mathematics study" in sophomore year revealed that enrollment across the various course mathematics options stratified according to ethnicity. When regression models were run, enrollment in Geometry emerged as a more potent predictor variable than Algebra 2, a more advanced course. Nevertheless, although mathematics course-taking was confirmed as an important factor in the long-term attainment of students, it also emerged as related to ethnicity. Enrollment in science courses was also stratified according to ethnicity and school composition. If students' academic experiences affect their long-term plans, including the option to go to college, then the disparities in enrollment revealed by this study suggest that efforts should be made to include more students from under-represented students in the more advanced mathematics and science courses earlier in their high school careers.

However, student awareness of the factors that influence their lives is an important component of any discussion of student access to advanced courses. It is not enough to open the doors and provide access. Students must become aware of the rules governing that access and their success in those courses. The results of this preliminary study revealed a relative lack of awareness among the sophomores regarding the college admissions process. This is not surprising, since college applications seem very remote

to the typical sophomore. They were particularly unaware of the newly implemented Top 10% Rule, which would affect their potential college attendance two years later. Once more, there were disparities in that awareness by ethnicity, across the total population and with the three categories of schools. This result suggests that greater effort must be made on the part of school personnel to bring that information to the students.

Support (from teachers, counselors, and parents) and interactions with institutional agents emerged as important to the college aspirations among students. The critical role of teachers deserves further scrutiny, particularly for the Mexican, Mexican American, and Chicano students. Given the heavy counselor load in most high schools, it is easy to imagine that students interact with their teachers more often than any other adult in that environment. Coupled with the fact that almost all (>90% across all populations) students credit their parents as encouraging them, teachers emerge as a force that can be mobilized for increased encouragement among students. Daily conversations with students about the value of coursework and potential career paths can provide an important human interface for the rather daunting process of seeking college admission.

The combination of all three constructs in this study explains a portion of what is happening with the students in the THEOP Sophomore Wave 1 Cohort. Even with relatively weak results, the regression models indicate that those variables do combine to advance our understanding of the factors at play in the lives of the population. The results are not random, but rather have a structure that is logical and comprehensible. Moreover, the difference in the regression results between the senior and sophomore cohorts suggests growth over time of the importance of those variables in the experience of students in the study. Therefore, this study suggests that there is a complex connection

of students' experiences with perceived support and specific knowledge of rules governing their future success that grows over time with the experiences of the students. It also affirms the importance of reinforcing their knowledge, structuring their experiences, and bolstering the support from institutional agents, particularly the teachers.

Implications for future research

The next level of study must necessarily involve examination of the Wave 2 Sophomore data. Analysis of the merged dataset should back map from the Wave 2 responses to original responses in the Wave 1 set, as originally proposed. Logistic regression will further unpack the predictability of the variables that were highlighted in this study. Then we will have a more comprehensive view of what factors affect the achievement and attainment paths of the early high school students as they approach senior year.

An ideal follow-up study would involve tracking these students into college, much as was done with the Wave 1, 2, and 3 Senior Cohort. Longitudinal follow-up of the sophomores would be richer because of the earlier insights gained from the Wave 1 study. Presumably large numbers of these students have entered the university system. Many of them were *de facto* in the Top 10% of their school population in their senior year. Given the identification numbers in the dataset, this suggestion might be possible and would involve exploring the capacity of finding these students within the Texas state university system.

Finally, a mixed methods approach suggests isolating some members from a cross-section of the population in the Wave 2 set and involving them in interviews that would provide depth and intensity to the findings derived through quantitative analysis.

A constructivist look at the faces behind the numbers combined with the numbers themselves might provide powerful information for addressing the issues inherent in the larger study.

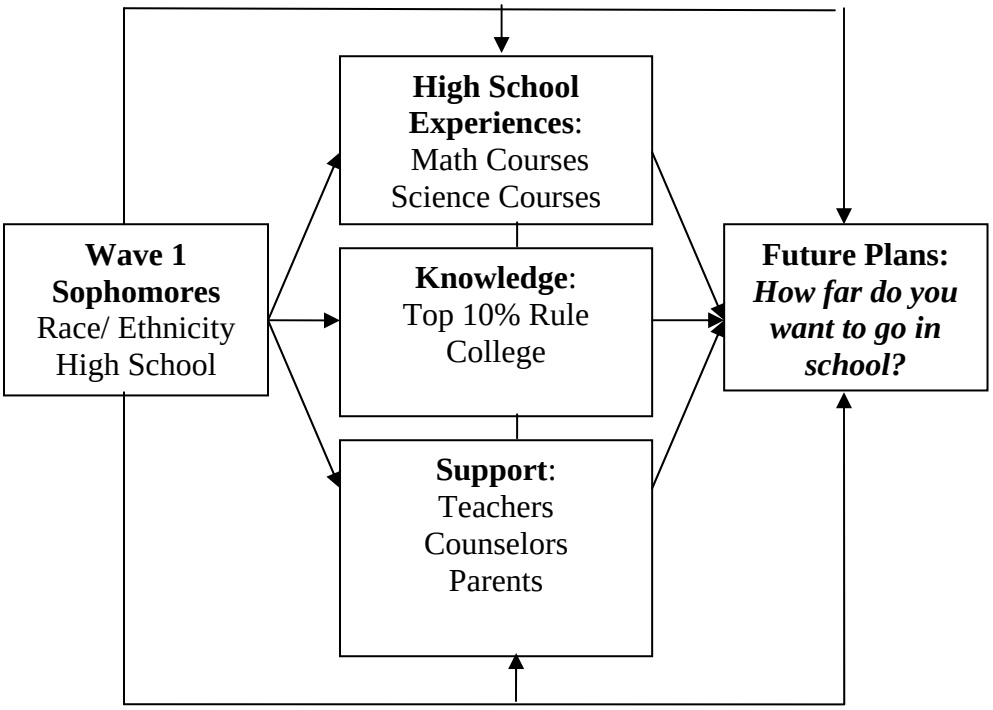
Implications for Practice

While studies like this are not usually intended to be prescriptive for the field studied, it is clear that the teachers in Texas (and any state) should understand the crucial role they play in the lives and aspirations of their students. In this age of educational accountability, practitioners in the K-12 arena rarely get to hear what they are doing right for their students. The importance of teacher encouragement for students, particularly those in traditionally underserved populations, should inform the practice and daily lives of teachers who work in the trenches every day.

Conclusion

The findings within this first report clearly point to the importance of students' experiences in their course work, their knowledge of the rules governing their future planning, and the support they perceive from the adults in their lives. As such, these results confirm the stated hypothesis of the study regarding the intersection of high school experiences and college admissions policies. These preliminary results also support other studies that have addressed the same constructs individually. However, this study was different from those other studies because it examined these constructs in combination with each other and confirmed the effects of their interaction in the lived experiences of the students in the dataset

Figure 1. Research design.



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Appendix: Tables and Graphs

Table 1. Math course completed by sophomore year by percent.

Ethnicity	Algebra 1	Geometry	Algebra 2
White	94.4	39.6	8.7
African American/ Black	90.4	24.9	5.9
Mexican/ Chicano	89.7	31.3	9.2
Other Hispanic	89.1	32.6	8.0

Table 2. Current course enrollment in sophomore year by percent with graph.

Ethnicity	Algebra 1	Geometry	Algebra 2
White	4.3	53.9	30.6
African American Black	7.1	64.0	16.5
Mexican Chicano	8.2	58.9	22.9
Other Hispanic	8.5	56.7	22.9

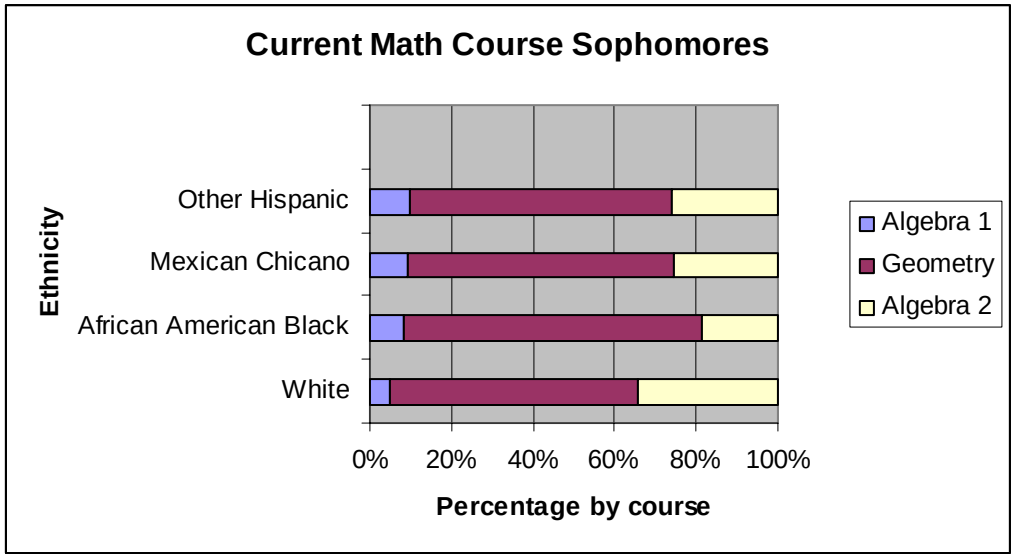


Table 3. Mathematics course completed before sophomore year by school category

Course	PredominantlyWhite	Predominantly Hispanic	Balanced
Algebra 1	93.3	90.4	91.5
Geometry	38.2	36.6	30.9
Algebra 2	8.2	10.5	6.8

Table 4. Current mathematics and science course enrollment in sophomore year by school category

	Algebra 1	Geometry	Algebra 2	Biology	Chemistry	Physics
White	4.6	54.2	29.2	36.1	32.0	8.7
Hispanic	7.0	54.8	26.3	37.5	29.1	7.1
Balanced	6.3	59.8	20.7	56.6	17.1	4.1

Table 5. Knowledge of the Top 10% Law by school category
Prompt: *How much have you heard about the Top 10% Rule?*

Population	None	A Little	Some	A lot	Total
Total Population	51.8	21.6	15.8	10.8	100.0
Predominantly White Schools	44.4	21.4	18.8	15.3	100.0
Predominantly Hispanic Schools	58.7	22.2	13.6	5.5	100.0
Balanced Schools	52.7	20.8	15.2	11.3	100.0

Valid percents, adjusted for missing cases.

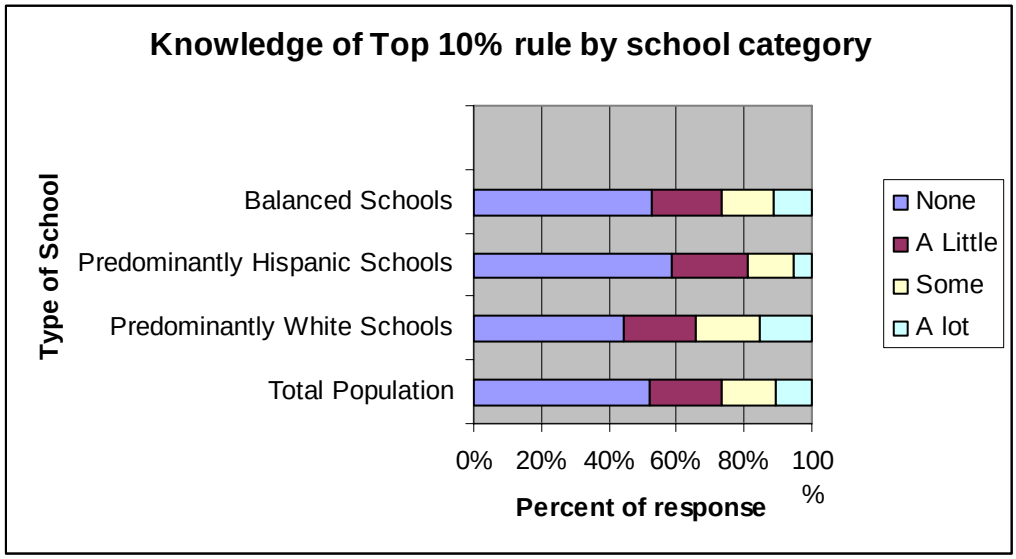


Table 6. Knowledge of the Top 10% Law by ethnicity – Total population
Prompt: *How much have you heard about the Top 10% Rule?*

Ethnicity	None	A Little	Some	A lot	Total
White	44.3	21.5	18.7	15.5	100.0
African American Black	58.9	21.3	11.9	7.8	100.0
Mexican Chicano	60.4	21.4	13.0	5.2	100.0
Other Hispanic	57.5	20.8	13.8	7.9	100.0

Valid percents, adjusted for missing cases.

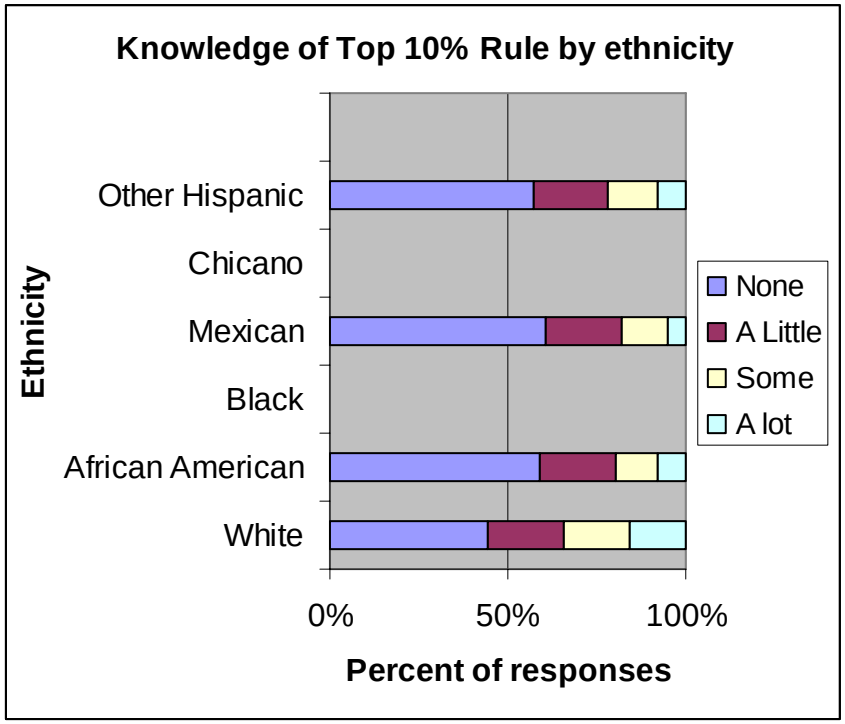
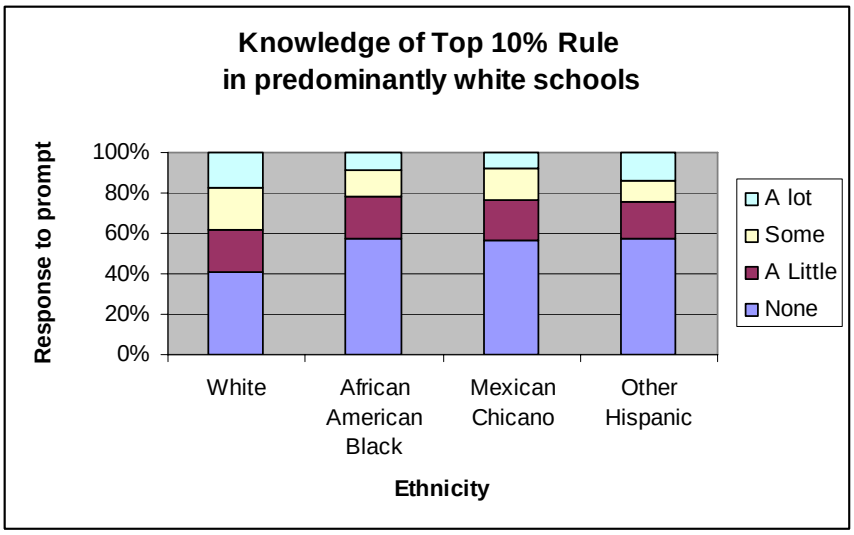
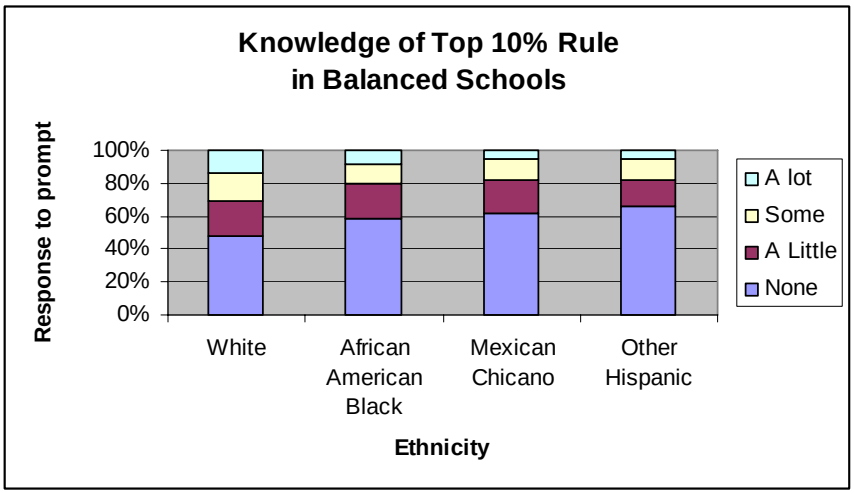


Table 7. Knowledge of the Top 10% Law by school ethnicity within school category
Prompt: *How much have you heard about the Top 10% Rule?*

School category	Ethnicity	None	A Little	Some	A lot	Total
Predominantly White schools	White	40.8	21.2	20.3	17.7	100
	African American Black	57.2	20.7	13.3	8.7	100
	Mexican Chicano	56.8	20.1	15.1	8.0	100
	Other Hispanic	57.5	17.9	10.4	14.2	100
Predominantly Hispanic schools	White	49.5	23.3	18.5	8.6	100
	African American Black	64.0	17.5	11.9	6.6	100
	Mexican Chicano	60.3	22.1	13.0	4.6	100
	Other Hispanic	54.5	23.6	14.1	7.9	100
Balanced schools	White	47.6	21.3	17.0	14.0	100
	African American Black	58.8	20.8	12.3	8.1	100
	Mexican Chicano	62.1	20.1	12.5	5.3	100
	Other Hispanic	65.7	16.2	13.1	5.1	100

Valid percents, adjusted for missing cases.


Knowledge of Top 10% Rule
in predominantly white schools
Response to prompt
100%
80%
60%
40%
20%
0%
White
African American Black
Mexican Chicano
Other Hispanic
Ethnicity
A lot
Some
A Little
None


Knowledge of Top 10% Rule
in Balanced Schools
Response to prompt
100%
80%
60%
40%
20%
0%
White
African American Black
Mexican Chicano
Other Hispanic
Ethnicity
A lot
Some
A Little
None

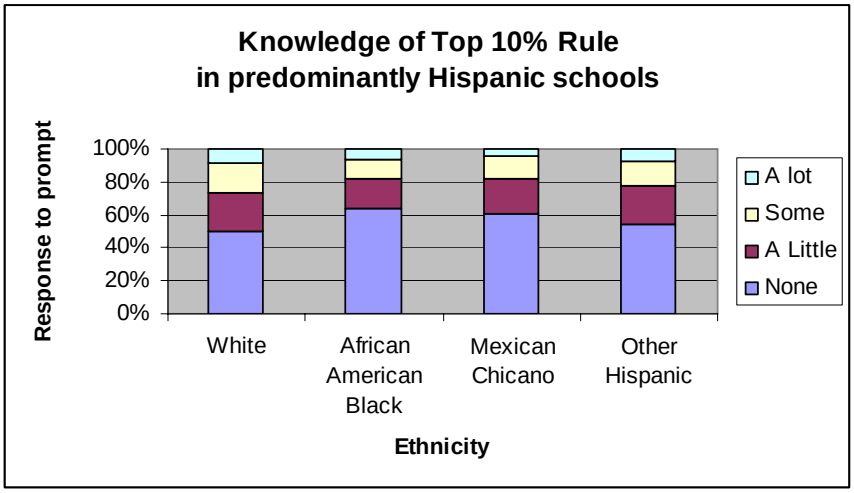

Knowledge of Top 10% Rule
in predominantly Hispanic schools
Response to prompt
100%
80%
60%
40%
20%
0%
White
African American Black
Mexican Chicano
Other Hispanic
Ethnicity
A lot
Some
A Little
None

Table 8. Perceptions of support from parents, counselors, and teachers

Racial/ethnic background		Parents	Counselors	Teachers
White	**No encouragement**	5.6	44.4	22.5
	Actively encouraged	94.4	55.6	77.5
	Total	100.0	100.0	100.0
African American/Black	**No encouragement**	7.5	43.9	20.6
	Actively encouraged	92.5	56.1	79.4
	Total	100.0	100.0	100.0
Mexican/Mexican American/Chicano	**No encouragement**	7.6	47.3	20.5
	Actively encouraged	92.4	52.7	79.5
	Total	100.0	100.0	100.0
Other Hispanic	**No encouragement**	7.3	47.3	20.6
	Actively encouraged	92.7	52.7	79.4
	Total	100.0	100.0	100.0
Asian or Pacific Islander	**No encouragement**	7.4	58.2	26.9
	Actively encouraged	92.6	41.8	73.1
	Total	100.0	100.0	100.0
Native American	**No encouragement**	10.0	50.0	28.0
	Actively encouraged	90.0	50.0	72.0
	Total	100.0	100.0	100.0
other	**No encouragement**	9.2	54.4	28.7
	Actively encouraged	90.8	45.6	71.3
	Total	100.0	100.0	100.0

Table 9. Regression Model 1: *How far would you like to go in school?*

Model Summary				
	Variables Entered	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	How much have you heard about the Top 10% Rule?	.056	.056	1.309
2	Course taken-Algebra 2	.073	.073	1.297
3	Teachers encouraged/discouraged going to college?	.086	.086	1.288

Coefficients						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	**(Constant)**	3.850	.022		173.385	.000
	How much have you heard about the Top 10% Rule?	.296	.010	.238	29.148	.000
2	**(Constant)**	3.809	.022		171.943	.000
	How much have you heard about the Top 10% Rule?	.251	.010	.201	23.968	.000
	Course taken-Algebra 2	.131	.008	.134	15.971	.000
3	**(Constant)**	3.535	.029		120.858	.000
	How much have you heard about the Top 10% Rule?	.237	.010	.190	22.712	.000
	Course taken-Algebra 2	.127	.008	.131	15.650	.000
	Teachers encouraged/discouraged going to college?	.095	.007	.115	14.238	.000

Excluded Variables						
Model		**Beta In**	**t**	**Sig.**	**Partial Correlation**	**Collinearity Statistics**
						Tolerance
1	**Teachers encouraged/discouraged going to college?**	.119	14.588	.000	.122	.989
	Course taken-Algebra 2	.134	15.971	.000	.133	.926
2	**Teachers encouraged/discouraged going to college?**	.115	14.238	.000	.119	.988

Table 10. Regression Model 2: *How far would you like to go in school?*

Model Summary				
	Variables Entered	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	Percentage that best represents your current class rank	.123	.123	1.107
2	How much have you heard about the Top 10% Rule?	.135	.135	1.100
3	Level of math taken	.138	.137	1.098
4	Teachers encouraged/discouraged going to college?	.140	.139	1.097

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	**(Constant)**	3.359	.065		51.514	.000
	Percentage that best represents your current class rank	.018	.001	.351	23.087	.000
2	**(Constant)**	3.217	.068		47.448	.000
	Percentage that best represents your current class rank	.016	.001	.322	20.497	.000
	How much have you heard about the Top 10% Rule?	.111	.015	.112	7.143	.000
3	**(Constant)**	3.189	.068		46.787	.000
	Percentage that best represents your current class rank	.015	.001	.303	18.317	.000
	How much have you heard about the Top 10% Rule?	.098	.016	.099	6.138	.000
	Level of math taken	.009	.003	.059	3.506	.000
4	**(Constant)**	3.090	.075		41.193	.000
	Percentage that best represents your current class rank	.015	.001	.299	18.063	.000
	How much have you heard about the Top 10% Rule?	.095	.016	.096	5.980	.000
	Level of math taken	.009	.003	.059	3.501	.000
	Teachers encouraged/discouraged going to college?	.036	.012	.048	3.154	.002

Excluded Variables

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	**Level of math taken**	.083	5.054	.000	.082	.858
	Teachers encouraged/discouraged going to college?	.054	3.507	.000	.057	.991
	How much have you heard about the Top 10% Rule?	.112	7.143	.000	.115	.929
2	**Level of math taken**	.059	3.506	.000	.057	.812
	Teachers encouraged/discouraged going to college?	.048	3.159	.002	.051	.988
3	**Teachers encouraged/discouraged going to college?**	.048	3.154	.002	.051	.988