The Impact of High Stakes Testing on Latina/o Students' College Aspirations

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Abstract

Recently a large emphasis has been placed on utilizing standardized tests as forms of assessment that are inextricably intertwined with high stakes (Nichols & Valenzuela 2013; McIntosh, 2012; Au, 2007). This juncture provides a critical crossroad to explore the implications of high stakes testing on a growing section of the student population. This study explores the influence high stakes testing has on Latina/o student aspirations and subsequent college enrollment. It quantitatively examines the critical juncture of high school exit and college access at a school district serving a predominately Latino population. The paper will critically examine the policy implications at the high school level influencing Latina/o student achievement and the transition to college with a specific focus on the influence high stakes testing has on their college aspirations. A discussion on the future role of high stakes tests and their unintentional but quite real consequences concludes the study.

Introduction

Political, economic, and social factors have contributed to the increasing reliance of the United States' education system on high stakes testing as a form of accountability since the implementation of the NCLB more than ten years ago (Au, 2009; Au, 2007; Grant, 2004). While a whole generation of students has gone through the American education system under this policy there has been little improvement in narrowing what is coined as the "achievement gap" between White and Latina/o students. Previous research has examined the influence of high stakes testing on curriculum, pedagogy, administrative pressures, and other aspects, yet the focus on student perspective and experience remains under-researched. In particular, the experiences that Latina/o students have with high stakes tests are critical to explore due to their increasing representation in the K-12 system nationwide and their continual underrepresentation in earning college degrees (Lee et al., 2011; Lopez & Fry, 2013).

Latino students are more likely to live in a state with standardized tests such as exit exams (Contreras, 2010). In addition, a reoccurring theme for Latino students is their low performance on these standardized tests. Latinas/os represent 53 percent of the California K-12 student population (California Department of Education, 2014), thus the state provides a model to explore college access issues. According to Contreras (2005), "California educates one out of every eight students in the nation and is the most diverse state in the union." In addition to California's large Latino population, it is one of the more heavily tested states in the nation, thus justifying our focus on California. This study seeks to further understand the relationships between exit exams and the college aspirations of Latina/o students. Through a review of literature and analysis of the context within a school district, this paper will problematize high-stakes testing and the role it has played in the college aspirations and transition for Latina/o

students. The research question guiding the study is: What effect does high stakes testing (CAHSEE) have on the college aspirations of high school seniors?

Literature Review

Latina/o Pipeline

When considering the Latina/o educational pipeline, out of 100 students that enroll in elementary school less than half (46) will graduate from high school. Out of those 46 only 26 will enroll in college, 9 of which will enroll in a 4-year college (Yosso & Solorzano, 2006). Given these dismal attainment numbers, it is important to understand the college choice process for Latina/o students while exploring the factors that influence their college aspiration and choice. It is critical to explore these factors in order to provide support and create just policies that will foster success for not only Latina/o students, but all students.

Latina/o students rely heavily on family and friends for information on colleges and largely value their opinions (Martinez, 2012;Perez & McDonough, 2008; Ceja, M., 2004). Non-familial networks also impact a student's college choice. Martinez (2012), found that neighbors, church members, and in one case a physician, served as social capital agents aiding in the college choice process of the Latina/o students interviewed. More specifically, 6 students (30%) referred to non-familial or school related individuals within their community as their sources of information.

Educational policies such as high school exit exams are also factors that influence students' access to higher education through increased dropout rates, limiting access to rigorous curriculum, and access to college-required courses (Nichols & Valenzuela 2013; Booher-Jennings, 2005, 2006; Valenzuela, 2005). High quality teachers and the expectations they have for their students also influences students' college choice process yet Latina/o students are less

likely to attend a school with highly qualified teachers (Contreras, 2011; Darling-Hammond, 1999). A college-going culture, school resources, and overall school environment also impact students' college aspiration. The factors described here are school-level factors but there is a need to understand larger, societal factors and how they trickle down to influence the individual student.

High Stakes Testing

Since the implementation of the National No Child Left Behind Act of 2001 (NCLB) there has been a strong emphasis placed on standardized tests as forms of assessment and accountability (California Department of Education, 2006). These standardized tests come in various forms including those with high stakes attached. They are used as tools to hold states, districts, schools, teachers, and students accountable for student achievement by attaching a consequence. For example, schools can be denied funding and students can be denied a high school diploma. A commonly used high stakes is a high school exit exam. Currently, 26 states require a form of standardized exam as a graduation requirement. These exams vary in format and can be either in the form of one comprehensive exit exam, multiple end-of-course exams, or both. End-of-course exams are tests required to receive credit for courses that are graduation requirements. Some states that require end of course exams include Arkansas, Indiana, and Maryland. California, Texas, and Minnesota are a few states that require a comprehensive exit exam. Massachusetts is an example of a state that requires both. It is important to note that only 12 states currently offer alternative forms of assessment, which often include scores from other high stakes tests such as SAT, ACT, and AP courses (McIntosh, 2012). With so few states offering alternative assessments many students are left with limited venues to demonstrate their academic knowledge in order to measure up to state standards. With such a large emphasis

placed on utilizing standardized tests as forms of assessment it provides many avenues to explore the implications of high stakes testing.

High-stakes tests are usually standardized tests that have a consequence attached to not performing well on them (Nichols & Valenzuela 2013; Reardon, et al., 2009; Au, 2007). The consequences of underperformance impact all stakeholders including students, teachers, and administrators. Some examples include grade promotion, graduation, teachers' salaries, and college entrance. While many researchers have found that high stakes testing hinders educational progress because it narrows curriculum and instruction, changes school climate, and allows for differential treatment based on performance on the exam (Nichols & Valenzuela 2013; Au, 2007; Booher-Jennings, 2005, 2006) there remains a strong reliance on them as a form of accountability.

Proponents of high stakes, standardized exams argue that this will ultimately lead to closing the achievement and opportunity gap that currently exists between minority students and their counterparts (i.e. ethnic, language, and economic minority students) by motivating students to do well given the goal of graduation while claiming to ensure qualified graduates for the workforce and college (Baker & Lang, 2013; Au, 2009, Vasquez Heilig and Darling-Hammond, 2008). While assessments are critical to understanding student achievement and measuring how well our current education system is working, attaching high-stakes to the test adds an additional element with implications that vary from low-stakes tests, such as those tests administered in class without consequences attached and are used to measure what students know in order to support students in the knowledge areas that they need help with. Opponents have argued that standardized tests, especially those with high stakes attached, do not adequately or fairly assess students achievement and lead to greater consequences such as increased drop out rates and as

Rodriguez (2014) coined as “Test Prep Pedagogy” in which schools change curriculum and practices based on what is being tested. Additionally, these negative implications of high stakes tests disproportionally affect minority students, students with disabilities, students that live in low-income areas, and students whose first language in not English (Garcia & Gopal, 2003). With approximately 80% of students of color living in states that require an exit exam or end of course exam for graduation, it is critical to explore how the implications of high-stakes tests impact students of color, specifically Latina/o students. In fact, the emphasis placed on high-stakes exams is adding to the educational inequities for Latino students in general and especially for those who are English learners (EL). (Menken, 2010;Garcia and Gopal, 2003) Moreover, the pressures associated with high-stakes tests have led some schools to manipulate student classifications to boost test scores, either by giving them the label of special education, classifying them as dropouts, or retaining the students in a grade-level so they would not take the exam (Vasquez Heilig and Darlings Hammond, 2008; McNeil, 2005; Figlio and Getzer 2002;). To understand the current and future context of high-stakes tests, it is important to understand the evolution of it while exploring the intentions of its creators.

The notion of high stakes and standardized testing has evolved throughout the years and continues to change. According to Carl A. Grant (2004), testing in general, can be traced back for centuries. He gives an example of Plato testing a young slave, Anytus, about his mathematical knowledge. He states, “however, in the early 1900s, social scientists and educators increasingly became interested in the science (the quantitative and measurable aspects) of education” (Grant, 2004, p. 4). As a response, the first intelligence test was created in 1905 by French psychologist, Alfred Binet, and was later revised in 1916. It is now commonly known as the IQ test (Grant, 2004; Lemann, 1999). The original intent of the test was to reserve higher

education opportunities for those individuals with high intelligence, as defined by test scores (Lemann, 1999). The IQ test set the precedent for using standardized tests to limit access to higher education.

Almost 20 years after the creation of the IQ test, Carl Campbell Brigham, a psychology professor at Princeton, created the Scholastic Aptitude Test (SAT). Similar to the IQ test, the SAT was created to predict a student's ability to learn and do well in college (Lemann, 1999; Hanson, 1993). The first test was administered in 1926, and since its initial implementation, some have argued that the test unfairly assesses certain student populations. Unlike the way it is used today, the SAT was originally used for scholarship selection and not admission (Lemann, 1999). Since then, standardized high-stakes testing has evolved and has transformed into part of a national agenda for educational reform.

The passage of the historic Brown vs. Board of Education in 1954, which was the first attempt to desegregate schools was an early attempt at educational equality (Contreras, 2011) exemplifies an increased role of the federal government over what was historically the states' responsibility. A short time later, in 1957 the launch of Sputnik raised a national level of competitiveness and sparked urgency to reform science education so that the United States could remain an international competitor in the sciences, specifically in the space sciences. This sense of urgency led to an increase in federal funding through the Office of Education's National Defense Education program. Sputnik sparked a concern that our country was falling behind others in the international race to the top. In 1965 the Elementary and Secondary Education Act (ESEA) was enacted and allowed for the federal government to allocate funds to help support students from low-income backgrounds as well as for students with limited English and bilingual students. The ESEA set the tone for the growing relationship between the federal government

and individual states' education systems. (Contreras, 2011)

The National Assessment of Educational Progress (NAEP), which dates back to 1969, was an attempt to measure student achievement through what is known as "The Nation's Report Card" and assessed students learning in various subjects. As a result, the first wave of exit exams started in the late 1970's-early 1980's and began as minimum competency exams. These exams were used to measure students' basic knowledge and were merely geared to ensure students fundamental skills. In 1983, as a response to the National Commission on Excellence in Education's report, "A Nation at Risk" there was a shift to more rigorous tests that measured higher standards. The report called for a raise in accountability and standards while creating an urgent concern that the nation's students were not meeting the high demands of the workforce and would not be able to fuel the American economy (Contreras, 2011). Similar to the urgency after the launch of Sputnik, The "Nation at Risk" report set the tone for the risk of "falling behind" other countries and in addition to raising accountability, there was an increase in graduation requirements and more rigorous classes. This is another example of an increase in federal funding to invest in education while increasing focus on standards.

In 1994 the Clinton administration enacted the Improving America's Schools Act (IASA), which required an annual student assessment and encouraged the creation of state-centered accountability systems but did not punish states for not creating such systems. Both the Nation at Risk report and the enactment of IASA set the foundation for educational reform and set the tone for the current landscape of educational accountability (Contreras, 2011). The minimum competency exams faded out, and in the late 90's-early 2000's, a new wave of exit exams were created. These exams included higher standards than before. The rationale for this increase in assessment was the need to create global workers so that the United States could be

competitive globally (Holme et.al., 2010). This shift of accountability, created by the past policies, set the tone for the creation and implementation of the national No Child Left Behind Act (NCLB) of 2001. This act was put into law in 2002 and was a top-down approach to accountability where the federal government gained stronger control over States' educational systems. As a response to NCLB, high school exit exams such as the California High School Exit Exam (CAHSEE) were created and implemented as a way comply with the accountability required by the act.

The CAHSEE was initially designed to measure the basic academic skills for all graduating high school students. According to the California Department of Education, the primary purpose of the CAHSEE is to significantly improve student achievement, which many believed would narrow the achievement gap. A close examination of the exam practices, however, suggests that the exam is not reaching its goal and there has been an increase in high school dropout rates for minority students (Reardon et al., 2009). For example, Rodriguez (2014) found that high school exit exams have shown to play a role in the dropout rate for students who underperform on the exam and according to the reports by the California Department of Education (2012) 78% of Latina/o students passed the English portion of the exit exam during their first attempt compared to 92% of their white peers. More importantly, Latina/o students underperformed on the exam at a higher rate than the state average. Holme et. al. (2010), found similar trends and explains that, "each of these studies has found that students who barely fail have a higher probability of dropping out than students who make it over the high-stakes hurdle" (p. 502). This phenomenon can be explained by assuming that these students drop out because they cannot pass the exam ultimately pushing out students without their diploma. Although this might be true in certain cases, this study suggests that the psychological effects of high stakes

testing play a major role in student motivation and self esteem, ultimately affecting their persistence in high school and post-secondary education. As Holmes et al., write, "most of these studies have found that students who fail exit exams experience adverse psychological consequences" (Holmes et al., 2010, p.503). This study found that there is an association between failing an exit exam and a significant increase in self-doubt about the possibility of graduation. Additionally, Baker and Lang (2013) found an alarming correlation between high school exit exams and incarceration rates, and although they do not desegregate by ethnicity, it is consistent with the school-to-prison pipeline (Wald & Losen, 2003) where educational policies such as high stakes tests push students out of school and into prisons. Given this reality, if students begin to doubt their abilities to graduate from high school based on their performance on a standardized test, it leads us to question how they doubt their abilities to go to college. Due to the numerous implications of high-stakes tests, there has been a strong opposition to using them for promotion and graduation.

Current Landscape

According to Ravitch (2010), NCLB represents a change in education in the United States that moved towards a strong focus on accountability. This change focused primarily on test scores as a measure of school quality and student achievement. This change towards a standardization of educational practices and outcomes has led to a shift of control of public schools from the state to the federal government (McNeil, 2005). Furthermore, accountability has shifted to the individual student and has created a standardization of education. McNeil (2000) argues that standardization reduces the quality of what is taught in schools while creating "inequities, widening the gap between the quality of education for poor and minority youth…" (p.3). She explains that the gap between students will increase the longer standardized controls

are in place which is contrary to what NCLB was supposed to do, which is to close the opportunity gap.

Current literature explores how high-stakes tests, and standardized systems of accountability, are presented in a way that gives the illusion that they are in place to benefit underrepresented students, but in reality they continue to reproduce social and economic inequality. Lemann (1999) supports this claim by arguing that the founders of standardized tests presented "the test as a scientific breakthrough meant to serve a high public purpose, and at the same time downplaying the impact of the score on the takers' lives" (p. 78). Currently, Latina/o students, especially those in low-income areas, face inequitable resources that adversely impact their schooling experience (Orfield & Lee, 2007), which is further impacted by high-stakes tests.

McNeil (2005) argues that the current era of accountability is an extreme form of centralization. The federal government controls the state standards and, through standardized tests that must be taken by all students, the federal government can assess and rate schools according to their standards. This sets up a type of hierarchy where school districts are responsible for the scores of schools, schools are responsible for teachers, and teachers are responsible for the success of their students, based on their scores (Vasquez Heilig and Darling-Hammond, 2008; McNeil, 2005). Additionally, the federal government controls funding for low-income schools, which allows them to use test scores to hold the schools accountable, using funding as a source of control. Additionally, federal funding is connected to performance on exams (Vasquez Heilig and Darling-Hammond, 2008). Government control of education contributes to political control of what students learn and how they are viewed by society. As Kettl (1998) writes, "performance measures and educational tests are not really about measurement. They are about political communication" (p. 47). Unfortunately, there are many

consequences of this type of political communication; many have a direct effect on student achievement.

Currently, there is a shift happening from NCLB to Common Core State Standards (CCSS) and testing. According to Au (2013), 43 states have adopted the CCSS and suggest that this change will lead to an increase in "restrictive high-stakes, standardized tests…" (p. 1) similar to those administered under NCLB. Again, with the goal of preparing students to be competitive in the global market, CCSS has further standardized the way states approach education (Common Core State Standards Website, 2015). Although the CCSS is in the early stages of implementation, there has been strong opposition to the creation and implementation of the standards. Furthermore, many researchers have argued against the continuation of the high stakes testing as forms of assessment (Ravitch, 2015; Au, 2013). In response to the continuation of the high stakes testing culture, many parents have had their children "opted out" of the exams as well as many school districts across the country (Ravitch, 2015). Given the larger societal pressures and switch to CCSS with the increase in high stakes tests, in addition to obstacles hindering the performance of Latina/o students on standardized tests, it is critical to explore the relationship between Latina/o students, testing, and post-secondary aspirations in order to minimize the negative unintended consequences.

Legal Battle

The legality of high school exit exams has been visited numerous times in courts throughout the country (Holme & Vasquez Heilig, 2012; Valenzuela, 2005). One of the first court cases to be heard was the *GI Forum et al. v. Texas Education Agency* in 2000. The argument of this case focused on the adverse effect that exit exams have on minority students. At

the time, 87% of students that did not pass the Texas Assessment of Academic Skills (TAAS) test were African American or Latina/o. Although the court agreed that there was an impact, it claimed that it was not enough to reach a constitutional level. Although the ruling in this case did not stop the use of high-stakes tests as requirements for graduation, it did spread awareness of the inequity and inspired the creation of a group called, Parents United to Reform TAAS. This group of community members paved the way for others to protest the use of these types of exams and the battle against high stakes testing continues.

Conceptual/Theoretical Framework

After reviewing the literature regarding high stakes testing and exploring its origins and future impact on the American educational system, we have created a framework to conceptualize how Latina/o students are experiencing high stakes tests. The primary theory used to explain the situation is Claude Steele's theory of Stereotype Threat. This theory examines the effects of stereotypes on group identity in relationship to students' academic performance. He argues that simply being aware of certain stereotypes can negatively affect a student's performance, specifically on standardized testing. His theory focuses on women in math and African Americans in general academia. The theory predicts that because of the negative stereotypes about these two groups, they will internalize these stereotypes and in turn underperform on standardized tests. In an article called, "A Threat in the Air: How Stereotypes Shape Intellectual Identity and Performance" Steele writes,

> Those who have become domain identified face the further barrier of stereotype threat, the threat that others' judgments or their own actions will negatively stereotype them in the domain. Research shows that this threat dramatically depresses the standardized test performance of women and African Americans who are in the academic vanguard of their groups." (Steele, 1997, p.613)

This theory can also be applied to other historically marginalized groups such as English Learners, certain immigrant groups, and students from low-income backgrounds. In the article, "Extending the Concept of Stereotype Threat to Social Class: The Intellectual Underperformance of Students from Low Socio-economic Backgrounds" by Jean-Claude Croizet and Theresa Claire (1998), the authors use stereotype threat as a way to explain the underperformance of students from low socio-economic backgrounds on intellectual tasks. The authors write, "According to these theories, stereotypes produce a hierarchy of expectations and treatment and an allocation of resources that discriminate against individuals from low socio-economic backgrounds" (p. 598). Given that the allocation of resources depends on funding, it creates an unequal playing field for students from low-income areas, ultimately creating a hierarchy of expectations and stereotypes that students internalize while reproducing the same results as expected of them. If we can reframe these expectations and the allocation of resources, we can minimize the effects on student success that would help lessen the pre-existing opportunity gap.

This cycle of repeated underperformance also influences teachers' view of students from certain populations. As Croizet and Claire (1998) discuss, poor students are treated worse than those in the middle class, and this sort of treatment leads to students internalizing their teachers' lowered expectations of them. The authors write, "These researchers have emphasized that in some situations, awareness of the stereotypes can influence targets to behave negatively, even in the absence of any concurrent negative treatment" (Croizet & Claire, 1998, p. 598). By understanding this phenomenon of continuous mistreatment of underrepresented students and the manifestation of this onto their performance on standardized tests, we can conclude that these exams merely contribute to the underperformance in school while contributing to the opportunity gap.

In an article by Holmes, et al., (2010) discussing the effects of exit exams, they discuss a 2009 study by Reardon, et al., in which stereotype threat theory is used to compare students taking the California High School Exit Exam (high stakes) with their test scores on the low-stakes California Standards test. The authors write, "Consistent with the stereotype threat hypothesis, they found low-achieving Blacks, Hispanics, and English learners underperformed on the CAHSEE by 15.6, 10.8, and 8.2 percentage points, respectively…" (p. 488). Even when controlling for outside factors, this study showed how the same students performed worse on standardized tests that had high stakes associated with it. Reardon et al. (2009) also found that the exit exam had a significant negative effect on graduation rates. They write, "We estimate that graduation rates declined by 3.6 to 4.5 percentage points as a result of the exit exam policy. Moreover, we find that these negative effects were concentrated among low-achieving students, minority students, and female students" (p. 1). These findings support the argument that standardized tests are not improving the opportunity gap, as was the intended purpose for these types of accountability mechanisms.

In addition to the performance on standardized tests, stereotype threat explains how the performance on these exams can influence student identity. Steele writes, "The theoretical focus is on how societal stereotypes about groups can influence the intellectual functioning and identity development of individual group members (Steele, 1997, p.613). This is a societal consequence of stereotypes and standardized testing. When students internalize these stereotypes, which are reaffirmed by the high stakes associated with standardized tests, they will not reach their full potential in society because they have been taught that they cannot succeed.

Using Stereotype Threat it is possible to analyze students' experiences with the CAHSEE. An important outcome of this analysis might be to better understand how students'

sense of self is directly related to their achievement on the exam. Females and ethnic minorities are at a disadvantage when taking the exam because of the perceived stereotype that they do not perform well in certain academic subjects. This leads to lower performance on the exam, which in turn might negatively affect their self-esteem and their drive to pursue higher education.

Methodology

Data Sources

The data for this study originated from a larger district-level database that includes the six high schools further considered in the present study. Three primary sources comprise the current investigation emerging from a "post graduate" survey, the CAHSEE student report, and each individual student's academic curriculum. The Sunshine High School District collected data on the Class of 2014 in July 2014. The cohort consisted of 2,991 seniors. The six high schools that make up the district are: Community High School, Florence High School, El Sol High School, Paloma High School, Sierra High School, and Whitwood High School. Florence High School will only be included at the descriptive level analysis, and not at the inferential level. This school is a continuation high school and not comparable to the other five high schools within the school district.

The school district is situated in the state of California. It serves a predominately Latino student population. Table 1 summarizes the characteristics of each of the high schools in the district. All of the high schools enroll a Latino majority ranging from 74% to 95%. The next largest racial group is White students ranging from 2% to 20%. With the exception of one high school, three-quarters of the students in the district come from socioeconomically disadvantaged backgrounds.

Each year the graduating seniors complete a survey indicating their plans after high school. For the Class of 2014 approximately 85% indicated that they plan to enroll in a trade school, community college, or four-year college/university that subsequent fall of 2014. More than half of the graduating seniors (54%) aspired to enroll in a community college while 28% intended to enroll in a four-year college or university. The aggregated totals per school are presented in Table 2.

Measures (Variables)

A limited number of variables were available to examine the relationship between high stakes testing, a student's grade point average, and their subsequent collegiate aspirations. After compiling the various data sources together, five variables were identified to include in the analysis. They include: CAHSEE ELA score, CAHSEE Math score, cumulative grade point average, number of attempts in taking the CAHSEE ELA exam, and number of attempts in taking the CAHSEE Math exam.

Data Analysis

Several layers of analysis were conducted to help answer the research question posed. First, descriptives were compiled to help understand the context of the educational environment taking place within the Sunshine High School District. Student enrollment broken down by grades, race/ethnicity of the student body, low SES, English language learners, students with disabilities, and percent of students proficient in the three exams were compiled in Table 1. The aspirations of the senior cohort are summarized on Table 2. Correlations were then run to further tease out the strength of the relationships between variables. Those results are presented in Table 3. The moderately strong (and negative) relationship between each of the test scores and the

number of attempts pointed to an unexpected finding. How can a student actually score worse with each subsequent attempt? An ad hoc analysis of this phenomenon was then conducted to investigate this relationship. Table 4 presents the relationship between the number of attempts and the average CAHSEE test score for both ELA and Math. Finally, two multiple regressions were conducted to predict the CAHSEE ELA score and the CAHSEE Math score. Table 5 and 6 respectively summarize those results.

Limitations

The most impactful limitation on this study was the inability to longitudinally match up data at the student level with their subsequent post-high school plans. The information from the post graduate survey was only available at the high school level and not at the student level. In other words, we were not able to link the student's individual test scores with their collegiate plans. This limitation stemmed from the school district site not collecting this information on an individual basis but rather only in the aggregate. A future follow-up with National Student Clearinghouse data (for individual enrollment information for fall of 2014) will allow the longitudinal connection to this data.

Similarly, student-level demographics did not include information on an individual's race/ethnicity or gender. Therefore analyses focusing on these two facets of the student population were not possible. Previous studies demonstrate disparate effects of high stakes testing along the lines of gender (Steele, 2007) and race (Au, 2008;). Unfortunately this study could not examine the effects of the CAHSEE test on any student background characteristics. Those reported here (Table 1) are only in the aggregate at the high school level.

This school district in the near future will be moving away from the CAHSEE exams and will be implementing the Common Core State Standards. Therefore the results of this study will

not directly inform the school district's future policies and procedures. Although, we do believe that the concept of high stakes testing and the effects that it has on high school students will continue to permeate through whatever the next iteration of policy and testing is implemented.

Finally, the study takes place in one school district within the state of California. While it will be difficult to generalize these results to a national audience, it does provide insight on how high stakes testing influences the academic and aspirational journey of our youth. The study is uniquely situated within a Latino-majority school district; however given the increase in current demographics many other school districts will become Latino-majority in subsequent years.

Results

District-Wide Snapshot

The high schools within the Sunshine High School District vary significantly in size. The smallest is the continuation high school with only 632 students enrolled (Table 1). The largest is Community High School with over 3,000 enrolled students. The smallest of the five comprehensive high schools enrolls 1,395. As stated earlier, the largest racial/ethnic group is Latino followed by Whites. Judging from the composition of the students in the rest of the district, the population is not very diverse. The next largest representation at one high school is 3% for Asians, 1.6% for African Americans, and 1.5% for Filipinos. The remaining racial/ethnic groups constitute less than 1% on their respective campuses.

El Sol High School stands out from the remaining schools in the district. It has the largest enrollment of White students (20%); inversely the smallest enrollment of Latino students (74%). It also has a lower percentage of students who come from socioeconomically disadvantaged backgrounds (only 49%). It also has the least amount of English language

learners and reported students with disabilities. Lastly, it also counts with the highest percentage of students proficient in English Language Arts and History/Social Sciences.

Senior Class Cohort

The senior class profile also demonstrates differences across high schools. Table 2 outlines the aspirations of the graduating class. The categories reported are expected enrollment in four-year colleges and universities, community colleges, trade schools, military, joining the workforce, unknown, and other. Only for the continuation high school do the categories of 5th year senior and adult high school become relevant. Across the board the next stage in the lives of these students is expected to take place in community colleges. More than half of all seniors in this cohort anticipate enrolling in a two-year college. A notable amount from Florence High School (7%) plan to enroll in a trade school. The rest of the senior class anticipating this journey varies from 2% to 4%. The future plans of the next largest group of seniors includes attending four-year institutions. The percentages for each school aspiring toward this goal ranges from a low of 25% to a high of 41%. Within this group of students, the largest expected enrollment will be towards the California State University system (42%-70%). About a quarter of the remaining students planning to attend four-year postsecondary institutions will either attend 1) a University of California campus or 2) a Private or out-of-state college or university.

Relationships between Variables

Prior to developing predictive models of CAHSEE test scores, we first had to examine the relationships between variables. The five variables included in the correlation analysis (Table 3) are: CAHSEE ELA score, CAHSEE Math score, cumulative grade point average, number of attempts in taking the CAHSEE ELA exam, and number of attempts in taking the

CAHSEE Math exam. The strongest correlation (.686) is found between the scores of both CAHSEE high stakes tests. This means that if a student achieves a certain score on one of the exams, they are very likely to receive a similar score for the second exam. The next moderately strong relationships are found between an individual's grade point average and each of the exams. Interestingly GPA has a stronger relationship with the Math exam (.635) rather than the English Language Arts score (.581). A moderate relationship exists between the number of attempts in order to pass the exam between both the Math and ELA CAHSEE (.513). A modest (but negative) relationship is evidenced between the number of attempts and each of the exams (range between -.348 and -.397). This finding illustrates that as students make more attempts at passing each of the exams; their scores are likely to decrease (thus the negative relationship). This particular set of correlations triggered subsequent ad hoc examinations between the number of attempts and CAHSEE scores (further discussed below). Finally, there was a weak (and negative) relationship between cumulative GPA and the number of attempts (-.195 and -.222). This last finding makes sense. The higher the GPA, the lower the number of attempts expected to pass the test. Or conversely, a student with a higher number of attempts will most likely have a lower GPA.

As mentioned above, we wanted to further examine the negative correlations between test scores and number of attempts. In order to understand what is happening with the student data for these variables we wanted to see if there was a clear pattern or trend with the number of increased attempts for both CAHSEE exams. Table 4 shows the average test score along with the number of attempts (and the number of seniors within each category). The vast majority of students were able to successfully pass the exam on the first try. A score of 350 is a passing score. Through the first four attempts there is a clear decline in the average score for both

exams. This is counter to what is expected. With each additional time taking the same test, students are likely to become familiar with the format and are more likely to score higher. For this group of seniors in California, that is not the case. As Table 4 demonstrates, each additional attempt yielded a lower score. When we get to attempt number 5 there is a slight increase in the average score. This can be explained due to the low number of students within each subsequent attempt. When the sample size gets smaller and smaller, the average is more susceptible to outliers. Statistically speaking, a sample size of 15 (CAHSEE ELA) and 4 (CAHSEE Math) becomes less reliable than the sample sizes in the previous four attempts.

Predictive Models

The final set of analyses for this study included two multiple regressions predicting both the CAHSEE English Language Arts score and the CAHSEE Math score. Table 5 summarizes the model predicting the ELA score. The most influential predictor is the CAHSEE Math score (standardized Beta of .432). The cumulative GPA has a little more than half the predictive power of the Math score (.276) when utilized to predict the ELA score. The number of attempts also negatively predicts the overall CAHSEE ELA score (-.157). It is also the weakest predictor in the model—however still very much statistically significant. The overall model with the three predictors explains about half of the variance ($R^2 = .492$) in predicting a student's CAHSEE ELA score.

When considering the dependent variable of CAHSEE Math score, the power of the predictors varies in the model as compared to the coefficients in the previous analysis. As indicated on Table 6, the ELA score is still the most influential (standardized Beta of .403). However the cumulative GPA in this model has more predictive power (.378) than in the one

predicting ELA. In other words, a student's GPA has more of an effect on their CAHSEE Math score than it does on their CAHSEE ELA score. Both the ELA score and the GPA have similar influence in predicting the Math score. The number of attempts also negatively predicts the Math score (-.099). This is a lower Beta than what mirrors the independent variables in the previous model. The overall model explains more than half of the variance ($R^2 = .531$) when predicting a student's CAHSEE Math score.

Discussion

Findings from this study confirm what previous scholars have discovered. As is represented in current literature, the students in this study were more likely to seek enrollment at community colleges (Yosso & Solorzano, 2006; Solorzano, et. al., 2005). This is particularly vital for Latina/o students who enroll in community colleges at higher rates than other racial/ethnic groups yet do not successfully transfer to a four-year college despite their initial aspirations to complete a Bachelor's degree.

Another interesting phenomenon is also simultaneously occurring for those few students that decide to pursue enrollment in the four-year sector. Of those few seniors that aspire to comprehensive colleges and universities, they are still more likely to attend a California State University campus. Very few of the seniors in this study plan to attend a University of California campus, a private institution, or a college or university situated outside of their home state. High school seniors not attending the type of institution they are eligible to enroll in (i.e. more selective) aligns with the concept of "under-matching" (Bowen, Chingos & McPherson, 2009).

As students require additional testing attempts to pass the CAHSEE exams, their score is most likely going to decline with each subsequent attempt. This is consistent with what we

know about stereotype threat (Steele, 2007). In this case, stereotype threat can be used to examine the cycle of underperformance by conceptualizing the idea that not passing the exam leads to a negative stereotype about the individual's academic capabilities, thus each time the student does not pass the exam they further internalize these negative feelings of themselves which are manifested in the test scores.

Lastly, the intertwined intricacies of both tests cannot be stressed enough. The CAHSEE English Language Arts exam scores and the CAHSEE Math exam scores are highly correlated with each other; meaning that if a student does really well on one, they will most likely do really well on the other one. Conversely, if a student does not pass one, they are more likely to not pass the other. In essence, these high school students are being judged twice when statistically speaking we can predict the results of the second assessment based on the first. As discussed throughout this paper, the negative consequences of succumbing to a high stakes test (psychologically, emotionally, etc.) are felt doubly when in reality one exam would suffice. The results of this study also help to inform recommendations and implications within the research, policy, and practice realms.

Implications

Research

It is critical to explore the reasons why Latina/o students continue to underperform on high stakes tests such as the California High School Exit Exam. In particular, research should aim to understand the factors that influence the cycle of underperformance and the negative correlation between exam attempts and test scores. These issues are critical to explore on a larger scale so that educators can utilize the findings to create best practices that will minimize the negative implications of high stakes tests in general and on Latina/o students college aspirations

in particular. Expanding this study beyond just one school district in California to include all of the state will provide a really powerful state-of-the-state snapshot highlighting the climate around high stakes tests. Furthermore, cross state comparison can also prove to be invaluable to help answer the question: Do high stakes testing across the nation impact students' college aspirations similarly? Future research should also employ qualitative measures in order ensure a deeper understanding of students' experience with high stakes tests and to understand, from the students' perspective, the impact high stakes tests have on their college aspirations.

Policy

The findings of this study can be used to inform policy changes at the local, state, and national levels. It is imperative to understand the unintended consequences and policy implications of high stakes tests specifically for Latina/o students because demographic changes predict that Latinas/os will become the demographic majority in many states. In March of 2014, Latinos in California became the majority of the state. They accounted for 39% of the population while non-Hispanic Whites remained at 38.8%. California was the second state to undergo this change after New Mexico. Considering the increasing trend of Latino population demographics, more states will soon become Latino-majority as well. Thus, it is vital to understand what systematic policies are currently in place within our educational system that hinder the success (and by extension the future) of our nation.

Practice

Most urgently, the findings from this study can inform practice and instruction for high schools that are administering high stakes tests such as the California High School Exit Exam. Given this information, schools can better understand the phenomenon that is occurring in their schools and can address the problems in a timely and effective manner. Additionally, teachers

can use this information to understand the negative consequences in order to best approach the way they deliver information about the exam and how they frame it to students. It is also vital to make the connection for administrators and those in the decision-making roles as to how this practice is detrimental to a significant majority of high school students. What is framed as an individual student evaluation has far-reaching tenets at the high school, school district, local, state, and national level.

References

Au, W. (2007). High-stakes testing and curricular control: A qualitative metasynthesis. *Educational Researcher*, *36*(5), 258-267.

Au, W. (2009). *Unequal by design: High-stakes testing and the standardization of inequality*. New York, NY: Taylor & Francis.

Au, W. (2013). Coring social studies within corporate education reform: The Common Core State Standards, social justice, and the politics of knowledge in US schools. *Critical Education*, *4*(5), 1-14.

Baker, O. & Lang, K. (2013). *The effect of high school exit exams on graduation, employment, wages and incarceration* (No. w19182). Cambridge, MA: National Bureau of Economic Research.

Booher-Jennings, J. (2005). Below the bubble: "Educational Triage" and the Texas Accountability System. *American Educational Research Journal*, *42*(2), 231-268.

Booher-Jennings, J. (2006). Rationing education in an era of accountability: The push for accountability was originally cast as a way to ensure that schools would leave no child behind. *Phi Delta Kappan*,*87*(10).

Bowen, W.G., Chingos, M.M. & McPherson, M.S. (2009). *Crossing the finish line: Completing college at America's public universities*. Princeton, NJ: Princeton University Press.

California Department of Education. (2006, 2012, 2014). *DataQuest* [datafile]. Retrieved from *http://dq.cde.ca.gov/dataquest*.

Ceja, M. (2006). Understanding the role of parents and siblings as information sources in the college choice process of Chicana students. *Journal of College Student Development*, *47*(1), 87-104.

Common Core State Standards Initiative. (2015). Website. Retrieved from http://www.corestandards.org.

Contreras, F.E. (2005). Access, Achievement, and Social Capital: Standardized Exams and the Latino College-Bound Population. *Journal of Hispanic Higher Education*, *4*(3), 197-214.

Contreras, F.E. (2010). The role of high-stake testing and accountability in educating Latinos. In E. G. Murillo Jr, S. A. Villenas, R. Trinidad Galván, J. S. Muñoz, C. Martínez & M. Machado-Casas (Eds.), *Handbook of Latinos and education: Theory, research, and practice* (pp. 194-209). New York, NY: Routledge.

Contreras, F.E. (2011). *Achieving equity for Latino students: Expanding the pathway to higher education through public policy*. New York, NY: Teachers College Press.

Croizet, J.-C. & Claire, T. (1998). Extending the concept of stereotype threat to social class: the intellectual underperformance of students from low socioeconomic backgrounds. *Personality & Social Psychology Bulletin*, *24*(6), 588-594.

Darling-Hammond, L. (1999). *Teacher quality and student achievement: A review of state policy evidence*. Seattle, WA: Center for the Study of Teaching and Policy, University of Washington.

Figlio, D. N. & Getzer, L. S. (2002). *Accountability, ability, and disability: Gaming the system?* Cambridge, MA: National Bureau of Economic Research.

Garcia. P.A. & Gopal, M. (2003). The relationship to achievement on the California high school exit exam for language minority students. NABE Journal of Research and Practice, 1(1).

Grant, C. A. (2004). Oppression, privilege, and high-stakes testing. *Multicultural Perspectives, 6*(1), 3-11.

Hanson, F. A. (1993). *Testing testing: Social consequences of the examined life*. Berkeley:

University of California Press.

Holme, J. J., Richards, M. P., Jimerson, J. B., & Cohen, R. W. (2010). Assessing the effects of high school exit examinations. *Review of Educational Research, 80*(4), 476-526.

Holme, J. & Vasquez Heilig, J. (2012). High stakes decisions: The legal landscape of gatekeeping exit exams and the implications for schools and leaders.*Journal of School Leadership*, *22*(6), 1177-1197.

Kettl, D. (1998). *Reinventing government: A fifth-year report card.* Washington, DC: The Brookings Institution.

Lee, E. T., & Wang, J. W. (2013). *Statistical methods for survival data analysis*. Hoboken, NJ: John Wiley & Sons.

Lee, J.M., Contreras, F., McGuire, K.M., Flores-Ragade, A., Rawls, A., Edwards, K., & Menson, R. (2011). *The college completion agenda: 2011 progress report. Latino edition*. New York, NY: College Board Advocacy & Policy Center.

Lemann, N. (1999). *The big test: The secret history of the American meritocracy.* New York, NY: Farrar, Straus & Giroux.

Lopez, M.H., & Fry, R. (2013). *Among recent high school grads, Hispanic college enrollment rate surpasses that of Whites*. Pew Research Center. Retrieved from: http://www.pewresearch.org/fact-tank/2013/09/04/hispanic-college-enrollment-rate-surpasses-whites-for-the-first-time

Martinez, M. A. (2012). Wealth, stereotypes, and issues of prestige: the college choice experience of Mexican American students within their community context. *Journal of Hispanic Higher Education*, *11*(1), 67-81.

McIntosh, S. (2012). *State high school exit exams: A policy in transition.* Center on Education Policy: Graduate School of Education and Human Development, The George Washington University.

McNeil, L.M. (2000). *Contradictions of school reform: Educational costs of standardized testing*. New York, NY: Routledge.

McNeil, L. (2005). Faking equity: High-stakes testing and the education of Latino youth. In A.Valenzuela (Ed.), *Leaving children behind: How "Texas-style" accountability fails Latino youth* (pp. 57-111). Albany: State University of New York Press.

Menken, K. (2010). NCLB and English Language Learners: Challenges and consequences. *Theory into Practice, 49*(2), 121-128.

Nichols, S. L., & Valenzuela, A. (2013). Education policy and youth: Effects of policy on practice. *Theory into Practice*, *52*(3), 152-159.

Orfield, G., & Lee, C. (2007). *Historic reversals, accelerating resegregation, and the need for new integration strategies*. UCLA: Civil Rights Project/*Proyecto Derechos Civiles*.

Perez, P.A. & McDonough, P.M. (2008). Understanding Latina and Latino college choice: a social capital and chain migration analysis. *Journal of Hispanic Higher Education*, *7*(3), 249-265.

Ravitch, D. (2010). *The death and life of the great American school system: How testing and choice are undermining education*. New York, NY: Basic Books.

Reardon, S. F., Atteberry, A., Arshan, N., & Kurlaender, M. (2009). *Effects of the California High School Exit Exam on student persistence, achievement, and graduation* (Working Paper 2009-12). Stanford, CA: Stanford University, Institute for Research on Education Policy & Practice.

Rodriguez, L. F. (2014). *The time is now: Understanding and responding to the Black and Latina/o dropout crisis in the U.S*. New York, NY: Peter Lang Publishing Inc.

Solorzano, D., Villalpando, O., & Oseguera, L. (2005). Educational inequities and Latina/o undergraduate students in the United States: A critical race analysis of their educational progress. *Journal of Hispanic Higher Education, 4*(3) 272-294.

Steele, C. M. (1997). How stereotypes shape intellectual identity and performance. *American Psychologist 52*(6), 613-629.

Valenzuela, A. (2005). *Leaving children behind: How "Texas-style" accountability fails Latino youth.* Albany, NY: State University of New York Press.

Vasquez Heilig, J. & Darling-Hammond, L. (2008) Accountability Texas-style: The progress and learning of urban minority students in a high-stakes testing context. *Educational Evaluation and Policy Analysis, 30*(2), 75-110.

Wald, J., & Losen, D. J. (2003). Defining and redirecting a school-to-prison pipeline. *New Directions for Youth Development*, 99, 9-15.

Yosso, T. J., & Solorzano, D. (2006). *Leaks in the Chicana and Chicano Educational Pipeline. Latino Policy and Issues Brief, no. 13*. Los Angeles: UCLA Chicano Studies Research Center.