

CONFERENCE DRAFT

Secondary to Postsecondary Transitions for Youth in San Francisco Unified School District

Oded Gurantz
Rebecca A. London

John W. Gardner Center for Youth and Their Communities
Stanford University

October 20, 2010

Contact:
Oded Gurantz
505 Lasuen Mall
Stanford, CA 94305
Phone: 650-724-2810
ogurantz@stanford.edu

This paper was prepared for the Association for Public Policy Analysis and Management Annual Conference in Boston, November 4, 2010. The study was funded by a Communities Learning in Partnership (CLIP) planning grant from the Bill & Melinda Gates Foundation to the City and County of San Francisco. We thank our partners in the San Francisco Mayor's Office, San Francisco Unified School District, and City College of San Francisco for collaborating with us on this project.

Introduction

Earning a postsecondary degree yields significant future economic benefits, yet bachelor and associate degree attainment rates in the United States have remained stagnant over the last ten years. Educators and policy makers are increasingly turning to data to help them better understand students' academic trajectories and create policies to improve their educational attainment. Many states have developed or are in the process of developing longitudinal data systems that allow them to track the academic progress of students through their elementary and secondary experiences and, in some cases, into their postsecondary schooling as well. In states without statewide longitudinal data systems, such as California, some educators and policy makers are initiating local partnerships, usually in collaboration with universities and researchers, to link secondary and postsecondary data and identify solutions designed to improve the educational attainment of their own local youth.

This paper focuses on one such collaboration and the linked longitudinal data and analyses that resulted from it. The study resulted from the desire of leadership at San Francisco Unified School District (SFUSD), the City College of San Francisco (CCSF), and the City and County of San Francisco, to create a partnership among relevant agencies to ensure that students exiting San Francisco's educational systems are equipped for and successful in their postsecondary pursuits. Using data from the Youth Data Archive (YDA), which individually links data across systems and over time in a variety of Bay Area communities, we examine student trajectories from high school to postsecondary education in San Francisco. Partners from SFUSD, CCSF, and the City came to the John W. Gardner Center for Youth and Their Communities (JGC) in order to use the YDA to examine, for the first time, the academic trajectories of San Francisco's public school students after high school. These data were then

used to create a set of institutional changes that helped San Francisco to receive a three-year grant to implement the proposals designed during the planning process, with the JGC continuing as a key research partner through the YDA. In addition to presenting findings on students' academic trajectories, this paper highlights the role that data played in providing a forum for city agencies to come together and discuss institutional practices. We also discuss the formalization of the partnership between SFUSD and CCSF through the creation of a set of publicly available indicators and benchmarks.

Literature

Earning a postsecondary degree, including a bachelor degree, associate degree, or workforce-applicable certificate, has been shown to provide significant economic benefits (Pascarella and Terenzini 2005; Heckman and Krueger 2002; Kane and Rouse 1995). Studies point to a widening gap in the earnings differential between having a postsecondary degree and a high school diploma, highlighting the importance of postsecondary education (Pascarella and Terenzini 2005; Baum and Ma 2007). Perhaps surprisingly then, bachelor and associate degree attainment rates for the U.S. population ages 25 to 29 have remained stagnant over the last ten years (Figure 1). Since the mid-1970s, the percentage of individuals aged 25 to 29 with a bachelor degree increased by approximately six to eight percentages points, but this increase was almost entirely due to changes in the educational attainment of females. Bachelor degree attainment rates for males have not changed significantly in thirty years.

Educators and policy makers are increasingly turning to data to help them better understand students' academic trajectories and to suggest policy prescriptions intended to increase their educational attainment. Data infrastructures that include extensive information

about students' demographic backgrounds and academic histories can be exploited to assess the factors that help students move successfully through key transition points in the education pipeline, such as enrolling in college, transferring from two-year to four-year colleges, or entering the workforce (L'Orange and Ewell 2007). Understanding student pathways from secondary to postsecondary education is critical for creating programs and policies that prepare all youth – and especially high-risk or disadvantaged youth – for productive adulthood.

Researchers have identified a number of individual-level factors associated with postsecondary completion rates. Academic preparation in high school, as measured by GPA and standardized test scores, has been shown to decrease the need for remediation and increase the likelihood that a student completes a postsecondary education (Geiser and Santelices 2007; Wirt et al. 2004). On average, ethnic minorities, especially African-Americans and Latinos, and students with lower socio-economic status complete high school less academically prepared than their peers (Roderick, Nagaoka, and Coca 2009; Baum and Ma 2007; ACT 2009), but these students also face additional barriers to postsecondary attendance and completion. They are more likely to attend high schools that do not offer the necessary coursework to qualify them for a competitive four-year institution and may have less non-academic resources (e.g. college counselors, supportive peer networks) that are needed to help guide them towards a postsecondary education (Venezia and Kirst 2005; Beattie 2002). As a result of these differences, ethnic minority and low-income students are less likely than their peers to attend a postsecondary institution or, of those who do attend, more likely to attend a two-year institution over a four-year institution, impacting their likelihood of obtaining a bachelor degree (Aud et al. 2010; Bowen, Chingos, and McPherson 2009; Long and Kurlaender 2009; Knapp, Kelly-Reid, and Ginder 2009). However, community colleges play a vital role in workforce development by

offering vocational training in high-growth fields and allowing students to take foundational courses that allow them to transfer to a four-year institution (Pascarella and Terenzini 2005; Lacey and Wright 2009).

Additional factors have a strong influence on postsecondary completion rates, even after accounting for differences in preparation at the high school level. Taking advantage of financial aid and enrolling full-time have been linked to higher levels of student persistence and degree attainment, but many students choose to enroll part-time while also working substantial amounts, perhaps from fear of accumulating debt or incorrectly valuing present and future financial trade-offs (Burdman 2005; King 2002). Students may also lack financial aid because they missed key deadlines or were deterred by the complexity of applications, especially in California where students take less advantage of state and federal aid than students in other large states (Bettinger et al. 2009; Zumeta and Frankle 2007).

Postsecondary institutions can also help students lower expenses and minimize time-to-degree by facilitating student enrollment in the courses that will most quickly lead them to their educational and career goals (Adelman 2005; Burdman 2005). This is especially important in an era of budget cuts and cancelled courses that can leave students frustrated and prone to dropping out (Lewin 2010; California Community College Chancellor's Office 2010).

States are beginning to develop K-16 (Kindergarten to postsecondary) systems in order to monitor student achievement and identify which factors are associated with postsecondary completion (Haskins and Kemple 2009; Venezia, Kirst, and Antonio 2003; Data Quality Campaign 2009). California does not currently have a comprehensive system in place that

follows students into their postsecondary educations,¹ though some limited data sharing exists between select institutions.² Texas and Florida, which have systems that follow students into their postsecondary careers, have begun to publish annual reports detailing the pathways and outcomes of high school graduates attending community colleges and state universities (Texas Higher Education Coordinating Board 2009; Florida Department of Education 2009).

Without a state-level system that links students' secondary and postsecondary enrollment, communities have begun to engage in local data-sharing efforts. There are many potential advantages to forging local partnerships. Policy recommendations from studies at the state level tend to be more general, which makes them challenging for local or state policymakers and educators to use findings for their own planning. Local agencies and organizations may collect more detailed information than is required for state reporting purposes and have more flexibility in altering their data collection practices, and these data have the possibility of providing more nuanced findings for the local area. By involving local officials, the research questions asked are attuned to respond to specific needs, and research findings are immediately placed into the hands of decision-makers who may be best positioned to move policy levers to enact change (London and Gurantz 2010; Ostrom, Lerner, and Freel 1995; Suarez-Balcazar et al. 2004). These changes may occur more quickly and directly on a local level than is feasible on a state level.

¹ One precursor to the development of any K-16 system is the ability to follow students across high schools within a state. California's system for high school tracking, the California Longitudinal Pupil Achievement Data System (CALPADS), was fully implemented only in the 2009-10 school year.

² In California, these include CCCTran, an internet-based system for community colleges and other institutions of higher education to quickly transmit academic transcript data, and the California Partnership for Achieving Student Success (Cal-PASS), which is a limited and voluntary tracking system that collects K-16 data from a number of California communities.

Secondary to Post Secondary Partnership in San Francisco

In November 2009, the City and County of San Francisco received a Bill & Melinda Gates Foundation Communities Learning in Partnership (CLIP) planning grant that asked “education, business, and civic leaders [to] work together to coordinate and streamline the guidance and services young people need to get into, and through, college” (Bill & Melinda Gates Foundation 2009). This one-year planning grant followed significant progress in San Francisco toward improving the postsecondary outcomes of public school students, including: new strategic plans from both SFUSD and CCSF, the SF Promise initiative guaranteeing admission and financial aid to students who met the requirements for entrance to San Francisco State, and other postsecondary-focused foundation-funded grants. The CLIP grant created an opportunity to place these different projects under the umbrella of the San Francisco Partnership for Postsecondary Success (PSP), whose executive committee included the mayor, the chancellor of CCSF, the superintendent of SFUSD, and key personnel from the Departments of Workforce Development (OEWD) and Children, Youth, and Families (DCYF), the Mayor’s Education Advisor and Director of Interagency Planning, the Chamber of Commerce, and the Youth Council of the Workforce Investment Board. The goal of the PSP was to focus the strategies set about in these multiple projects into a unified approach that advanced the city’s agenda of improved postsecondary completion.

As part of the CLIP planning grant, PSP committed to using data to help inform their decisions. They opted to partner with the John W. Gardner Center for Youth and Their Communities (JGC) at Stanford University in order to use the Youth Data Archive (YDA), discussed in more detail below, to link their own data across agencies and infuse the findings into their decision-making process. The focus during the planning process was to examine three

key milestones: (1) How many ninth grade SFUSD students graduated from high school; (2) How many high school students attended a postsecondary institution; and (3) How many students who attended a postsecondary institution received some form of postsecondary credential. The JGC also examined where data might point to programmatic or policy changes that could improve the postsecondary educational attainment for youth.

PSP representatives participated in the YDA process, which asks partners to convene, agree upon research questions, and respond to the subsequent findings, all in order to make data-driven decisions about policies and programs for youth. This is an iterative process of question formation and resolution that strives to be responsive to “real world” timelines that require a quick turnaround of research findings. We linked student records from SFUSD to those from CCSF and presented initial findings on students’ academic trajectories (high school graduation and postsecondary attendance and completion). Participants then posed and prioritized a series of research questions around a variety of topics, with the results presented to community partners in a written report. PSP working teams, each focused on a different area of the educational system, used these findings to help determine, where appropriate, institutional changes designed to improve students’ educational outcomes. The culmination of this process was the submission of a proposal to the Gates Foundation 2010 for a three-year CLIP implementation grant to be used to implement the specific proposals formulated by the working groups. As part of this grant application, data on ninth grade students’ academic trajectories was used as a baseline for San Francisco to evaluate the effectiveness of their proposals, with explicit targets for postsecondary completion rates set for the year 2020. San Francisco was one of four sites chosen to receive an implementation grant.

Data and Methods

We rely on data from the Youth Data Archive (YDA), a collaboration of public, private, and university partners that share administrative data across agencies and come together to ask and answer questions about youth in the community. With the YDA, we link individual-level administrative data over time and across schools, public agencies, and community based organizations to support community partners to make data-driven policy and programmatic decisions to improve outcomes for youth.

For this analysis, we primarily used data from two partner agencies: San Francisco Unified School District (SFUSD), which serves all K-12 public school students in the City and County of San Francisco, and the Community College of San Francisco (CCSF), which offers classes at 10 campuses across San Francisco. These data were linked individually over time in order to track students who moved from SFUSD to CCSF using individual-level identifiers such as name, birth date, and demographic descriptors. SFUSD data include information on students' demographic and academic characteristics, including their attendance, grades, standardized test scores, and grade progression. CCSF administrative records include information such as course transcripts, placement tests, and completion dates for when a student received a vocational certificate, associate degree, or transferred to a four-year institution.

To these two sets of local data, we appended a third source of information, the National Student Clearinghouse (NSC). The NSC is a non-profit organization that collects and compiles student-level information on postsecondary attendance in community colleges, colleges, and universities nationwide. With the NSC data, we were able to examine a broader set of postsecondary experiences, but with very limited information. The NSC data were provided by SFUSD and include postsecondary attendance and graduation dates of SFUSD graduates who

did not attend CCSF. The earliest reliable NSC data were from the 2004-05 school year, preventing us from analyzing earlier student cohorts.

The first part of this article follows 4,798 first-time ninth grade students who were enrolled in the 2000-01 school year at SFUSD (excluding students who were initially enrolled in SFUSD charter or alternative schools). We focus on students who go immediately from high school to college in order to maximize the number of years we can track students in their postsecondary trajectories.³ We begin with descriptive statistics on high school graduation and college-going among this cohort. Focusing on SFUSD graduates who attended CCSF, we then use logistic regressions to examine which secondary and postsecondary factors are associated with successful completion or transfer to a four-year institution. Per Adelman (2006), we also run these models using stepwise regression in order to highlight which variables are the strongest determinants of college completion.

Regressions predicting CCSF completion control for a host of factors, but high correlation between academic variables required us to select final models based on theoretical and practical considerations. For instance, there were numerous choices for academic achievement, including high school GPA, total number of SFUSD course failures, SFUSD attendance rate, first-year CCSF GPA, highest English course passed during the first year at CCSF, and results from CCSF English and math placement tests. To remove unsuitably high correlations, we chose high school GPA over total number of course failures (correlation coefficient $\alpha=0.91$) and attendance rate ($\alpha=0.45$) at SFUSD, in part due to community partner familiarity with interpreting GPA; additional analysis (not presented here) shows that total

³ Throughout the process, we also presented community partners with information on alternative groups of students, for example, students who took more than four years to graduate high school or did not enroll in college immediately after high school. We cannot currently follow these small groups of students for sufficiently long periods of their postsecondary education, so preliminary results are not presented in this paper.

number of course failures may be a better predictor of postsecondary success than GPA, especially for students with a GPA near a C average. We selected high school GPA over first-year CCSF GPA ($\alpha = 0.44$) as first-year CCSF GPAs were generally based on few classes, especially for part-time students, and it is more likely that causality runs from high school to college. We also include results from the California Standards Test (CST), which was calculated by taking the maximum of the most recent English Language Arts (ELA) and Mathematics proficiency levels (CST ELA and Math, $\alpha = 0.46$). On a theoretical basis, the highest English course attempted at CCSF was selected over highest English course passed to distinguish between students who passed no English course their first year but had attempted more challenging coursework. Highest English course attempted was selected over the initial CCSF placement test in order to measure student motivation and achievement over the course of their first year. Final models did not include the highest level math course taken during the first year at CCSF, as this factor was predictive only if several other variables, most notably highest math course taken at SFUSD and highest English course taken at CCSF, were removed. Highest CCSF math course taken may be less predictive than highest CCSF English course taken for multiple reasons: more students entered CCSF college-ready in math than English, the course sequence prior to college-level math is less easily quantified, and the math sequence may require less time to complete than the range of English courses.

Findings

Figure 2 shows the overall pathways of the 2000-01 cohort of first-time ninth grade students. A total of 63% of this group graduated from SFUSD within four years. Among these graduates, 78% attended a postsecondary institution the following year and among those, 54%

earned a credential from a two- or four-year institution within five years. In sum, these findings indicate that slightly more than one in four SFUSD ninth grade students (27%) earned a postsecondary credential by the approximate age of 23. The true postsecondary completion rate may be higher as data limitations prevented us from including students who: completed secondary school outside of SFUSD, took more than four years to graduate high school, did not enter a postsecondary institution immediately upon completing high school, and took longer than five years to complete their postsecondary studies.

Four-Year High School Graduation

Figure 3 provides more detail on the first step of this process – high school graduation. Although a total of 63.4% of entering ninth grade students in the 2000-01 school year graduated from SFUSD in four years, this rate varied widely by ethnicity. Chinese students had by far the highest graduation rates; Whites and other Asian students, including Filipinos, had mid-range graduation rates; and Latino and African-American students had the lowest graduation rates, mirroring ethnic differences in graduation rates seen throughout California (Rumberger and Rotermund 2009). Female students were more likely to graduate than males, regardless of ethnicity.

In our framework, non-graduates included students who took more than four years to graduate, transferred to a non-SFUSD high school, or dropped out altogether. This approach understates the true high school graduation rate as some dropouts will go on to complete a secondary degree and many transfer students will complete their high school diploma; unfortunately, the lack of a statewide tracking system prevents us from capturing the pathways of all students in the ninth grade cohort. The graduation rates presented in this chart are only for the

ninth grade cohort and do not take into account students who entered SFUSD in tenth grade or later. Data on late-entry students were presented to community partners but are not examined here.

Postsecondary Attendance

Figure 4 shows the postsecondary attendance rates of all four-year SFUSD graduates who were enrolled as ninth graders in the 2000-01 school year, disaggregated by ethnicity and gender. The year after graduating SFUSD, 44.5% of students attended a four-year institution and 33.9% attended a two-year institution, for an overall college-going rate of 78.4%.⁴ SFUSD graduates exhibited high college-going rates, regardless of ethnicity, but there were significant differences in the types of institutions attended. Over half of Asian/Pacific Islander, Chinese, and White SFUSD graduates attended a four-year institution compared to just one-fifth of African-American and Latino graduates. Females were also 12 percentage points more likely than males to attend a four-year institution.

A closer examination of enrollment patterns using the NSC shows that approximately half of the SFUSD graduates in our cohort who attended a four-year institution initially enrolled in the University of California (UC) system (51.4%) and one quarter attended San Francisco State University (25.4%), with the remaining students attending San Jose State University or the California State University (CSU) system (9.2%), or one of a variety of other institutions (14.0%).

⁴ SFUSD graduates who required more than four years to graduate had very different postsecondary pathways, with 3.1% attending a four-year institution, 33.8% attending CCSF, and 3.1% attending another two-year institution, for an overall college-going rate of 40.0%.

Postsecondary Completion at Four-Year Institutions

Five-year bachelor degree completion rates varied significantly by institution attended, with the highest completion rates for UC students and students in other four-year institutions at 81.8% and 69.3%, respectively (Figure 5).⁵ Our current sample is too small to accurately determine whether there are significant ethnic or gender differences in postsecondary completion rates, but four-year completion rates appear to be determined more by the institution attended than individual characteristics.

CCSF Completion Rates and Predictors of Postsecondary Completion

Of the 1,032 SFUSD graduates in our cohort who enrolled in a two-year institution, 75.5% enrolled at CCSF. Within five years of enrolling at CCSF, 25.9% of attendees “completed” their studies by receiving a vocational certificate, associate degree, or transferring to a four-year institution, and an additional 7.6% transferred and received a bachelor degree from a four-year institution, for a total five-year completion rate of 33.5%.

Using detailed records from SFUSD and students’ first year at CCSF, we employed logistic regression models to examine which factors were correlated with higher rates of CCSF completion among SFUSD graduates. In order to create more robust estimates, we combined data from two ninth grade SFUSD cohorts, our original population from 2000-01, plus an additional cohort from 2001-02. Demographic and academic characteristics are virtually identical between the two cohorts. As a result of adding the later cohort, all findings are in relation to the likelihood of completing CCSF within four years, not five. The final regression population includes 1,658 students, who have a four-year CCSF completion rate of 26.9%.

⁵ National data that examined high school graduates who initially attend a four-year institution found that, of students who received a bachelor degree, between 90% to 95% complete their postsecondary studies within five years (Bowen, Chingos, and McPherson 2009).

Tables 1 and 2 show the demographic and academic characteristics of this group of students. As is common in many urban school districts, the student population in SFUSD is comprised of many ethnic minorities, most predominantly Chinese and Latino. Fifteen percent of students were English learners at the time they graduated high school. Table 2 shows students' high school and community college academic characteristics. Several findings stand out, including that just one-third of CCSF student are enrolled full-time and a quarter of entering students do not enroll in an English course. Many students who enter CCSF appear unprepared for college-level work in both math and English.

Table 3 presents the results of four regression models. There are two important cautions in interpreting regression findings. First, the regressions highlight associations between individual-level characteristics and CCSF completion, but the findings cannot be used to infer a causal relationship between students' characteristics and differences in educational outcomes. Second, some key variables that may predict student outcomes, such as financial aid receipt or workforce participation, were unavailable in administrative records. As mentioned previously, many variables were highly correlated (e.g. SFUSD students with high GPAs also had high SFUSD attendance rates and high CCSF GPAs), making it difficult to isolate the relationship between any one factor and postsecondary completion. In these cases, we selected variables based on model testing, relevant literature, and ease of interpretation.⁶

Models 1 and 2 are the results of logistic regressions that include all the listed variables. Model 2 differs from model 1 by including high school fixed effects (for the last high school attended). Models 3 and 4 are the results of the stepwise regression and result in a reduced set of

⁶ Existing literature highlights the importance of curricular rigor and high school math levels (Adelman 2006), and GPA as a better predictor of postsecondary success than standardized test scores (Bowen, Chingos, and McPherson 2009; Geiser and Santelices 2007).

variables after an iterative process that eliminates statistically insignificant variables.⁷ Again, model 3 does not include high school fixed effects and model 4 does include these. All findings are presented in marginal effects, which were calculated as averages across individual in the sample.

Results highlight key indicators of postsecondary completion at both the high school and postsecondary levels. We focus on the results of model 1 in this discussion, but there are few substantial differences across the four models presented. At the high school level, a one point increase in GPA (e.g. an average GPA of 3.0 compared to 2.0) was associated with a 9.0 percentage point increase in the likelihood of completing CCSF. A one proficiency level increase in a student's most recent California Standards Test (CST) was associated with a 3.5 percentage point increase in CCSF completion. Students take the CST each year starting in second grade for measuring compliance with No Child Left Behind. Proficiency levels are measured on a five-point scale and a one point increase in proficiency level is, for example, moving to a proficiency level of 4 compared to a 3. Students whose highest high school math course was geometry or lower were 6.4 percentage points less likely to complete CCSF than students who had reached Algebra 2. Students who took CCSF units in high school, either during summer school or through a dual-enrollment program, were also more likely to complete CCSF.

At the community college level, attending school full-time was associated with a 16.0 percentage point increase in the likelihood of completing CCSF.⁸ Finishing the first year of CCSF below college-level English, especially for students four or more levels below, was

⁷ All models were run with the SELECTION=STEPWISE option in SAS version 9.1. Forward and backward selection models produced similar results.

⁸ Full-time attendance was 24 units in one year or 12 units in one term.

negatively associated with CCSF completion.⁹ There is no significant difference between students finishing their first year one, two, or three levels below college-level English, but these results might be altered by future analysis with a larger student sample. Students who did not take any English course their first year at CCSF, which included 10% of full-time students and 33% of part-time students, were 15.6 percentage points less likely to complete CCSF within four years.¹⁰

There was no significant difference in postsecondary completion rates for males and females, after controlling for other academic and attendance factors. Findings on ethnic differences were also inconclusive; controlling for high school attended, which may be correlated with unobserved factors such as instructional quality or counselor support, removes almost all ethnic differences.

Alternate Pathways: SFUSD Non-Graduates

An important omission from the analyses above is the pathways of ninth grade SFUSD students who did not receive a high school diploma from SFUSD; these students may have transferred to another high school district, earned a GED, dropped out, or had another non-traditional high school pathway. We can only examine non-graduates who attended CCSF, and not other universities, because NSC data were only available for graduates.

Focusing on students in the 2000-01 cohort who left SFUSD by 2004 without graduating, a total of 27.3% attended CCSF within two years of leaving SFUSD, with students in the upper grades more likely to attend (Table 4). However, some students may have simultaneously

⁹ CCSF offers a sequence of English and ESL courses that place students from 1 to 8 levels below college-level English.

¹⁰ Part-time students with high school GPAs below 2.0 or greater than 3.0 were less likely to have enrolled in an English course than other part-time students, indicating that there may be barriers to enrolling in specific levels of English courses.

enrolled in another high school district while also taking CCSF courses, perhaps during the summer. Among non-graduates who enrolled in CCSF by 2004, only 12 of 185 (6.5%) had earned a postsecondary credential within five years.¹¹ We do not run similar models using non-graduates because we only have information about their attendance in CCSF and there are too few students to conduct a multivariate analysis.

Discussion and Policy Implications

This study was undertaken at the request of partners in the San Francisco Unified School District and the Community College of San Francisco, who came together with the City and County of San Francisco to find ways to improve postsecondary completion rates for San Francisco's youth. With a planning grant from the Gates Foundation, which ultimately led to a larger three-year implementation grant, the Partnership for Postsecondary Success (PSP) embarked on a partnership with the JGC to use the YDA to help inform their decision-making process. Working closely with the PSP team, we conducted an analysis of the educational pathways of students after SFUSD, with additional focus on the factors that support successful completion for students attending CCSF. Because the two data systems had not previously been linked, the analyses generated with the YDA provided new information to help inform program and policy development as the partnership moves forward.

Analyses with the YDA indicate that a substantial number of SFUSD students do not complete postsecondary degrees, either because they do not enter postsecondary institutions or because they are not successful once there. About 45% of SFUSD four-year graduates enter CCSF in the year after graduation, and of these, 27% go on to complete their studies within four

¹¹ Data on intermediate steps towards postsecondary completion, including earning a high school diploma or passing the GED, were unavailable.

years by earning an associate degree or credential certificate, or by transferring to a four-year institution. Both high school and CCSF factors are predictive of completion. In particular, a higher high school GPA, higher proficiency levels on standardized tests, and taking higher level high school courses are all associated with higher rates of completing CCSF. Once at CCSF, students who attend full-time and those who initially enroll in core English classes are more likely to complete. Interestingly, among the 1,600 students who exited SFUSD without a degree during the period examined, more than a quarter (27%) enrolled in CCSF within two years of SFUSD exit. This is an important group to follow more closely in order to better understand the future educational trajectories of students who drop out of high school.

Although very useful to the PSP, the analyses to date have not yet generated new information to inform the academic field of postsecondary attendance and completion. This is in part due to the initial questions asked by the PSP, which were aimed at describing the population and the problem. The continuing collaboration of PSP with the JGC is likely to generate questions and findings that will both advance the literature and inform the PSP partners.

More dramatic at this point are the ramifications of this work for local policy and practice. Using these findings, San Francisco's PSP made significant progress towards the creation of a system of shared accountability for the postsecondary success of all students, particularly in helping to design and prioritize the initiatives in the final strategic plan. In just three months, partners from SFUSD and CCSF were able to discuss the findings from the YDA and propose concrete changes to their institutional practices, including:

- The majority of SFUSD graduates entering CCSF were unable to place into college-level English, leading to high rates of remediation. SFUSD and CCSF agreed to create professional learning communities that examine samples of student work to highlight

disconnects and better define and align expectations for students and teachers in both institutions.¹²

- Data showed that timely entry into core courses was important for keeping students engaged and on track for postsecondary completion, but many first-year students were not enrolled in, and likely locked out of, English and math courses required for transfer to a four-year institution. As a result of this research, in the 2010-11 school year CCSF gave approximately 300 incoming SFUSD students first enrollment privileges and will be comparing their progress to similar students to see whether guaranteed access to core courses affects their retention and completion rates.
- Analysis showed significant alignment between CCSF English and Math placement tests and the California State University's Early Assessment Program (EAP), taken by 11th grade SFUSD students. CCSF departments are investigating the possibility of accepting EAP results in lieu of placement tests to help students who missed or were unaware of placement test dates so that they can enroll in a timely manner.

The collaboration between SFUSD and CCSF is now formalized into an ongoing partnership. With input from SFUSD students, the initiative has been rebranded as “Bridge to Success,” and the accompanying logo merges the two organizations into “CCSFUSD.” Stakeholders from various city agencies met to choose eight indicators spanning the educational pipeline that were incorporated into a report card for SFUSD students:

1. Enter Kindergarten Ready,
2. Stay on track in school (4th, 8th, and 10th grade data),

¹² Better curricular alignment between secondary and postsecondary systems has been advocated by Venezia (2003), amongst others.

3. Pass California State University's Early Assessment Program (EAP) in 11th grade,
4. Apply for financial aid,
5. Graduate high school with the core competencies needed to enter a school in the University of California or California State University system,
6. Enroll in college,
7. Go to college full-time, and
8. Earn a college degree.

These eight indicators will be continuously monitored, and specific targets have been set for the year 2020. The Bridges to Success partnership plans to continue to engage the YDA in order to make data-driven decisions about changes to policy and practice.

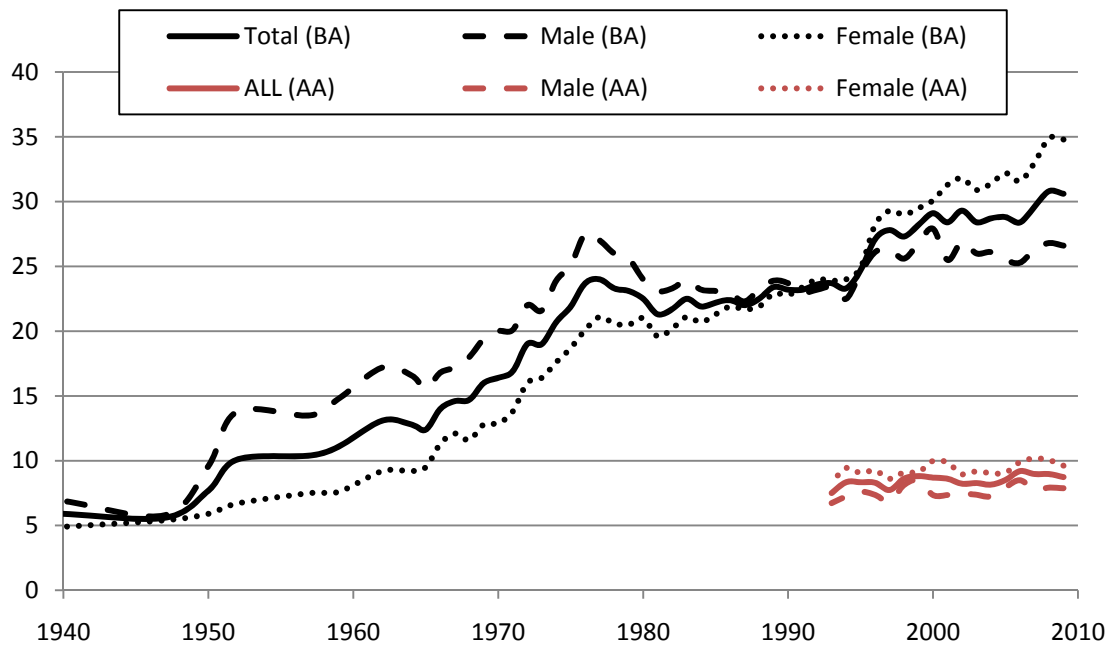
References

- ACT. 2009. The Condition of College Readiness. Iowa City, IA.
- Adelman, Clifford. 2005. Moving Into Town—and Moving On: The Community College in the Lives of Traditional-age Students. Washington, D.C.: U.S. Department of Education.
- . 2006. The Toolbox Revisited: Paths to Degree Completion From High School Through College. Washington, D.C.: U.S. Department of Education.
- Aud, Susan, William Hussar, Michael Planty, Thomas Snyder, Kevin Bianco, Mary Ann Fox, Lauren Frohlich, Jana Kemp, and Lauren Drake. 2010. The Condition of Education, Immediate Transition to College. edited by I. o. E. S. National Center for Education Statistics, U.S. Department of Education. Washington D.C.: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.
- Baum, Sandy, and Jennifer Ma. 2007. Education Pays: The Benefits of Higher Education for Individuals and Society. In *Trends in Higher Education Series*. Washington D.C.: College Board.
- Beattie, Irene R. 2002. Are All "Adolescent Econometricians" Created Equal? Racial, Class, and Gender Differences in College Enrollment. *American Sociological Association* 75 (1):19-43.
- Bettinger, Eric P., Bridget Terry Long, Philip Oreopoulos, and Lisa Sanbonmatsu. 2009. The Role of Simplification and Information in College Decisions: Results from the H&R Block FAFSA Experiment.
- Bill & Melinda Gates Foundation. 2010. *Seven Cities Launch Collaborative Efforts to Improve College Graduation Rates* 2009 [cited 10/8/2010 2010]. Available from <http://www.gatesfoundation.org/press-releases/Pages/coordinating-services-to-help-raise-graduation-rates-091105.aspx>.
- Bowen, William G., Matthew M. Chingos, and Michael S. McPherson. 2009. *Crossing the Finish Line: Completing College at America's Public Universities*. Princeton, NJ: Princeton University Press.
- Burdman, Pamela. 2005. The Student Debt Dilemma: Debt Aversion as a Barrier to College Access. Berkeley, CA: Center for Studies in Higher Education.
- California Community College Chancellor's Office. 2010. California Community Colleges Chancellor Jack Scott Announces 2009/10 Enrollment Decline. http://www.cccco.edu/Portals/4/News/press_releases/2010/Jack%20Scott%20Briefs%20Media%20on%202009-10%20Enrollment%20Budget%20and%20Access%20FINAL%20%282-24-10%29.pdf.

- Data Quality Campaign. 2009. *10 Essential Elements of a State Longitudinal Data System* 2009 [cited August 18 2009]. Available from <http://www.dataqualitycampaign.org/survey/elements>.
- Florida Department of Education. 2009. *Continuing Education and Employment Reports* 2009 [cited August 17 2009]. Available from <http://www.fldoehub.org/FETPIP/Pages/PublicHighSchoolGraduatesStandardDiplomaOutcomes.aspx>.
- Geiser, Saul, and Maria Veronica Santelices. 2007. Validity of High-School Grades in Predicting Student Success Beyond the Freshman Year. Berkeley, CA: Center for Studies in Higher Education.
- Haskins, Ron, and James Kemple. 2009. A New Goal for America's High Schools: College Preparation for All. *Future of Children Policy Brief* Spring 2009.
- Heckman, James J., and Alan B. Krueger. 2002. *Inequality in America: What Role for Human Capital Policies?* Edited by H. U. The Alvin Hansen Symposium on Public Policy. Cambridge, Massachusetts: MIT Press.
- Kane, Thomas J., and Cecilia Elena Rouse. 1995. Labor-Market Returns to Two- and Four-Year College. *American Economic Review* 85 (3):600-614.
- King, Jacqueline E. 2002. Crucial Choice: How Students' Financial Decisions Affect Their Academic Success. Washington, DC: American Council on Education Center for Policy Analysis.
- Knapp, Laura G., Janice E. Kelly-Reid, and Scott A. Ginder. 2009. Enrollment in Postsecondary Institutions, Fall 2007; Graduation Rates, 2001 & 2004 Cohorts; and Financial Statistics, Fiscal Year 2007. Washington D.C.: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics.
- L'Orange, Hans, and Peter Ewell. 2007. P-20 Data Systems: An Alignment Status Report. Austin, TX: Data Quality Campaign.
- Lacey, T. Alan, and Benjamin Wright. 2009. Occupational Employment Projections to 2018. *Monthly Labor Review* 132 (11):82-123.
- Lewin, Tamar. 2010. Community Colleges Cutting Back on Open Access. *New York Times*, June 24, 2010, A15.
- London, Rebecca A, and Oded Gurantz. 2010. Data Infrastructure and Secondary to Postsecondary Tracking. *Journal of Education for Students Placed At Risk* 15 (1-2):186-199.
- Long, Bridget Terry, and Michal Kurlaender. 2009. Do Community Colleges Provide a Viable Pathway to a Baccalaureate Degree? *Educational Evaluation and Policy Analysis* 31 (1):30-53.

- Ostrom, Charles W., Richard M. Lerner, and Melissa A. Freel. 1995. Building the Capacity of Youth and Families through University-Community Collaborations: The Development-In-Context Evaluation (DICE) Model. *Journal of Adolescent Research* 10 (4):427-448.
- Pascarella, Ernest T., and Patrick T. Terenzini. 2005. *How College Affects Students: A Third Decade of Research*. Vol. 2. San Francisco, CA: Jossey-Bass.
- Roderick, Melissa, Jenny Nagaoka, and Vanessa Coca. 2009. College Readiness for All: The Challenge for Urban High Schools. *The Future of Children* 19 (1):185-210.
- Rumberger, Russell W., and Susan Rotermund. 2009. Ethnic and Gender Differences in California High School Graduation Rates. In *Statistical Brief 11: California Dropout Research Project*.
- Suarez-Balcazar, Yolanda, Margaret I. Davis, Joseph Ferrari, Philip Nyden, Bradley Olson, Jsefina Alvarez, Paul Molloy, and Paul Toro. 2004. University-Community Partnerships: A Framework and an Exemplar. In *Participatory Community Research*, edited by L. A. Jason, C. B. Keys, Y. Suarez-Balcazar, R. R. Taylor and M. I. Davis. Washington, D.C.: American Psychological Association.
- Texas Higher Education Coordinating Board. 2009. *Texas Higher Education Data* 2009 [cited August 17 2009]. Available from <http://www.txhighereddata.org/Topics.cfm>.
- Venezia, Andrea, and Michael W. Kirst. 2005. Inequitable Opportunities: How Current Education Systems and Policies Undermine the Chances for Student Persistence and Success in College. *Educational Policy* 19 (2):283-307.
- Venezia, Andrea, Michael W. Kirst, and Anthony L. Antonio. 2003. Betraying the College Dream: How Disconnected K-12 and Postsecondary Education Systems Undermine Student Aspirations. Stanford, CA: Stanford University Bridge Project.
- Wirt, J., S. Choy, .P Rooney, A. Sen, and R. Tobin. 2004. The Condition of Education 2004, Remediation and Degree Completion. edited by N. C. f. E. S. U.S. Department of Education. Washington D.C.: U.S. Government Printing Office.
- Zumeta, William, and Deborah Frankle. 2007. California Community Colleges: Making Them Stronger and More Affordable. San Jose, CA: The National Center for Public Policy and Higher Education.

Figure 1. Bachelor and Associate Degree Attainment Rates of the U.S. Population Ages 25-29



Source: Current Population Survey.

Note: (1) Prior to 1992, the CPS asked whether an individual had completed four or more years of college. From 1992 onward, the CPS asked whether an individual had attained a bachelor degree. (2) Associate degree attainment rates were first collected in 1992.

Figure 2. High School Graduation, Postsecondary Attendance, and Postsecondary Completion Rates for the 2000-01 Ninth Grade Cohort of SFUSD Students

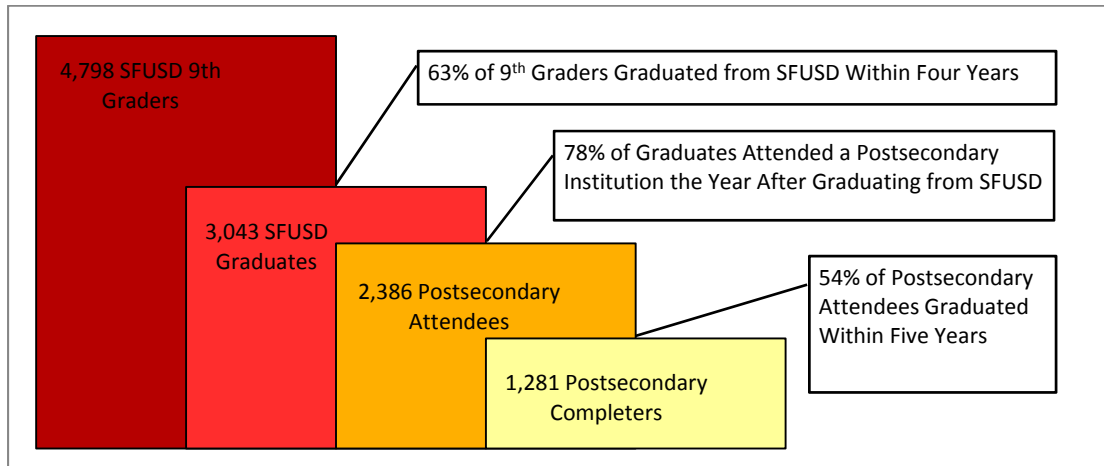
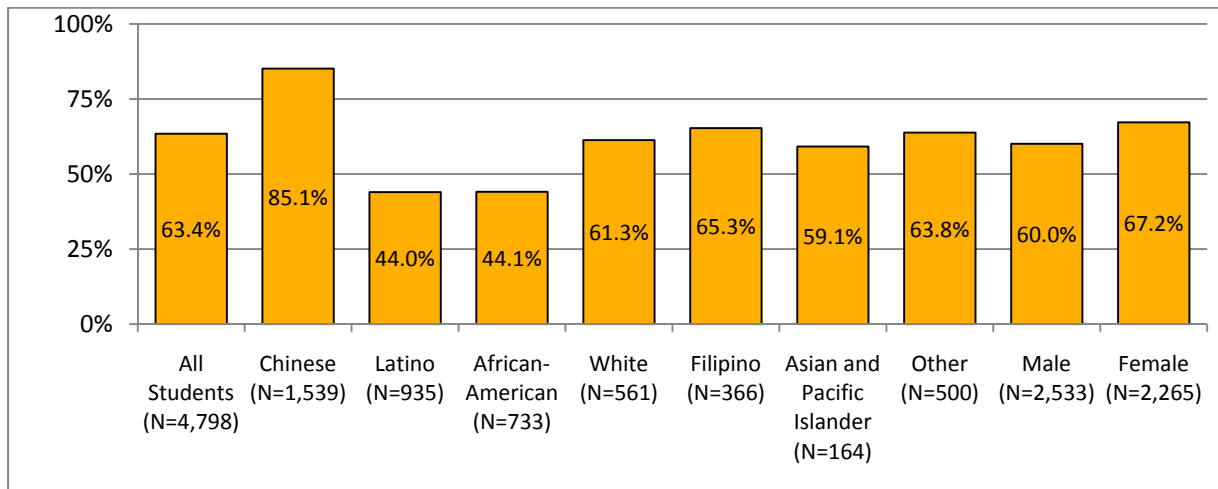


Figure 3. Four-Year High School Graduation Rates for the 2000-01 Ninth Grade Cohort of SFUSD Students



Note: The Asian and Pacific Islander category includes Japanese, Korean, Pacific Islander, and Other Asian. The Other category includes Native American and all students listed as other.

Figure 4. Postsecondary Attendance Rates Year After Graduating SFUSD, by Institution Type, Four-Year High School Graduates, 2000-01 Ninth Grade Cohort

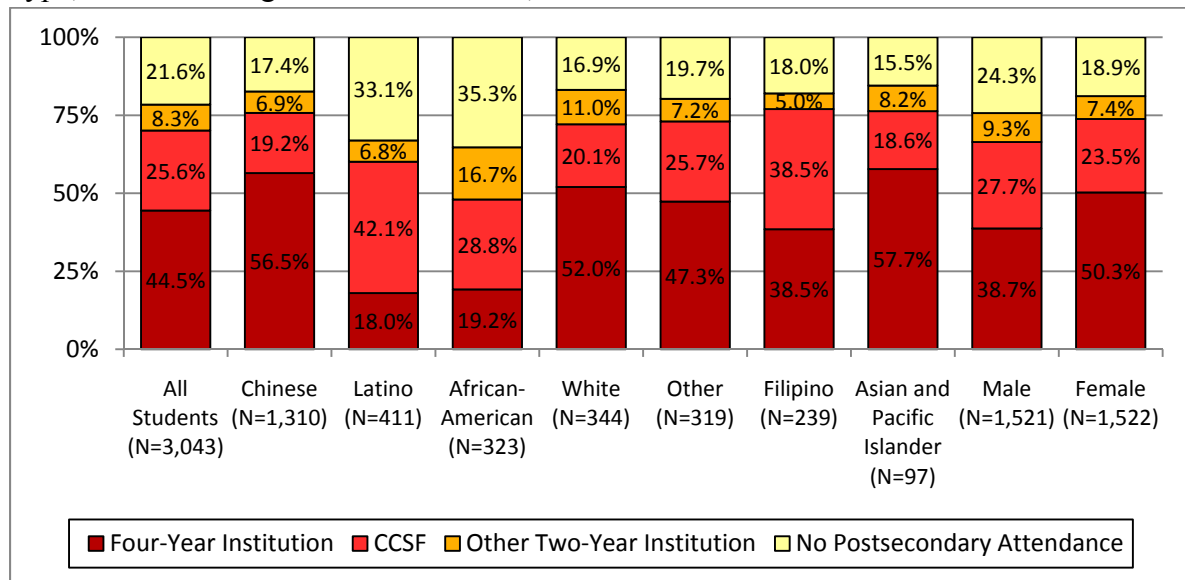
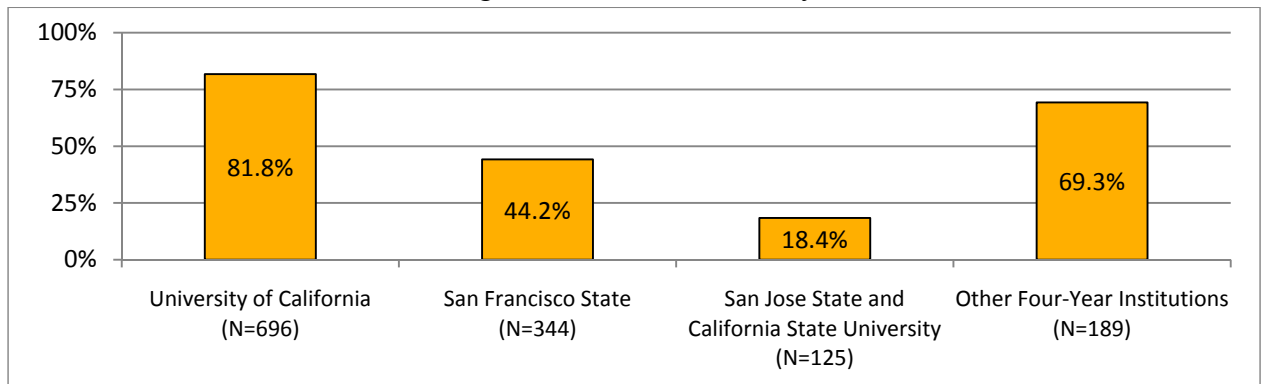


Figure 5. Five-Year Bachelor Degree Completion Rates for SFUSD Graduates Attending Four-Year Institutions, Four-Year High School Graduates Only, 2000-01 Ninth Grade Cohort



Note: A small number of students who initially attended a four-year institution did not earn a bachelor degree but earned a vocational certificate or associate degree from a two-year postsecondary institution within five years.

Table 1. Demographic Characteristics, 2000-01 and 2001-02 Ninth Grade Cohorts

English Learner at Time of High School Graduation	15.1%
Special Education	10.8%
Female	46.6%
Ethnicity:	
African-American	11.7%
Chinese	33.2%
Filipino	11.5%
Latino	22.1%
Other	13.0%
White	8.4%
Parental Education:	
College Graduate or Higher	33.5%
High School Graduate or Some College	45.4%
Not A High School Graduate	18.2%
Missing / Declined to State	2.8%
N	1,658

Table 2. High School and Community College Academic Characteristics, 2000-01 and 2001-02 Ninth Grade Cohorts

HIGH SCHOOL FACTORS	
High School GPA	2.50
Ever Suspended	5.7%
Highest Math Course Taken at SFUSD:	
Calculus	13.0%
Trigonometry	21.6%
Algebra 2	41.3%
Geometry or lower	24.1%
Proficiency level (1-5) on last CST test taken	2.99
Number of CCSF units earned in HS	1.15
CCSF FACTORS	
Attended CCSF Full-Time	34.1%
Concurrently Enrolled in Another Two-Year College	5.5%
Highest English Course Taken First Year at CCSF:	
No English Course Taken	25.3%
College English	12.9%
One Level Below College English	13.6%
Two Levels Below College English	15.1%
Three Levels Below College English	10.5%
Four or More Levels Below College English	22.6%
Highest Math Course Taken First Year at CCSF:	
No Math Course Taken	39.1%
College Math	20.6%
Pre-College Math	23.2%
Basic Math	17.1%
N	1,658

Table 3. Logistic Regressions of Four-Year CCSF Completion Rates on High School and Community College Level Factors, Four-Year SFUSD Graduates Only, 2000-01 and 2001-02 Cohorts

	Logistic Regression Marginal Effects			
	Full Model	Full Model	Stepwise	Stepwise
	(1)	(2)	(3)	(4)
DEMOGRAPHIC FACTORS				
English Learner at Time of High School Graduation	0.009	0.006		
Special Education	0.005	-0.017		
Female	0.015	0.001		
Ethnicity:				
African-American	0.062	0.036		
Chinese	0.064*	0.007	0.039*	
Filipino	-0.077*	-0.119**	-0.099**	-0.114**
Latino	(omitted)			
Other	0.038	-0.015		
White	0.001	-0.051		
Parental Education:				
College Graduate or Higher	0.024	0.021		
High School Graduate or Some College	(omitted)			
Not A High School Graduate	0.003	0.015		
Missing / Declined to State	-0.031	-0.024		
HIGH SCHOOL FACTORS				
High School GPA	0.090**	0.095**	0.093**	0.096**
Ever Suspended	-0.022	-0.010		
Highest Math Course Taken at SFUSD:				
Calculus	0.050	0.069*	0.059*	0.084**
Trigonometry	-0.013	-0.010		
Algebra 2	(omitted)			
Geometry or lower	-0.064	-0.053	-0.060**	-0.057*
Proficiency level (1-5) on last CST test taken	0.035**	0.023	0.036**	0.030**
Number of CCSF units earned in HS	0.009**	0.011**	0.009**	0.011**
(continued)				

Table 3 (continued)

CCSF FACTORS				
Attended CCSF Full-Time	0.160**	0.148**	0.161**	0.167**
Concurrently Enrolled in Another Two-Year College	0.180**	0.178**	0.190**	0.188**
Highest English Course Taken First Year at CCSF:				
No English Course Taken	-0.156**	-0.138**	-0.150**	-0.100**
College English	(omitted)			
One Level Below College English	-0.100**	-0.084**	-0.104**	-0.052*
Two Levels Below College English	-0.144**	-0.118**	-0.146**	-0.084**
Three Levels Below College English	-0.110**	-0.081*	-0.112**	
Four or More Levels Below College English	-0.195**	-0.167**	-0.195**	-0.121**
Highest Math Course Taken First Year at CCSF:				
No Math Course Taken	-0.002	0.001		
College Math	(omitted)			
Pre-College Math	-0.023	-0.009		
Basic Math	-0.029	-0.009		
School Dummies (Last High School Attended)	No	Yes	No	Yes
N	1,658	1,658	1,658	1,658

Note: ** p<0.01, * p<0.05.

Table 4. Percent of SFUSD Non-Graduates who Entered CCSF, 2000-01 Ninth Grade Cohort

Grade Level When Exiting SFUSD	N	Enrolled at CCSF Year After Leaving SFUSD	Enrolled at CCSF Two Years After Leaving SFUSD	Total Percentage of Students Enrolling in CCSF Within Two Years of Leaving SFUSD
9 th Grade	481	7.3%	3.7%	11.0%
10 th Grade	428	21.3%	6.1%	27.4%
11 th Grade	380	26.8%	7.4%	34.2%
12 th Grade	306	37.3%	7.2%	44.5%
Total	1,595	21.4%	5.9%	27.3%