
(Working paper draft prepared for 2016 Association for Public Policy and Management International Conference)

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Abstract: Why individuals choose not to sign up for social programs, particularly when the costs of sign-up are low and the benefits generous, is a crucial question for policy scholars. In this paper, we show that a substantial share of qualified middle school students fail to sign up for Washington State’s College Bound Scholarship program, and this failure leads these students to lose out on college financial aid for which they would be eligible. The availability of student-level data allows us to show that the actual student sign-up rates are lower than has been previously documented in public reports. We find that the student characteristics that are associated with signing the pledge closely parallel the characteristics of low-income students who go to 4-year colleges. As a consequence, simulations suggest that while the pledge program may address college enrollment gaps, increasing college-going by some historically disadvantaged groups, it also would modestly reinforce inequalities in educational attainment that exist between low-income student sub-groups. Finally, our qualitative analysis finds that incorrect perceptions that nearly all eligible students sign the pledge may be leading program administrators to shift attention away from middle school sign-up decisions in favor of efforts to get high school pledgees to follow through with requirements for scholarship receipt.

Key Words: Take-Up, College Financial Aid, Low-Income Youth

Acknowledgments: Generous financial support for this project was provided by the U.S. Department of Education (Grant R305A140380). Excellent research assistance was provided by Nick Huntington-Klein and Bingjie Chen. We thank Vivien Chen for her data support and Li Feng, Teresa Greene, Rachelle Sharpe, Lexi Shankster, and audience members at the Association for Education Finance and Policy 2016 conference for helpful comments on an earlier draft of this paper.

1. Introduction

In 2007, the Washington State legislature created a new need-based scholarship program to encourage economically disadvantaged middle school students to “choose a path that will lead to educational success after high school.” Under Washington’s College Bound Scholarship (CBS) program, low-income students sign a pledge in the 7th or 8th grade to: 1) do well in middle and high school; 2) be a good citizen and not be convicted of a felony; and 3) apply for financial aid to college. If they satisfy these requirements, and their family income remains below a threshold in their senior year, they are promised a scholarship that covers the tuition and fees (plus a small book allowance) that are not covered by other state financial aid awards, to attend an eligible Washington State higher education institution.

Students have a strong incentive to sign up for the CBS program given that the potential college tuition benefits are significant and the costs of signing the pledge are negligible. Yet not all students sign up and there is considerable heterogeneity across districts in Washington in sign up rates. In this mixed-methods project we explore the factors explaining students’ signing the pledge and the potential reasons for low sign up rates in some schools and districts. Specifically, the paper addresses the following questions: (A) What student and middle school characteristics are associated with the student’s likelihood to sign the pledge and thus participate in the CBS program?; and (B) What do program administrators report doing to encourage student uptake? Later data collection and analysis will examine the role of middle school principals and guidance counselors in the process.

Our study finds that factors associated with sign-up are similar to factors associated with enrollment in college. For example, among eligible (low-income) middle school students, females are both more likely to enroll in college and are more likely to sign up for the program. Since students who do not sign up for the program are ineligible for the college financial aid that comes from the program, this correspondence of factors affecting sign-up and college enrollment

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1 The state regards this as a need-based scholarship (WSAC, 2016), though some may view it as both a need- and merit-based scholarship given that students must maintain a 2.0 grade point average in middle and high school in order to be eligible to receive scholarship money.
suggests that this “opt-in” program may reinforce existing disparities in college enrollment among the target population.

Our qualitative study, which is on-going, draws upon semi-structured interviews with CBS Regional Officers who are engaged through a state contract with the Office of Superintendent for Public Instruction (OSPI) and assigned to Washington’s nine Educational Service Districts, and middle school guidance counselors and principals from schools across the state. We find that, from the perspective of the program’s regional outreach coordinators, the schools that are most successful at signing-up students (1) have district-level “buy-in” and support for the program, coupled with a school-level champion who takes “ownership” of the program; (2) share the free and reduced lunch program list with counselors or other school staff, allowing staff to target individual students who are eligible for the program; (3) have guidance counseling staff that are not over-burdened with other responsibilities and have good relationships with students; and (4) are in a community or district that has strong or ingrained college-going culture. Preliminary findings from school counselors and principals show that the majority of schools have access to information about eligible students (the free and reduced lunch program eligible student list) and school-level champions tasked to encourage students to sign the CBS pledge. However, there is a perception that there is ample variation in district-level encouragement for students to sign the CBS pledge, college-going culture, and counselor workload. Interestingly, several Regional Officers emphasized that negative attitudes about school and college, or a general “mistrust” of government, are a major obstacle to student’s signing the pledge in some communities. They felt this to be the case particularly in rural communities, which may not have a university or community college nearby and where people do not often leave the community to attend college. They noted that such areas, which are largely in the Eastern part of the state, are politically more conservative and libertarian than more urban areas like Seattle and Western Washington. Preliminary findings from school counselors and principals tentatively support this. By contrast, our quantitative findings show that students from Eastern counties are, all else equal, more likely to sign a pledge than their Western counterparts.

Importantly, the availability of individual-level student records allows us to calculate a more accurate CBS sign-up rate than the rate that has been publicly reported. The rate we calculate, while still an estimate as we describe below, shows a similar increase over time in the proportion of students who sign the CBS pledge. However, we estimate that the overall
proportion of eligible students who have signed the pledge is far lower, which may affect the way program administrators allocate their efforts to promote the CBS program since the majority of schools are striving for the misrepresentative “100% sign-up rate” and Regional Officers, citing the high sign-ups, largely agree that their role is shifting from encouraging student sign-up to encouraging high school students to complete the necessary steps to use the scholarship.

To our knowledge this is the first paper investigating the factors influencing whether students sign up for an early commitment pledge. Understanding why eligible students opt not to sign up is of fundamental import given that these types of pledge programs seek to change student trajectories toward college with the early commitment of financial support. This is the first paper in a broader project funded by the U.S. Department of Education. Subsequent papers will investigate what other program administrators are doing to encourage student uptake and will evaluate the impact of the program on high school outcomes (grades, course-taking, graduation, and incarceration) and college outcomes (enrollment decisions, persistence, and grades).

2. Policy Background

Over the past three decades there have been notable increases in the proportion of U.S. students enrolling in and graduating from college. Despite this, significant educational attainment gaps still exist between more advantaged (primarily white and high-income students) and disadvantaged (primarily low-income and minority students). New evidence in fact shows an increase in income-based educational attainment gaps and a decline in intergenerational educational mobility (Duncan and Murnane, 2011), trends that are extremely problematic for both U.S. long-term economic competitiveness as well as social cohesion. Duncan and Murnane (2011) note: “American Society relies on its schools to level the playing field for children born into different circumstances. More than any other institution, schools are charged with making equality of opportunity a reality” (p. 7).

Empirical research has identified a variety of factors that contribute to the persistence of college enrollment gaps: low-income students often lack a good understanding of the academic

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2 For an overview of changes in postsecondary enrollments and the magnitudes of attainment gaps between sub-populations, see *Increasing Access to College: Extending Possibilities for All Students*, edited by Tierney and Hagedorn (2002).
requirements needed to be admitted and to succeed in college (Kirst, Venezia, and Antonio 2004; Rosenbaum 2001); and have lower educational expectations and are less likely to have taken courses necessary to succeed in college (Choy, 2001; Jacob and Linkow, 2011). Academically prepared, low-income students are less likely to apply to college as seniors, and are “discouraged by the complexity of the process of applying for financial aid and college admissions, even if they are qualified and enthusiastic about going to college” (Avery and Kane, 2004, p. 356).

An increasingly prevalent type of program designed, in part, to address college enrollment and attainment gaps are state-based financial aid programs that offer low-income students an early promise of funding for college in exchange for their making a pledge (typically during 7th-9th grades) to do well in high school and be a good citizen, and being admitted to attend particular colleges. These “early commitment programs” are hypothesized to help low income students directly by making college more affordable and indirectly by signaling to them early enough that college is financially within their reach so that it changes their high school trajectory; the early promise of a college scholarship may raise their expectations about the feasibility of college attendance, creating a strong incentive for them to do well in high school and fulfill pledge requirements. Understanding whether these types of programs appear to work to increase student achievement and college access, and close educational attainment gaps, is vitally important.

The College Bound Scholarship program was created by the Washington legislature in 2007 and was patterned on similar programs in Indiana (21st Century Scholars program initiated in 1990) and Oklahoma (Oklahoma’s Promise initiated in 1996), but as we describe below, the Washington program has some features that differentiate it from other early commitment programs.3

The CBS program works as follows. If an eligible student signs the pledge, meets the obligations of the pledge, and her family’s income remains below a predetermined threshold by her senior year, the student receives a scholarship that covers tuition and fees (plus a small

3 These “early commitment” programs are similar to merit scholarship programs that are available in a number of states (Georgia’s HOPE Scholarship Program is particularly well-known), in that they require students to earn a certain high school GPA to be eligible for receipt of the funds, but they differ from merit scholarship programs in that they are income-contingent (i.e., available only to low-income students) and require the signing of a pledge in the early high school grades.
textbook allowance) which are not covered by other state financial aid awards. The student can use the scholarship to attend any public or eligible private Washington state higher education institution. A student is eligible to sign the CBS pledge if during her 7th or 8th grade (or 9th grade for the first eligible cohort during 2008-09) any of the following apply: the student was eligible for free or reduced-price lunch (FRPL), the student’s family received Temporary Assistance for Needy Families (TANF), the student was a foster youth, or the student’s family income was below 185 percent of the poverty line (which would also qualify the student for FRPL).

The text of the pledge students must sign reads as follows:

“Yes, I am college bound! I pledge that I will:
Do well in middle school and high school, and graduate with a cumulative high school grade point average of 2.0 or higher on a 4.0 scale.
Be a good citizen in my school and my community and not commit a felony.
Apply for financial aid by submitting the Free Application for Federal Student Aid (FAFSA) in a timely manner during my senior year of high school.”

When the student enters her senior year, the student’s family income during that year must fall within 65 percent of the state’s median family income in order to be eligible to receive the College Bound financial aid. The fact that the CBS is contingent on family income during a student’s senior year somewhat weakens the clarity of what rewards will follow from signing and fulfilling the pledge, though the increase in the income threshold for qualifying (e.g., rising from $39,220 in 8th grade to $53,000 in 12th grade for a family of four in the first cohort) implies that a great many of those students who initially sign up for the program will be eligible when it comes

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4 Income-eligibility is reassessed in every year of postsecondary schooling and students could lose CBS scholarship funds if family income rises above the specified threshold.
5 If attending a private institution, the student will be granted the maximum amount they would have been awarded if they attended a public institution. Students can only use CBS funds at eligible state aid participating private institutions, for more detail on this, see http://www.readysetgrad.org/eligible-institutions
6 Note that for the first cohort, for a family of four, 185 percent of the poverty line equaled $39,220 in 2008.
time to make college-going decisions. Should the student remain income-eligible in his or her senior year, the guaranteed aid is both generous and transparent:

“The scholarship amount will be based on tuition rates at Washington public colleges and universities. It will cover the tuition and fees (plus a small book allowance) that are not covered by other state financial aid awards such as the State Need Grant. You will receive your scholarship through your college or university as part of your financial aid award” (WHECB, 2012c).

Students attending private institutions of higher education in Washington receive an amount equal to what the average student receives attending a comparable public institution in the state (typically the average award given at the University of Washington and Washington State University). CBS covers 8 semesters (12 quarters) so long as the student maintains Satisfactory Academic Progress as determined by the college. The scholarship must be used within five years of high school graduation, and cannot be used for graduate school.

Table 1 outlines the similarities and differences between CBS and other early commitment scholarship programs operating in other states. Currently there are three states (Indiana, Oklahoma, and Washington) that are operating uniform, statewide programs that meet Blanco’s (2005) “three core criteria for early commitment programs: that they make a guarantee

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7 The language surrounding CBS implies a contractual bond between the student and the state. The “College Bound Scholarship Program… promises annual college tuition and a small book allowance” [http://www.wsac.wa.gov/sites/default/files/2011-12_Q&A.pdf, emphasis added]. Moreover, given that the student is required to do well in school, be a good citizen, and not commit a felony, it appears that it would be politically hard to break the promise if the student does these things. As State Representative Reuven Carlyle, noted that the state has “a moral responsibility to fund [the CBS]. There's no way we can break that social contract” (Long, 2012). As a result, these types of pledge programs may bind future legislatures to fund the programs given the promise of funding. These kinds of pledge policies may be appealing to legislatures given their transparency to students and the ability of current legislatures to bind the actions of future legislators.

8 The maximum award is based on tuition and service & activity fees for 15 credits at a public institution, plus book allowance. For 2014-15, this amount was $11,904 plus a $500 book allowance.
of aid; that aid is designated only for economically disadvantaged students; and that students are identified in elementary, middle school, or early high school” (p. 9).9

[INSERT TABLE 1]

Two key programmatic differences distinguish Washington’s program from those in other states. First, until recently, the programs in Indiana and Oklahoma had no income requirement at the time that the student attended college. Heller (2006) noted, “(t)he distinguishing characteristic of these two programs from that of other publicly funded aid programs is that once students are accepted into the program while in middle school, they will not be removed even if their family’s economic circumstances change” (p. 1276). Washington, in contrast, was designed at its inception with a restriction that the students’ family income could not rise above 65% of the state’s median family income ($53,000 for a family of four in 2012-13). This senior year income cap makes the CBS “promise” much more uncertain. The recently adopted cap in Oklahoma of $100,000 creates less uncertainty, as few family’s incomes are likely to rise from less 50K to more than 100K during the student’s high school years. Given the challenges states face with limited budgets, one might anticipate that future state programs will include senior year income cap.

A second distinguishing feature is that the programs in Indiana and Oklahoma require students to take specific college-appropriate coursework while in high school to be eligible for financial aid. CBS, by contrast, places no coursework restrictions and merely has a relatively weak 2.0 grade point average as its only performance requirement.10

There is no financial cost for the student to sign up in middle school. To sign up for the scholarship program, eligible 7th or 8th graders, along with their parent or legal guardian, must sign a physical copy of the pledge form. The pledge form is typically given to the student at school, mailed home, or can be printed from the College Bound website. After signing the pledge, students can either mail their pledge directly to the Washington Student Achievement

9 The Wisconsin Covenant is not included in this summary as eligibility for it is not restricted to economically disadvantaged students. Colorado’s CollegeInvest Early Achievers Scholarship is not included as the program was closed in 2010. California’s “Early Commitment to College” and “SOAR Virginia” are not included in this summary because they are not available in all schools in the state and programmatic details vary across districts.

10 In 2013-14, 80.6% of Washington high school students maintained a 2.0 or higher GPA by the fall of their senior year.
Counsel (WSAC) or turn it into their school.\textsuperscript{11} The school will send the completed forms on to WSAC. Eligible students have until June 30\textsuperscript{th} of their eighth grade year to submit a completed form. The method of publicizing of the CBS opportunity is largely left to the discretion of schools and school districts with support from WSAC through the work of their contracted regional outreach officers.\textsuperscript{12} Heterogeneity in communication may affect whether students sign up and whether they fully understand the program.

Given the low burden to sign-up, the relatively innocuous and vague pledge that students are asked to make, juxtaposed against the guaranteed benefits and the fact that a high percentage of middle school students anticipate attending college, it is surprising, as we discuss below, that sign-up rates are not uniformly high across the state. Consequently, our study is intended to help explain the factors that may be impeding a higher sign-up rate.

3. Literature on Similar Programs and Program Take-up

As noted above, increases in the proportion of U.S. students enrolling and graduating from college have been significant over the long term, but gains in college completion have leveled off more recently, and large educational attainment gaps have actually widened over the past 35 years. Between 1975 and 2010, the share that had attained a bachelor's degree increased 15 percentage points for Whites, 9 percentage points for Blacks, and only 4 percentage points for Hispanics (Aud et al., 2011). In 2009, there was a 29-percentage point gap between students from low- and high-income families in the share attending either a two- or four-year college in the fall immediately after completing high school (Aud et al., 2011) and there are similar gaps in Washington State (ERDC, 2012).\textsuperscript{13}

There is a large and growing literature on the effects of merit-based financial aid (e.g. Cornwell et al., 2006; Dynarski, 2008, Sjoquist and Winters, 2012), but early commitment college programs – distinct from more general forms of merit-based aid – have received very limited empirical scrutiny despite significant public attention. Early commitment programs offer

\textsuperscript{11} WSAC is a cabinet-level agency that, among other responsibilities, administers the CBS program. For more information on WSAC, see http://www.wsac.wa.gov/what-we-do.

\textsuperscript{12} Regional Officers are hired through Washington College Access Network, a subsidiary of the College Success Foundation, who holds a contract with OSPI for program outreach activities. The research team interviewed all Regional Officers working at the time data were collected.

\textsuperscript{13} The gap in enrollment in a postsecondary institution in Washington between students eligible and not eligible for FRPL for 2004-05 high school graduates was about 20 percentage points.
promise as they are designed to address some of the hurdles confronting low-income students. In particular, studies also show that students and parents often misestimate college costs (Ikenberry & Hartle 1998; Usher 2005), and that low-income families are particularly inaccurate in their estimation (Avery & Kane 2004; Grodsky & Jones 2007; Horn et al., 2003; Jacob and Linkow, 2011). This likely contributes to the fact that low-income families are also more likely to have inadequate funding (Long & Riley 2007). But, even when adequate funding is available (e.g. through scholarships, etc.), low-income students and families are less likely to know about funding options and less likely to apply for assistance (Bettinger et al., 2009; Hahn & Price 2008; Long & Riley 2007). For example, Dynarski and Scott-Clayton (2006) argue that complexities in the financial aid system, particularly in completing the Free Application for Federal Student Aid (FAFSA) “may prevent the subsidies from having their intended effect of inducing students into college” (p. 319). Likewise, Bettinger et al. (2009) find that low- and moderate-income families who “received assistance with the FAFSA” during tax preparation at H&R Block “and information about aid were substantially more likely to submit the aid application, enroll in college the following fall, and receive more financial aid” (abstract).

It is not surprising that there are numerous programs designed to increase years of postsecondary schooling, particularly for disadvantaged students. Indeed, there are over a thousand programs administered by federal and state government, universities, nonprofits, and community groups designed to address the attainment gap through a variety of approaches including mentoring, counseling, parental involvement, academic preparation, personal enrichment, and financial assistance (Gándara & Bial, 2001).

To our knowledge, research has not explored the factors influencing whether students sign up for Washington’s early commitment pledge.14 This is an important gap in the literature given that a central theory of action of such pledge programs is that early commitment will change student trajectories toward college, but this depends on the programs reaching students who are not already on a trajectory toward college. More generally, the findings of this paper are relevant to a broader, though currently limited, literature on the take-up of social programs (e.g., Bitler, Currie, and Scholz, 2003; Currie, 2006).

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14 A previous study performed by the BERC group for the Gates Foundation explored the stratification in college readiness, enrollment, and persistence among pledged CBS students in the first scholarship cohort (Baker et al., 2013). They do not, however, touch on sign-up rates or sign-up rate variation that occurs across the state.
4. Methods and Data

4.1 Quantitative Analysis

We begin with a quantitative analysis of the individual and school characteristics that predict the likelihood of a student signing the pledge in middle school. These results may provide policymakers and school administrators information on student subgroups and types of schools where recruitment of pledge signers is low, and provide important information for targeting students who are underrepresented in college.\footnote{Legislation in the State of Washington was passed in the summer of 2015 to have the Washington State Institute of Public Policy “complete an evaluation of the [CBS] program” which “shall complement studies on the [CBS] program conducted at the University of Washington” (i.e., the study we are currently conducting) (SB 5851 – 2015-16 http://apps.leg.wa.gov/billinfo/summary.aspx?bill=5851).}

To evaluate how individual and school characteristics predict the likelihood of eligible students signing the pledge in middle school, we estimate the specifications shown in Equations 1a and 1b using data on the first three cohorts of CBS eligible students:

\begin{align*}
(1a) \quad \text{Signed}_{im} &= F(\delta_0 + \delta_1 X_i + MSCE_m + \varepsilon_{im}) \\
(1b) \quad \text{Signed}_{im} &= F(\delta_0 + \delta_1 X_i + \delta_2 S_m + \varepsilon_{im})
\end{align*}

The subscript $i$ denotes the student and $m$ denotes the middle school attended in 8th grade. The dependent variable for this analysis, $\text{Signed}_{im}$, is an indicator variable that equals one if the student signed the pledge by the end of 8th grade (or 9th grade for cohort 1). The student level predictors (i.e., the $X_i$ vector) include: standardized scores on Washington’s reading and mathematics assessments – known as the Washington Assessment of Student Learning (WASL) – when the student was in 6th grade (post-policy cohorts) or 7th grade (pre-policy cohorts) and indicators for taking the WASL test out-of-grade-level\footnote{For example, a 6th grader taking the test given to 7th graders. WASL scores are set to missing for these students and then imputed as discussed below. For 2008-09 observations did not have reporting grades and for these the student’s test grade was assumed to be the student’s grade level.} and taking a modified version of the WASL\footnote{Mostly given to students with disabilities.}; student’s age in May of 8th grade; and indicators for female, race/ethnicity group (Hispanic; Non-Hispanic African American, Asian, Hawaiian or Pacific Islander, or Native American or Alaskan Native; and Non-Hispanic and Two or More Races), disability status,
migrant status, homeless status, “highly capable” status, “transitional bilingual” status, language spoken at home other than English, attends public school part-time as a homeschooler or private school enrollee, and region (Puget Sound (including King, Pierce, Kitsap, Thurston, and Snohomish counties), the remainder of Western Washington (i.e., west of the Cascade Mountains), and Eastern Washington).

We estimate Equation 1a using a logit specification with middle school fixed effects, $MSCE_m$, to account for time-invariant school level factors that may influence students’ signing the pledge.\(^{18}\) We estimate Equation 1b using a hierarchical logistic regression (i.e., the logit analog of hierarchical linear modeling) with random intercepts. The advantage of the former specification is that it accounts for both observable and unobserved time-invariant school level factors. The disadvantage of 1a over 1b is that it does not estimate the way that student sign-up rates are influenced by observable school level characteristics. The student’s school is defined as the program that the student attended for the most consecutive number of days, thus including alternative or secondary programs that the student may have attended. When middle school characteristics, $S_m$, are included (Equation 1b), the following variables are used: percent of students receiving FRPL, mean standardized student score on 6\(^{th}\) grade mathematics WASL (7\(^{th}\) grade for pre-policy cohorts due to data limitations) among 8\(^{th}\) grade students in the school, 8\(^{th}\) grade enrollment in fall (divided by 100), school has a guidance counselor, and proximity to college enrollment (number of undergraduate students within a 50-mile radius\(^{19}\)). We expect that schools with higher test scores and closer proximity to a 4-year college will have higher rates of signing the pledge, as such schools likely have more students who are aware of and interested in

\(^{18}\) The “incidental parameters” problem that occurs when using fixed effects in a logit model with panel data is not a concern for us as the number of students at each middle school is typically far above the numbers that would yield an incidental parameters problem. In similar situations, Cameron and Trivedi (2005) prefer the term “cluster effects” rather than the more commonly used term “fixed effects”, as “fixed effects” are more appropriately used in the context of panel data containing multiple observations of outcomes for a single individual, whereas a cluster effect refers to a common effect occurring for individuals in a cluster, in this case the school. Nonetheless, we follow convention here in using the more familiar “fixed effects” terminology.

\(^{19}\) We also used number of undergraduates within 10- or 25-miles of the middle school, and these produced qualitatively similar results. See Long and Kennedy (2016) for more information about the effect of college proximity on college enrollment decisions, as well as information on the spatial distribution of Washington’s colleges and how that corresponds to the locations of students.
attending college. We expect that schools with a higher share of students eligible for FRPL will, conditional on mean test scores, have a higher sign-up rate as we hypothesize that such schools are more likely to be the target of efforts by community organizations. Consistent with the evidence in Hurwitz and Howell (2014), we expect that middle schools with guidance counselors will have higher college going rates and will also have more capacity to convey information about CBS to students. Finally, we expect that schools with higher enrollment may have lower sign-up rates as such large schools may have more difficulty making connections to individual students.

We further estimate versions of 1a and 1b where we replace the outcome with “enrolled in any college” (using data from two pre-CBS cohorts). We evaluate whether there are meaningful differences in the $\delta_1$ and $\delta_2$ vectors of coefficients using “Enrolled” rather than “Signed”. If the coefficients are similar, it would indicate, as we would expect, that the types of students who are more prone to attend college are also more likely to sign the pledge. Significant differences in the coefficients may also provide useful information. For example, given that girls are more likely to enroll in college than boys, we expect girls to be more likely to sign the pledge. If we instead find that boys are more likely to sign the pledge, it could indicate that: (a) the guidance counselors are doing a good job at getting the underrepresented group (boys) to sign the pledge, or, alternatively; (b) efforts focusing on getting low-income girls to sign the pledge could be fruitful given their predisposition to attend college; and (c) the current advantage for low-income boys signing the pledge could be working to offset their disadvantage relative to girls in college enrollment.

The categorization of schools and resulting case selection for our qualitative analysis is based on the results from the estimation of Equation 1b. We predict each school’s 2011-12 sign-up rate\textsuperscript{20} based on the following Equation 2, where $\text{Signed}_m$ is the school’s predicted sign-up rate, $\bar{X}_m$ indicates the average of the school’s students’ characteristics and $S_m$ are the school’s characteristics in 2011-12, and $\delta_0$, $\delta_1$, and $\delta_2$ are estimated coefficients based on data from students in the first three CBS-eligible cohorts:

\begin{equation}
\text{Signed}_m = F(\delta_0 + \delta_1 \bar{X}_m + \delta_2 S_m) \tag{2}
\end{equation}

\textsuperscript{20} 2011-12 is the most recent year for which we have data to compute the school’s actual sign-up rate.
4.2 Data for Quantitative Analysis

The data we utilize are aggregated by Washington State’s Education Research & Data Center (ERDC). ERDC maintains individual student level K-12 records for all public school students in the state that can be linked to information about enrollment in two- or four-year colleges in Washington State as well as those outside the state (through the National Student Clearinghouse). The ERDC data includes K-12 student information dating back to the 2005-06 school year, thus we have data on two cohorts of students who did not have the opportunity to receive a CBS scholarship (those who were in 8th grade in 2005-06 and 2006-07) and three cohorts who were eligible to sign up (those who were in 8th grade in 2007-08, 2008-09, or 2009-2010). Note that for the first eligible cohort, the deadline to sign up was Jun 30th of their 9th grade year, as opposed to their 8th grade year. We dropped from these data students in foster care, foreign exchange students, observations with missing ID codes, observations with multiple IDs and irreconcilable birthdates, and students who were not identified in a school in 8th grade. These restrictions reduce the number of unique student observations from 443,315 to 414,959.

We then restrict the analysis to students who are known to be FRPL eligible in 7th or 8th grade (or 8th or 9th grade for the first post-policy cohort), bringing our analytical sample size to 191,205.

Note that it is not possible with the administrative data made available to us to construct a perfect measure of whether the student is eligible to sign up for the CBS in middle school; students who are in income-eligible families, but who are not a recipient of FRPL and not in a family that is a recipient of Supplemental Nutrition Assistance Program (SNAP), Food Distribution Program on Indian Reservations (FDPIR), or TANF are unknown to available state education administrative databases. In our analysis, we restrict the sample to those who are

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21 The CBS automatically enrolls all foster care students into the scholarship if they are in grades 7-12, thus signing the pledge is not a relevant choice for this group. Foreign exchange students (i.e., those in formal exchange programs, not including undocumented immigrants) are dropped from the analysis as they are not eligible for the program. Observations with missing ID codes reflect pledges that could not be connected to a student in our administrative data. Students with irreconcilable birthdates reflect multiple students who, mistakenly, share an ID code and could not be disentangled. Students who were not identified in a school in 8th grade were dropped because they could not be included in our regression analysis that included school characteristics or school fixed effects.

22 Washington does not have a state income tax.
known to be eligible for FRPL. What we will fail to identify as eligible are those who are income-eligible for CBS, but not a recipient of FRPL, SNAP, FDPIR, or TANF. Fortunately, the share of students who are CBS-eligible, but not known to be FRPL-eligible is likely to be modest. To test this assertion, we used data on all 12 to 14 year olds in families included in the first three waves of the 2008 Survey of Income and Program Participation (SIPP). We find that the share of SIPP youth who meet one of the eligibility criteria for CBS yet who are only eligible due to income (i.e., who are not FRPL, SNAP, or TANF recipients or in foster care) is only 13.3 percent.

There are two reasons to believe that income-only-eligible students have a lower responsiveness to the CBS program than the students we correctly identify as eligible. First, such students may come from families who do not feel comfortable relying on government aid or are from families who are generally unaware of available need-based aid programs. If so, and if these preferences and/or lack of knowledge applied to college financial aid, then this group might be less responsive. Second, based on our analysis of SIPP youth, income-only-eligible students appear to come from families with lower income and higher poverty than students that we correctly identify as eligible. (Those who we will identify as eligible have higher median family incomes ($30,280 versus $25,711), larger mean family sizes (4.7 versus 4.1), and higher income-to-poverty threshold ratios (1.31 to 1.24) than those who are foster / income-eligible-only, based on these SIPP youth). Such lower income families are likely to have greater amounts

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23 By 2008-09, all school districts in the U.S. were required by the 2004 Child Nutrition and WIC Reauthorization Act to “directly certify” recipients of SNAP and FDPIR as eligible for free meals under the National School Lunch Program. Thus, all SNAP and FDPIR recipients should be coded as a FRPL-eligible in our administrative data. In Washington in 2007-08, 76 percent of children in SNAP households were directly certified for free school meals (USDA, 2008). Washington began direct certification of children in TANF households in 2003-04 (Neuberger, 2006).

24 This figure is based on 3,245 SIPP youth, aged 12-14, who were CBS eligible. If we restrict the analysis to Washington youth (only 93 observations), we find a comparable rate of youth eligible for WSP based solely on family income (17.7 percent), which is not significantly different than the full sample given the small sample size.

25 Recipients of the FDPIR are directly certified as eligible for free lunches, but SIPP does not collect data on FDPIR participation. Since we will capture these youth as FRPL-eligible from school administrative data, our estimate of the fraction that we will miss, 13.3 percent, is an upper-bound estimate. Nationally (in Washington) we estimate (based on data in Usher, Shanklin, and Wildfire (1990), Snyder and Dillow (2011), and USDA (2012)) that 0.05 percent (0.10 percent) of 8th grade students participate in FDPIR.
of support from Pell Grants and State Need Grants, and thus receive smaller amounts of net financial aid support from the CBS program. If they receive less marginal funding from the CBS, they may be less responsive to the program.

As noted above, the CBS program is overseen by the Washington State Achievement Council which “provides strategic planning, oversight, and advocacy to support increased student success and higher levels of educational attainment in Washington”.

WSAC reports substantial success in increasing the sign-up rate since the CBS program began. Their calculations, reported in Figure 1, show that the “sign-up rate” was 57% for the first cohort of eligible students and rose to 85% by the 6th cohort. Their website states:

“In 2015, 91 percent of the Class of 2019 (8th graders whose deadline was June 30, 2015) submitted complete applications. This year, 110 districts had sign-up rates of 92 percent or higher. Of these, 77 school districts saw 100 percent of their eligible students sign up.”

The above figure suggests both substantial improvement over time in sign-up rates and a situation where there is little room for improvement in a large number of school districts. Our estimates, discussed below, confirm this improvement. However, by using record-level data and an historical perspective, we show that the baseline sign-up rate is in fact lower than the figures reported by WSAC, and there remains room for improvement.

To compute the number eligible, as shown in the first row of the table shown in Figure 1, WSAC uses the count of the number of FRPL students in 7th grade as recorded in October of the corresponding school year. The result is an early snapshot of eligibility that does not include students who are added to FRPL throughout the remainder of the 7th and 8th grad years (which would enlarge the denominator). While these students are indeed eligible, this computation misses all students who become FRPL eligible during the remainder of 7th grade or at any point during 8th grade. For example, there were 30,521 7th graders denoted FRPL eligible in October 2005-06, while during the remainder of that school year, an additional 3,540 7th graders were

28 Source: Personal communication from Rachelle Sharpe, Ph.D., Senior Director of Student Financial Aid and Support Services, Washington Student Achievement Council, December 3, 2015
denoted FRPL eligible after October (having not been eligible in October), and in the following school year an additional 5,238 students were denoted as eligible in 8th grade that had not been eligible at any point the year before. Note that CBS eligibility is defined by being eligible at the time of signing the pledge at *any time during 7th and 8th grades*, so students who lose FRPL eligibility during 7th or 8th grade would not lose their CBS eligibility. Additionally, this denominator misses all students that are income-eligible, but not FRPL, SNAP, or TANF recipients or in foster care. We found that number of FRPL-eligible students grows by roughly 20% over the two-year period.\(^{29}\) This growth in the denominator results in a corresponding deflation of the overall sign-up rate.

To calculate the sign-up rate, we utilize student-level FRPL data, which captures eligibility in *both* 7th and 8th grades, which corresponds to the policy’s eligibility requirements. In Table 2, we show our calculations of the sign-up rate for the first three eligible “Post-Policy” cohorts. In row (A), we find that the number of students signing the pledge increased from 14,181 to 18,802 across these three cohorts.\(^{30}\) By contrast, WSAC reported (as shown in Figure 1) that the number of students signing the pledge increased from 15,947 to 20,903 across these three cohorts. Our counts of the number of students who signed the pledge are lower because we do not count pledges from foreign exchange students, students in foster care in 7th or 8th grade, students that have irreconcilable birthdays across observations, or students that did not attend 8th grade in a Washington school. (Note that these same students are not included in our denominator). Also, we do not count pledges of which there was no corresponding student in our K-12 database. Next, in row (B), we show that the number of clearly eligible students remained stable from 38,651 to 38,478 across the first three cohorts. This denominator is substantially higher than the denominator reported by WSAC (i.e., 28,093 to 29,856 as show in Figure 1, for the reasons that we discussed above). We believe the figures we report are conservative given that they do not include students who are made eligible to sign the pledge by virtue of participation in SNAP, FDPIR, or TNAF, or who sign the pledge despite not being income

\(^{29}\) Running contrary to this conclusion, WSAC’s denominator includes those students that completed a pledge form but may not be actually income-ineligible.

\(^{30}\) Note that a small number of students from the “Pre-Policy” cohorts signed-up. These students may include those who were retained such that they became part of a subsequent “Post-Policy” cohort. We define a student’s cohort given the first cohort in which they are observed – thus retained students are counted as belonging to their pre-retention cohort.
eligible. But note the sign-up rate we calculate, by dividing (A) by (B) is 36.7% for the first cohort and 48.9% for the third cohort, and these are substantially below the 57% and 70% rates reported by WSAC in Figure 1, though the increase in our calculate rate over time is very close to that reported by WSAC (13 percentage points from first to third cohort versus our calculation of report of a 12.2 percentage point change).

[INSERT TABLE 2]

Our qualitative findings suggest that the distinction in terms of how sign up rates are calculated turns out to be important given that many school districts may interpret the message that they have few eligible students who have not signed the CBS pledge. Indeed, preliminary results from our ongoing qualitative work suggest this to be the case.

It is important to note that there is no auditing mechanism to prevent parents and students from signing-up and incorrectly claiming to be income-eligible for the CBS. Washington State does not have a state income tax system that could be used to verify income. Schools and districts under pressure to meet the implied standard of 100% sign-up have little disincentive to try to get as many students as they can to fill-in the forms, including those who are not in fact eligible. The State and the schools can’t know when they have reached 100% sign-up because they can’t know what the denominator is for any school given the lack of administrative data that is needed to verify eligibility.

In the last rows of Table 2, we show that there were sizable differences in sign-up rates across the three regions of the state, particularly in the first cohort, with Eastern Washington leading and Western Washington counties that surround the Puget Sound counties trailing. It is interesting to note that, while Eastern Washington has a high sign-up rate for the scholarship program compared to Western Washington counties (41.7% versus 28.1% for the first scholarship cohort), both regions have similar college enrollment rates (27.1% versus 28.2% for

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31 In Table 2 we also report a second definition of the sign up rate, the number who signed the pledge and we identify as “clearly eligible” divided by the number we identify as being “clearly eligible” to participate. This lower sign-up rate ranges from 33.7% to 45.5% across the three cohorts.

32 See, for instance, http://www.wsac.wa.gov/sites/default/files/2015.10.23.CBS_School.Districts.pdf. Schools are able to view whether their students have signed the pledge and thus can monitor sign-up rates (Personal communication from Rachelle Sharpe, March 7, 2016); we are unsure of the extent to which they do so.
the first scholarship cohort). This heterogeneity in sign-up rates suggests the possibility of uneven communication and understanding of the program across the state, and provides an argument for the qualitative research that we carry out.

Table 3 presents the descriptive statistics for our analysis sample, which consists of those students who are clearly eligible to sign up. Note that, among these eligible students, the share that enrolled in any college within 4 years after starting 9th grade increased across the two pre-policy cohorts (from 23.6% to 25.7%) and then increased again for the first post-policy cohort to 27.2%. These students also saw some improvements in their test scores relative to not-clearly-eligible students as can be seen by the improvement in their z-scores on the WASL exams. Additionally, of note, the average math WASL score of 8th grade students in these clearly eligible students’ schools was improving during this time. Finally, note that these students tend to live closer to more undergraduate students than not-clearly-eligible students.33

[INSERT TABLE 3]

The last two columns of Table 3 show the number of non-missing observations for each variable. Approximately 15% of students are missing their own WASL scores, and there is a small amount of missingness for school characteristics, which occurs when a middle school’s 8th grade class is exceptionally small or is unreported in OSPI report card data. We impute missing variables with a two-step process. First, we use single imputations to impute missing school characteristics linearly based on values of observed school characteristics.34 Second, we use multiple imputation to fill-in all remaining school characteristics and WASL scores. We create ten multiply imputed datasets and combine the results using Rubin’s Rules (Rubin, 1987).

4.3 Qualitative Analysis

33 A couple of other points of note. The 48-49% female share of these eligible students is the same as the general population of Washington middle school students. And, in 2007-2008, there was a large jump in state appropriation funding for highly capable programs, which explains the corresponding jump in the share of clearly eligible students in this program.

34 A middle school’s average 6th grade test score (z-score) for their 8th grade class is calculated from students’ individual test z-score. If a student’s 6th grade test score is missing, it is filled in with the z-score from the test that is closest in time to the missing score (i.e. 5th grade or 7th grade z-score if missing 6th grade score), with priority given to the earlier test score. If a middle school’s average 6th grade test score is still missing, it is imputed using the steps listed above.
The goal of our qualitative analysis is to complement the quantitative research on uptake of the CBS by providing a deeper understanding of how well school-level administrators understand CBS, how information is conveyed to students, and what efforts schools are making to get students to sign the pledge, as well as to develop hypotheses that can explain why particular schools are unusually good or bad at stimulating enrollment in the program. As the empirical evidence in Hurwitz and Howell (2014) suggests, school administrators, guidance counselors in particular, may play a vital role in laying the groundwork for students to be on a college-ready track and successfully enroll in college. We believe such qualitative information is key to understanding the seemingly low take-up rate.

This report draws upon analyses of data from two sets of semi-structured telephone interviews. (The protocols for each set are included in the Appendix.). The first set of interviews included all five CBS regional officers and their regional director. The interviews were conducted either individually or in a small group between November and December 2015. Interview protocols were designed to ensure consistent data collection on critical themes across respondents and to facilitate systematic analysis. At the same time, they allowed for unanticipated themes to emerge. A senior researcher led interviews while an analyst took notes. Interviews lasted between 60 and 120 minutes.

Regional Officer interview themes aligned with the core research questions. Key themes included:

- Efforts to inform and engage various stakeholders in the CBS program (schools, students, parents, community organizations) \(^{35}\),
- Practices to encourage student uptake,
- Factors limiting student uptake,
- Evidence that the program is affecting students’ behavior, and
- Factors limiting the program’s success.

The interview questions are included in the Appendix.

After the interviews, the research team distilled notes into analytic themes. We then identified areas of agreement, disagreement, and patterns with respect to these themes. Overall,

\(^{35}\) Community organizations have been engaged by the state to play an active role in helping increase sign-up rates (Power, 2011).
these interviews provided a high-level perspective on CBS activities around the state, which was used to inform development of the protocol for the second set of interviews.

The second set of interviews is part of an ongoing effort to interview middle school guidance counselors and principals from schools across the state. We drew our sample of middle schools by first dividing the state into the three regions and selecting ten middle schools from each region. For our case selection within each region, we aim to select two middle schools from each of the following five cells\textsuperscript{36}, where the “School’s Predicted Sign-up Rate” is derived from the quantitative analysis:

<table>
<thead>
<tr>
<th>School’s Actual Sign-up Rate</th>
<th>School’s Predicted Sign-up Rate</th>
<th>Characterization of the School</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) Bottom 20%</td>
<td>Bottom 20%</td>
<td>Predictably Low Sign-up</td>
</tr>
<tr>
<td>B) Bottom 20%</td>
<td>Upper 20%</td>
<td>Surprisingly Low Sign-up</td>
</tr>
<tr>
<td>C) 40\textsuperscript{th}–60\textsuperscript{th} Percentile</td>
<td>40\textsuperscript{th}–60\textsuperscript{th} Percentile</td>
<td>Typical School</td>
</tr>
<tr>
<td>D) Upper 20%</td>
<td>Bottom 20%</td>
<td>Surprisingly High Sign-up</td>
</tr>
<tr>
<td>E) Upper 20%</td>
<td>Upper 20%</td>
<td>Predictably High Sign-up</td>
</tr>
</tbody>
</table>

By comparing the responses from principals and guidance counselors in the cells identified above and across the three regions, we hope to shed light on the variety of approaches used to promote the CBS and the contextual factors that might influence them. This will help us to explain why schools have high, low, and median sign-up rates, and provide explanations that may be missed by our quantitative analysis.

The preliminary qualitative analysis includes data from interviews conducted between March and May 2016, with 13 individual respondents, including 12 guidance counselors (or other CBS program leaders) and 1 principal.\textsuperscript{37} Summary information on respondents distribution across the cells described above appears in Table 4. Because our current sample skews towards

\textsuperscript{36} We excluded schools with fewer than 25 8\textsuperscript{th} graders from this analysis. Schools with small enrollments may have low or high rates of sign-up for atypical reasons and their high or low sign-up rates in a particular year may be ephemeral. This led us to drop 30.5\% of middle schools enrolling 2.2\% of students. When there were more than two middle schools in a region-cell, we randomly selected two middle schools (with probabilities of selection being set to be proportional to the number of eligible 8\textsuperscript{th} graders in the school). If there were no middle schools in the region-cell, we selected the middle school within that region was closest to the characterization of the cell.

\textsuperscript{37} We also interviewed a college readiness coordinator identified through our professional contacts. Information from this interview is not included in descriptive statistics from the interview sample but is included in discussion of qualitative themes.
the Western part of the state, our present analysis looks at major themes across schools and does not yet interpret any regional or categorical differences.

[INSERT TABLE 4]

5. Results

5.1 Quantitative Analysis

Table 5 reports three specifications for our models of the likelihood of students signing the pledge. Columns (1)-(3) of Table 5 presents raw differences in sign-up rates for each dichotomous student characteristic, columns (4)-(6) shows the school fixed effects specification (Equation 1a), and columns (7)-(9) the specification with school characteristics (Equation 1b). Not surprisingly, there are major differences in the estimated coefficients between the models that do not condition on other characteristics (column 1) and those that do (columns 4 and 7). The inclusion of middle school effects substantially improves the fit of the model (lowering the Akaike Information Criterion (AIC) from 548 to 466), but has little impact on many of the student characteristics of interest relative to the results shown in column 7 with middle school characteristics.38

Most of the groups that are traditionally “advantaged” in terms of educational attainment are more likely to sign the pledge. For example, we find that females are 7.3 percentage points more likely to sign up than males. There are some exceptions to this pattern; notably, we find that Hispanics, African Americans, migrants, and transitional bilingual students – all sub-groups with lower average college-going propensities39 – are more likely to sign the pledge.

[INSERT TABLE 5]

Column (4) of Table 5 shows the mean marginal effects corresponding to the parameters estimated in Equation (1a). We find that a one standard deviation increase in student’s math test

38 The F-statistic testing the null hypothesis that the addition of the school fixed effects are jointly zero is 16.6 (p-value=0.000). A few of the student coefficients do change significantly in magnitude when we move from a school fixed effects specification to a school characteristics specification, such as the coefficients on receiving bilingual services and attending public school part time, but these are very small student sub-groups.

39 In cohort 1, 24.0% of low-income Hispanics, 28.4% of low-income African-Americans, 23.9% of low-income migrant students, and 24.6% of low-income transitional bilingual students enrolled in college 4 years after 9th grade. This compares to each subgroups’ scholarship average sign-up of 41.1%, 38.3%, 50.1%, and 42.6% respectively.
score is associated with a 4.1 percentage point increase in the probability of signing the pledge, holding constant all other characteristics. Female students are 6.0 percentage points more likely to sign the pledge than otherwise comparable males. Relative to non-Hispanic white students, Hispanics and non-Hispanic blacks, Asians, and multi-racial youth are more likely to sign up, while Native American or Alaskan Native youth are less likely to pledge. Finally, of note, students in Eastern Washington are 8.1 percentage points more likely to sign up than their peers in the Puget Sound region.

In columns (7)-(9) of Table 5, we present the results including middle school characteristics rather than middle school fixed effects, corresponding to Equation (1b). We find higher sign-up likelihood in schools that have higher mean math scores, a higher share of students on FRPL, and more undergraduates within 50 miles, controlling for the student’s own characteristics.

In Table 6, we repeat these specifications using “enrolled in any college within 4 years after starting 9th grade” as the dependent variable. Here too we see large differences between the coefficients from the model that is not conditioned (column (1)) and that with either middle school fixed effects or characteristics (columns (4) and (7) respectively), but little difference between the latter two specifications.

In the first column, we find that the disparities among low-income students mirror those typically found when examining all students (e.g., females, whites, Asians, and gifted students are substantially more likely to enroll in college “on-time”). When estimating our logit specifications, we find a remarkable correspondence between the factors associated with signing the pledge and enrolling in college. The correlations between the marginal effects shown in the columns (4) and (7) in Tables 5 and 6 are 0.67 and 0.84 respectively.

To get a handle on the extent to which these results might contribute to enrollment disparities within low-income youth, we conduct the following thought experiment. Start with a “typical” low-income 7th grade student who has a 25% chance of enrolling in college and a 40% chance of signing the pledge. Given the raw advantage of being female on the likelihood of signing the pledge, 7.27%, we could reasonably conclude that this typical student would have a 36.36% chance of signing-up if male and 43.64% if female. Likewise, given the raw advantage of being female on the likelihood of enrolling in college, 9.18%, we could reasonably conclude
that this typical student would have a 20.41% chance of enrolling in college if male and 29.59% if female. If we assume that signing the pledge raises the probability of attending college for a typical student by 3 percentage points, and further assume this effect does not vary by gender.\textsuperscript{40} For the average female student, the college enrollment rate would rise to 30.90% (i.e., 29.59% + 43.64%×3%), while for the average male student, the college enrollment rate would rise to 21.5% (i.e., 20.41% + 36.36%×3%). Note that the male-female gap in college enrollment among low-income students would rise \textit{slightly} from 9.18% to 9.40%. Some simple arithmetic can show that this slight expansion in the disparity would be avoided if male signees likelihood of enrolling in college was increased by 3.6%, while the effect for females was held at 3.0%. It is important to note that while male-female enrollment gap is slightly increasing among low-income students, more low-income students are enrolling in college on the aggregate than in the absence of the scholarship program.

In Table 7, we repeat this thought experiment for each of the 18 dichotomous student characteristics. Columns (1) and (2) of Table 7 correspond to the raw disparities shown in the first columns of Table 5 and Table 6. The third column of Table 7 shows the simulated post-policy college enrollment, assuming that signing the pledge raises the likelihood of college enrollment by 3 percentage points. The fourth column of Table 7 shows the simulated change in the college enrollment disparity between this group and the reference group. (The reference group includes all those who do not have the particular characteristic; for example, gifted versus non-gifted; Hispanic versus all non-Hispanics; etc.). The final column of Table 7 shows what level of “effect” of the CBS program on college-going would be needed for the reference group to eliminate growth in the college enrollment disparity.

[INSERT TABLE 7]

The top panel of Table 7 shows that the five groups who have higher college enrollment rates also have higher CBS sign-up rates. So, if signing the pledge has an effect on college enrollment, and if this effect is constant across CBS eligible students, then we should expect these 5 advantaged groups to have their advantage rise. For example, gifted students are 12.9 percentage points more likely to sign up and 33.6 percentage points more likely to attend college. If sign-up raises the likelihood of enrollment by 3 percentage points for all signers, we

\textsuperscript{40} Our subsequent papers will attempt to estimate the causal effect of signing the pledge. This 3-percentage point effect is completely hypothetical and used only for illustration.
would expect the 33.6 percentage point advantage to increase to 33.9 percentage points. However, as shown in the last column of Table 7, if the act of signing up has a bigger effect on college going of those who are not gifted, and specifically if the effect for this reference group is 4.2% instead of 3.0%, then the college-going disparity between the gifted and non-gifted would not increase. Among the groups that are disadvantaged, 9 would experience an increase in their disadvantage (middle panel of Table 7), and 4 would experience a decrease in their disadvantage. Altogether, Table 7 shows that disparities are likely to widen for 14 of the 18 subgroups we examine. Thus, the evidence suggests that variation in sign-up rates is likely to modestly increase disparities between low-income youth, but narrows gaps between low-income and high-income youth. This could be useful to program administrators who might choose to focus on the low-income student sub-groups that have low college enrollment rates.

We now pivot to discuss school-level sign-up rates in preparation for our qualitative analysis. Figure 2 shows the relationship between the school’s actual sign-up rate and its predicted sign-up rate by region for the 605 schools in Washington state that have program-eligible 8th grade students. A few things are of note here. First, while the actual and predicted rates are correlated, there is substantial deviation (the raw correlation is 0.35). This result provides a rationale for the qualitative analysis designed to explore explanations for this variation. It furthermore suggests that there may be gains to be made by targeting resources towards particular schools with surprisingly low sign-up rates. Second, note that the majority of schools have actual sign-up rates in 2011-12 that are greater than one would expect based on the behavior of the first three cohorts of students, which is consistent with an improving sign-up rate across cohorts. The school that is an outlier in the upper-right corner of the Puget Sound panel of Figure 2 had 232 eligible students in 2011-12 out of an 8th grade class of 330, yet had high test scores (54% of its eighth graders passed the 8th grade Measurements of Student Progress (MSP) math test). This school will be in the “Predictably High Sign-up” category. In contrast, the school that is an outlier in the upper-left corner of the Eastern Washington panel of Figure 2 had all 79 eighth graders eligible in 2011-12 and only 25% of its students passed the MSP math test. This school will be in the “Surprisingly High Sign-up” category. Finally note that the lack of schools in the upper-left and lower-right regions of the Puget Sound panel and lack of schools with high
predicted sign-up rates in the Remainder of Western Washington will yield few schools in some categories for these regions.\footnote{In the next draft of this paper, we plan to evaluate whether the sign-up rate differences appear to be driven by within district school differences or between district differences.}

[INSERT FIGURE 2]

Panels A and B of Table 8 provide the frequencies of schools by category and region and demonstrates that we will need to expand outside some of these categories where there are fewer than 2 schools in the cell. Panels C and D of Table 8 present the descriptive characteristics of these schools. As shown in Panel D, “Surprisingly Low” schools have higher shares of Hispanic and female students, lower shares receiving special education, and higher shares passing the 8th grade MSP math test than “Surprisingly High” schools.

[INSERT TABLE 8]

5.2 Qualitative Analysis

5.2a Regional Officers

Across the interviews with Regional Officers, several themes emerged as potentially important for interpreting the quantitative findings about students’ program uptake and for informing ongoing CBS program development. Respondents reported that schools’ success in signing students up for the CBS program depends upon (1) district-level “buy-in” and support for the program, coupled with a school-level champion who takes “ownership” of the program; (2) counselors or other school staff having access to FRPL data in order to target individual students who are eligible for the program; (3) guidance counseling staff that are not over-burdened with other responsibilities and have good relationships with students; and (4) being in a community or district with a strong college-going culture. We discuss each of these issues below.

Importance of district buy-in and school champion

There was broad agreement across interview respondents that district-level “buy-in” for the program is critical to its success. Districts can send a message to school leaders that CBS should be a priority. However, respondents described district support as necessary but insufficient for encouraging all eligible students to sign up. The majority of respondents agreed that schools are the most critical partner in targeting eligible students and they pointed to the
simultaneous need for a “champion” to take ownership of the program at the school level to ensure adequate prioritization of the program relative to the many activities required of middle school faculty and staff. Ultimately, respondents asserted, someone at each school needs to take responsibility for the program’s success there.

In addition to the role of districts and schools, respondents described community organizations as sometimes helpful with outreach and promotion, but most felt that such groups would directly sign up students only if they have staff within the school, which would limit their ability to help. One Regional Officer, however, does rely heavily on community organizations, particularly given the rural nature and weak college-going culture of the region.

*Availability of data for targeting eligible students*

Interview respondents described many approaches to working with schools, students, and families to encourage sign up. Among the various efforts, respondents agreed that the most powerful approaches are those that target individual eligible students—for example, personalized communications versus posters and other promotional materials, or individual sessions with a guidance counselor versus group information nights. However, such approaches require adequate information to identify and follow-up with individual eligible students. Unfortunately, according to Regional Officers, neither they nor their colleagues working in the schools can always get accurate and timely information to do this.

Although most interview respondents were not aware of the exact nature of the discrepancy between the eligibility and sign-up figures discussed above, they were aware of issues with the data from WSAC and other sources that might make it difficult for schools to know exactly which students to target for sign up. Specifically, they noted that not all schools are able to access FRPL data on their students, either because districts are unable or unwilling to share this student-level data. Even in cases where school leaders have access to FRPL data, respondents noted that these might not always be accurate, either because students have not signed up for FRPL or because of student mobility. Finally, one respondent described how different start dates for the school year can leave some schools and districts without the WSAC data at precisely the time when it would be most useful, that is during orientation and the first weeks of school.
The guidance counselor role

Although there may be variation from school to school in who serves as the CBS program’s champion, most Regional Officers emphasized the importance of middle school guidance counselors as the key individuals involved in actually getting students to sign up for the program. They noted, however, that heavy workloads can leave some counselors struggling to prioritize the program and support its success. Similarly, they described variability across counselors in their ability to develop meaningful relationships with students, which they viewed as key to encouraging students to sign up. Finally, they described turnover rates among counseling staff as high, noting that this could also pose challenges to the program’s success.

College-going culture and attitudes toward government programs

Interview respondents pointed to variability in the college-going culture in different regions, districts, and schools as another potential reason for variability in sign-up rates. They noted that proximity to a college or university often supports the development of a college-going culture, which could leave schools in rural areas, in particular, in a more difficult position to promote program success. In addition to the relatively straightforward problem of geographic distance from colleges, respondents described what might be characterized as a “cultural” distance that is also greater for students on Indian reservations and in rural, coastal, and timber communities around the state. In such areas, according to respondents, it is not the norm for students to go away to college and there is a pervasive mistrust of government that may keep students and families from engaging with the program. Respondents described different sources for this lack of trust, including political and cultural attitudes, immigration status and language barriers, and the state legislature’s history of failing to fund education programs.

Opportunities for improvement

Interview respondents generally considered the CBS program to be a success, but also noted several areas where it could be improved. To improve and maintain high sign-up rates, respondents pointed to two opportunities, which correspond to the first two key findings discussed above. First, because district leadership and school champions play such important roles, turnover among these positions is a concern. Interview respondents emphasized the need for more systemic and systematic approaches, where all school faculty and staff have a role to
play in encouraging program participation and sign-up rates serve as part of a school’s evaluation and accountability systems. Second, there was broad agreement that stakeholders need easier access to better and more timely data to identify eligible students, target them for sign up, and support them as they move toward college enrollment.

A final opportunity was identified that could promote students’ use of the scholarship after they have signed up. Interview respondents emphasized that program sign up is just the first step. In their view, going forward, the CBS program should devote more attention to students’ actual uptake of the scholarship and success in college. This opportunity is accompanied by many challenges, however. Specifically, maintaining students’ and families’ awareness of the program and encouraging them to adequately plan and prepare for college presents a different set of issues from encouraging program sign-up. Similarly, if the ultimate goal of the program is college completion, students will require additional supports to help them enroll and persist in college.

5.2b Middle School Guidance Counselors and Principals

The preliminary counselor and principal interviews suggest that middle school guidance counselors view their CBS responsibilities as an important part of their work. Nearly all of the respondents (92%) report that they consider CBS part of their expected job duties and more than two-thirds (69%) rank the program as having about the same importance as most of their other duties. While holding higher or similar importance to their other duties, respondents routinely mentioned the significant amount of time that it takes to reach a high student sign-up rate. A third of respondents mentioned heavy time burdens to track down signed scholarship forms and nearly half of respondents (43%) named additional personnel support as the main action that a school or district could take to make the respondent a more effective program champion. On average, respondents, report spending just over 8% of their annual FTE on the program, although, as noted by two respondents, the amount of time they spend on CBS varies throughout the year. Time demands on counselors may have a negative effect on program sign-up; as emphasized in interviews with CBS Regional Officers, schools where counselors’ have too many demands on their time typically have lower sign-up rates.

Guidance counselors reported using a variety of approaches to promote the program and encourage sign up. The most common activities reported by respondents included individual
meetings with students (93%) and parent-teacher conferences (64%); less common were schoolwide and other group approaches (21% each); the tactics least commonly reported included placing scholarship forms in orientation packets (14%) or FRPL application packets (7%). Our data cannot identify causal links between specific activities and sign-up rates, but respondents’ reported use of multiple activities and emphasis on individual approaches is in line with prior research on the CBS program, which identifies as promising practices the use of “multifaceted” outreach and “targeted and personalized” outreach (Higgins Terry 2012). It is interesting to note that, while all schools use the fall free and reduced price lunch list to identify eligible students, 10 out of 13 guidance counselors used additional means to identify eligible students that were not on the FRPL list. These other tactics include sending forms to all students for families to self-identify (6 out of 13), giving applications to any new student (4/13), teachers identifying potential students (2/13), and providing materials to students that attend a college/career program geared towards low-income or first generation college bound students (2/13). This finding suggests that counselors and other program administrators recognize that the FRPL list does not capture all eligible students. Indeed, 3 out of the 13 school counselors recognized that calculated rates were over measurements of program uptake.

Beyond the work of the counselors themselves, another important component for CBS program success—identified both in the literature and by CB Regional Officers—is district support for the program. Half of respondents could identify a district-level “champion” and over a third reported that their district places accountability requirements on schools’ CB performance. The flip side of course is that a large share of respondents did not report that their districts placed this type of emphasis on signing the pledge. The pattern of responses to these items supports the contention that district leadership is critical, though the data are as yet merely suggestive.

Reflecting on the program’s progress and results, respondents were not in close agreement about what works, but they did largely concur about primary challenges to the CBS program’s success. Among the various strategies to support the program, respondents most often identified one-on-one conversations with parents (4 out of 13) as the most effective approach. Other strategies considered most effective by at least one individual included: classroom approaches (3/13), one-on-one conversation with students (2/13), large incentives (1/13), persistence (1/13), attaching forms to fieldtrip permission slips (1/13), and having a WSAC guest
speaker come to the school (1/13). The greatest challenge to encouraging sign up, identified by nearly two-thirds of respondents, was getting signed forms back from students (8 out of 13). Other challenges (mentioned by one respondent each) included parents not understanding eligibility requirements, unresponsive parents, the amount of time required for follow-up, and middle schoolers’ developmental stage, in which a future-oriented concept like college is not top of mind.

Overall, the majority of respondents (12 of 13) believe that the College Bound Scholarship has fostered a college-going culture at their school. When asked how the College Bound program has fostered a college-going culture, interviewees responded that the program:

- Helps families see that college is a possibility (2)
- Works in conjunction with other school-wide college readiness efforts (2)
- Has a positive impact on eligible students but does not impact school-wide culture (2)
- Has given counselors a reason to start the conversation about college (2)
- Is helping those students who are already motivated (1)

Only one respondent was unsure of the impact because college is “so far off in the future, it doesn’t register [with students].”

6. Conclusion

Early commitment scholarship pledge programs are relatively new so it is not surprising that we know relatively little about program effects, and almost nothing about decisions to sign up. This is an important gap in the literature since this type of pledge program can only help students if they choose to participate. In this paper we provide the first evidence of the factors that predict the likelihood of students signing Washington’s College Bound Scholarship.

We document that while the state has made considerable progress in increasing the number of eligible middle school students signing the pledge, sign-up rates are still far below 100 percent in most school districts. This finding conflicts with state reports, suggesting near universal sign up rates in many districts, that are based on incomplete data on eligible students. The dichotomy between these state reports and the proportion of eligible students who have actually signed up may be important as it could help determine how to allocate resources devoted to encouraging students to sign the pledge and eventually utilize scholarship aid.
Not surprisingly, the individual student characteristics that are associated with signing the pledge are closely aligned with the characteristics that predict whether low-income students go on to 4-year colleges. High achieving students, for instance, are both more likely to sign the pledge and (earlier cohorts of high achieving students are) more likely to go to college. This correspondence suggests that sign-up disparities may modestly increase college enrollment disparities among the targeted low-income students, even though it may narrow college enrollment disparities between low- and higher-income students. Also not surprisingly, there is a positive correlation between predicted school level sign-up rates and actual sign-up rates, but the correlation, 0.35, is not overwhelmingly high. This, combined with the fact that schools have lower sign-up rates than is reflected in public reports, suggests it may be beneficial to target resources towards encouraging student sign-ups at schools with surprisingly low sign-up rates. In follow-up qualitative research we plan to investigate in more depth why some schools have unusually high or low sign up rates, which should help us better assess if it is related to misunderstandings of the number of eligible students. We also plan further work to assess the impacts of signing the early commitment pledge on high school course-taking patterns, college enrollment and other academic outcomes.
References


College Bound Scholarship Program. Chapter 28B.118 RCW, [2007 c405 § 1].

———. Chapter 28B.118 RCW, [2015 c244 § 7].


Neuberger, Zoë. (2006.) “Implementing Direct Certification: States And School
Districts Can Help Low-Income Children Get The Free School Meals For Which They Are Eligible.”  
Center on Budget and Policy Priorities, August 11.  


New York City: Russell Sage Foundation.


Usher, Alex. (2005.) A Little Knowledge is a Dangerous Thing: How Perceptions of Costs and Benefits Affect Access to Education.  
Toronto: Educational Policy Institute.


———. (2012c.) Questions and Answers.  
| Table 1: Differences Between Washington State’s Program and Other States’ Programs |
|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|
|                                                | **Indiana 21st Century Scholars Program** | **Oklahoma Promise** | **Washington College Bound Scholarship** |
| **Year Started**                               | 1990                                        | 1992                                        | 2007                                        |
| **When the Student Signs the Pledge**          |                                              |                                              |                                              |
| **Time of commitment**                        | 6th, 7th or 8th grade                       | 8th, 9th and 10th grade                     | 7th, 8th grade                              |
| **Income Requirement When Pledge is Signed?**  | No (Foster care); otherwise, Yes (Varies by household size, equivalent to eligibility for FRPL.) | Yes (Family income of $50,000 or less at commitment. Special income provisions apply to children adopted from certain court-ordered custody and children in the custody of court-appointed legal guardians) | No (Identified by state as eligible for FRPL, family receives basic food/TANF benefits, or currently in foster care or a dependent of the state); otherwise, Yes (Varies by household size, equivalent to eligibility for FRPL.) |
| **When the Student Goes to College**          |                                              |                                              |                                              |
| **Income Requirement To Qualify for Scholarship?** | No (Class of 2015 and Earlier); Yes (Class of 2018 and Later); Depends on when enrolled in the program (Class of 2016, 2017) | Yes, family income of $100,000 or less at the time the student begins college. | Yes, less than 65% of the state’s Median Family Income ($53,000 for a family of four in 2012-13) |
| **GPA Threshold**                             | 2.0 (Class of 2014 and earlier); 2.5 (Class of 2015 and later) | 2.5                                         | 2                                            |
| **College-bound coursework requirement?**      | Yes                                         | Yes                                         | No                                           |
| **Requires the student to earn a specific type of diploma?** | No (Class of 2016 and Earlier); Yes, a "Core 40" diploma (Class of 2017 and Later) | No                                          | No                                           |
| **Other Curricular Requirements**              | No (Class of 2016 and Earlier); Yes -- Completion of "Scholar Success Program" (Class of 2017 and Later) | No                                          | No                                           |
| **Guaranteed full tuition?**                   | Yes (Class of 2015 and Earlier); No (Class of 2018 and Later); Depends on when enrolled in the program (Class of 2016, 2017) | Yes, full tuition at public institutions and a portion of tuition at private institutions. | Yes, plus a book allowance. |

Sources: Harnish (2009), Heller (2006), Indiana Division of Student Financial Aid (2013a, 2013b, 2013c), Oklahoma State Regents for Higher Education (2013a, 2013b), and Washington Student Achievement Council (2013a, 2013b)
### Figure 1: Sign-up Rate According to the State’s Washington Student Achievement Council

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Expected Grad Year</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>Total Sign-Ups By Academic Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Year 07-08</td>
<td>Eligible Students</td>
<td>26,093</td>
<td>28,600</td>
<td>29,856</td>
<td>30,549</td>
<td>31,923</td>
<td>36,394</td>
<td>36,208</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Complete</td>
<td>9,062</td>
<td>6,199</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15,261</td>
</tr>
<tr>
<td>Academic Year 08-09</td>
<td>Eligible Students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>27,895</td>
</tr>
<tr>
<td></td>
<td>Complete</td>
<td>6,885</td>
<td>9,871</td>
<td>11,139</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22,120</td>
</tr>
<tr>
<td>Academic Year 09-10</td>
<td>Eligible Students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24,311</td>
</tr>
<tr>
<td></td>
<td>Complete</td>
<td>9,764</td>
<td>12,356</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>28,241</td>
</tr>
<tr>
<td>Academic Year 10-11</td>
<td>Eligible Students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>33,795</td>
</tr>
<tr>
<td></td>
<td>Complete</td>
<td>11,042</td>
<td>13,269</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>151,623</td>
</tr>
</tbody>
</table>

1. Preliminary Numbers. Includes incomplete applications.

---

Source: Personal communication from Rachelle Sharpe, Ph.D., Senior Director of Student Financial Aid and Support Services, Washington Student Achievement Council, August 23, 2013
Table 2: Sign-up Rates

<table>
<thead>
<tr>
<th>Expected HS Graduation Year</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2010</td>
<td>2011</td>
</tr>
<tr>
<td>7th grade in 2004-05 or 7th grade in 2005-06</td>
<td>25</td>
<td>235</td>
</tr>
<tr>
<td>8th grade in 2005-06</td>
<td>39,156</td>
<td>37,410</td>
</tr>
<tr>
<td>9th grade in 2008-09</td>
<td>24</td>
<td>217</td>
</tr>
<tr>
<td>7th grade in 2007-08 or 7th grade in 2008-09</td>
<td>0.1%</td>
<td>0.6%</td>
</tr>
<tr>
<td>8th grade in 2006-07</td>
<td>33.7%</td>
<td>37.2%</td>
</tr>
<tr>
<td>9th grade in 2008-09</td>
<td>0.1%</td>
<td>0.3%</td>
</tr>
<tr>
<td>8th grade in 2009-10</td>
<td>0.0%</td>
<td>0.6%</td>
</tr>
</tbody>
</table>

Note: "Clearly eligible" defined as a student that was marked as eligible for the Free and Reduced Lunch Program at any point during their 7th or 8th grade year (8th or 9th grade for the first Post-Policy cohort).
### Table 3: Descriptive Statistics for Analysis Sample

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Pre-Policy Mean</th>
<th>Post-Policy Mean</th>
<th>Number of Observations in Pooled Sample with Non-Missing Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signed the Pledge</td>
<td>0.1%</td>
<td>33.7%</td>
<td>76,566 (Two Cohorts Pooled)</td>
</tr>
<tr>
<td>Enrolled in any college within 4 years after starting 9th grade</td>
<td>23.6%</td>
<td>27.2%</td>
<td>76,566</td>
</tr>
<tr>
<td><strong>Student Characteristics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading WASL (standardized within test grade, test type, and cohort)</td>
<td>-0.38</td>
<td>-0.32</td>
<td>65,962 (Two cohorts pooled)</td>
</tr>
<tr>
<td>Math WASL (standardized within test grade, test type, and cohort)</td>
<td>-0.40</td>
<td>-0.38</td>
<td>66,040</td>
</tr>
<tr>
<td>Took WASL out-of-grade-level</td>
<td>1.5%</td>
<td>0.9%</td>
<td>76,566</td>
</tr>
<tr>
<td>Took a modified version of WASL</td>
<td>2.6%</td>
<td>6.1%</td>
<td>76,566</td>
</tr>
<tr>
<td>Age in 8th grade</td>
<td>14.4</td>
<td>14.4</td>
<td>76,566</td>
</tr>
<tr>
<td>Female</td>
<td>48.0%</td>
<td>48.4%</td>
<td>76,566</td>
</tr>
<tr>
<td>Hispanic</td>
<td>25.6%</td>
<td>30.2%</td>
<td>76,566</td>
</tr>
<tr>
<td>Non-Hispanic African American</td>
<td>7.4%</td>
<td>6.6%</td>
<td>76,566</td>
</tr>
<tr>
<td>Non-Hispanic Asian</td>
<td>5.9%</td>
<td>5.7%</td>
<td>76,566</td>
</tr>
<tr>
<td>Non-Hispanic Hawaiian or Pacific Islander</td>
<td>0.1%</td>
<td>0.2%</td>
<td>76,566</td>
</tr>
<tr>
<td>Non-Hispanic Native American or Alaskan Native</td>
<td>3.2%</td>
<td>2.0%</td>
<td>76,566</td>
</tr>
<tr>
<td>Non-Hispanic and More Than One Race</td>
<td>7.7%</td>
<td>10.3%</td>
<td>76,566</td>
</tr>
<tr>
<td>Disability</td>
<td>20.2%</td>
<td>21.6%</td>
<td>76,566</td>
</tr>
<tr>
<td>Migrant</td>
<td>7.3%</td>
<td>8.4%</td>
<td>76,566</td>
</tr>
<tr>
<td>Homeless</td>
<td>8.0%</td>
<td>11.5%</td>
<td>76,566</td>
</tr>
<tr>
<td>Gifted (“highly capable”)</td>
<td>2.6%</td>
<td>3.9%</td>
<td>76,566</td>
</tr>
<tr>
<td>Receives bilingual services (“transitional bilingual”)</td>
<td>13.6%</td>
<td>18.5%</td>
<td>76,566</td>
</tr>
<tr>
<td>Language spoken at home other than English</td>
<td>22.9%</td>
<td>28.1%</td>
<td>76,566</td>
</tr>
<tr>
<td>Attends public school part-time</td>
<td>0.3%</td>
<td>0.6%</td>
<td>76,566</td>
</tr>
<tr>
<td>Attended 8th grade in Puget Sound Counties</td>
<td>48.7%</td>
<td>49.6%</td>
<td>76,566</td>
</tr>
<tr>
<td>Attended 8th grade in Other Western Washington Counties</td>
<td>19.6%</td>
<td>19.5%</td>
<td>76,566</td>
</tr>
<tr>
<td>Attended 8th grade in Eastern Washington</td>
<td>31.7%</td>
<td>30.9%</td>
<td>76,566</td>
</tr>
<tr>
<td><strong>Middle School Characteristics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Math WASL (standardized across schools within cohorts)</td>
<td>-0.20</td>
<td>-0.16</td>
<td>76,471</td>
</tr>
<tr>
<td>8th grade fall enrollment</td>
<td>242</td>
<td>235</td>
<td>74,755</td>
</tr>
<tr>
<td>Percent of student by FRPL</td>
<td>47.57</td>
<td>48.44</td>
<td>75,752</td>
</tr>
<tr>
<td>Undergrad enrollment within a 50-mile radius (standardized across schools within cohorts)</td>
<td>0.10</td>
<td>0.15</td>
<td>76,302</td>
</tr>
<tr>
<td>Has a guidance counselor</td>
<td>90.6%</td>
<td>93.4%</td>
<td>76,566</td>
</tr>
</tbody>
</table>

Note: Standard deviations are in parentheses. Students are eligible to sign the pledge in 8th or 9th grade for Cohort 1 and 7th or 8th grade for subsequent cohorts. WASL scores are based on 6th grade administration for post-policy cohorts and 7th grade for pre-policy cohorts.
Table 4: Respondent sample by region and predicted sign-up rate cell

<table>
<thead>
<tr>
<th></th>
<th>Remainder of Western WA</th>
<th>Puget Sound</th>
<th>Eastern Region</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surprisingly low</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Predictably low</td>
<td>1</td>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Typical school</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Predictably high</td>
<td>1</td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Surprisingly high</td>
<td>1</td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>6</strong></td>
<td><strong>4</strong></td>
<td><strong>3</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>
### Table 5: Marginal Effects of Student and School Characteristics on the Likelihood of Signing the Pledge

<table>
<thead>
<tr>
<th>Student Characteristics</th>
<th>(1) Raw Differences (i.e., Not Conditioned on Other Characteristics)</th>
<th>(2) Logit Model with Middle School Fixed Effects</th>
<th>(3) Mixed Effects Logit Model with School Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math WASL (Standardized)</td>
<td>0.041 (0.004) ***</td>
<td>0.043 (0.003) ***</td>
<td></td>
</tr>
<tr>
<td>Reading WASL (Standardized)</td>
<td>0.031 (0.003) ***</td>
<td>0.028 (0.003) ***</td>
<td></td>
</tr>
<tr>
<td>Took WASL out-of-grade-level</td>
<td>-0.049 (0.015) ***</td>
<td>0.068 (0.022) **</td>
<td>0.068 (0.017) ***</td>
</tr>
<tr>
<td>Took a modified version of WASL</td>
<td>-0.080 (0.006) ***</td>
<td>-0.032 (0.012) **</td>
<td>-0.040 (0.008) ***</td>
</tr>
<tr>
<td>Age in 8th grade</td>
<td>-0.028 (0.003) ***</td>
<td>-0.021 (0.002) ***</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>0.073 (0.003) ***</td>
<td>0.060 (0.003) ***</td>
<td>0.055 (0.003) ***</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.090 (0.003) ***</td>
<td>0.056 (0.012) ***</td>
<td>0.015 (0.005) **</td>
</tr>
<tr>
<td>Non-Hispanic African American</td>
<td>0.061 (0.006) ***</td>
<td>0.148 (0.011) ***</td>
<td>0.078 (0.008) ***</td>
</tr>
<tr>
<td>Non-Hispanic Asian</td>
<td>0.098 (0.006) ***</td>
<td>0.104 (0.012) ***</td>
<td>0.049 (0.008) ***</td>
</tr>
<tr>
<td>Non-Hispanic Hawaiian or Pacific Islander</td>
<td>-0.104 (0.027) ***</td>
<td>-0.039 (0.029) **</td>
<td>-0.070 (0.024) **</td>
</tr>
<tr>
<td>Non-Hispanic Native American or Alaskan Native</td>
<td>-0.120 (0.010) ***</td>
<td>-0.050 (0.019) **</td>
<td>-0.057 (0.012) ***</td>
</tr>
<tr>
<td>Non-Hispanic and More Than One Race</td>
<td>-0.019 (0.005) ***</td>
<td>0.049 (0.007) ***</td>
<td>0.021 (0.005) ***</td>
</tr>
<tr>
<td>Disability</td>
<td>-0.090 (0.003) ***</td>
<td>-0.020 (0.005) ***</td>
<td>-0.012 (0.004) **</td>
</tr>
<tr>
<td>Migrant</td>
<td>0.150 (0.005) ***</td>
<td>0.046 (0.017) **</td>
<td>0.030 (0.008) ***</td>
</tr>
<tr>
<td>Homeless</td>
<td>-0.026 (0.004) ***</td>
<td>0.000 (0.006) ***</td>
<td>-0.013 (0.004) **</td>
</tr>
<tr>
<td>Gifted (“highly capable”)</td>
<td>0.129 (0.006) ***</td>
<td>0.085 (0.014) ***</td>
<td>0.079 (0.009) ***</td>
</tr>
<tr>
<td>Receives bilingual services (“transitional bilingual”)</td>
<td>0.115 (0.004) ***</td>
<td>0.065 (0.013) ***</td>
<td>0.033 (0.006) ***</td>
</tr>
<tr>
<td>Language spoken at home other than English</td>
<td>0.115 (0.003) ***</td>
<td>0.042 (0.014) **</td>
<td>0.047 (0.006) ***</td>
</tr>
<tr>
<td>Attends public school part-time</td>
<td>-0.100 (0.020) ***</td>
<td>-0.064 (0.022) **</td>
<td>0.005 (0.024)</td>
</tr>
<tr>
<td>Attended 8th grade in Remainder of Western WA</td>
<td>-0.055 (0.004) ***</td>
<td>0.004 (0.021)</td>
<td>0.030 (0.022)</td>
</tr>
<tr>
<td>Attended 8th grade in Eastern Washington</td>
<td>0.087 (0.003) ***</td>
<td>0.081 (0.022) ***</td>
<td>0.050 (0.023) *</td>
</tr>
</tbody>
</table>

### Middle School Characteristics

| (4) Average Math WASL (Standardized)| 0.147 (0.021) *** |
| (5) 8th grade fall enrollment| -0.009 (0.011) |
| (6) Percent of student body on FRPL| 0.004 (0.001) *** |
| (7) Undergrad enrollment within a 50-mile radius (Std.)| 0.045 (0.016) ** |
| (8) Has a guidance counselor| 0.027 (0.021) |

Number of observations | 114,639

Note: Standard deviations are in parentheses. WASL scores are based on 6th grade administration for post-policy cohorts and 7th grade for pre-policy cohorts. "Raw Differences" are computed by an ordinary least square regression of the outcome on the student characteristic (with no other controls).
Table 6: Marginal Effects of Student and School Characteristics on the Likelihood of Enrolling in College On-Time

<table>
<thead>
<tr>
<th>Student Characteristics</th>
<th>Raw Differences (i.e., Not Conditioned on Other Characteristics)</th>
<th>Logit Model with Middle School Fixed Effects</th>
<th>Mixed Effects Logit Model with School Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math WASL (Standardized)</td>
<td>0.104 (0.004) ***</td>
<td>0.100 (0.004) ***</td>
<td></td>
</tr>
<tr>
<td>Reading WASL (Standardized)</td>
<td>0.078 (0.003) ***</td>
<td>0.075 (0.003) ***</td>
<td></td>
</tr>
<tr>
<td>Took WASL out-of-grade-level</td>
<td>-0.134 (0.013) ***</td>
<td>0.082 (0.026) **</td>
<td>0.072 (0.024) **</td>
</tr>
<tr>
<td>Took a modified version of WASL</td>
<td>-0.144 (0.008) ***</td>
<td>-0.025 (0.014)</td>
<td>-0.021 (0.014)</td>
</tr>
<tr>
<td>Age in 8th grade</td>
<td>-0.043 (0.003) ***</td>
<td>-0.041 (0.003) ***</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>0.092 (0.003) ***</td>
<td>0.063 (0.003) ***</td>
<td>0.063 (0.003) ***</td>
</tr>
<tr>
<td>Hispanic</td>
<td>-0.032 (0.004) ***</td>
<td>-0.029 (0.007) ***</td>
<td>-0.024 (0.005) ***</td>
</tr>
<tr>
<td>Non-Hispanic African American</td>
<td>-0.006 (0.006)</td>
<td>0.061 (0.009) ***</td>
<td>0.075 (0.008)</td>
</tr>
<tr>
<td>Non-Hispanic Asian</td>
<td>0.225 (0.007) ***</td>
<td>0.148 (0.012) ***</td>
<td>0.142 (0.010) ***</td>
</tr>
<tr>
<td>Non-Hispanic Hawaiian or Pacific Islander</td>
<td>-0.141 (0.044) ***</td>
<td>-0.127 (0.037) ***</td>
<td>-0.094 (0.045) *</td>
</tr>
<tr>
<td>Non-Hispanic Native American or Alaskan Native</td>
<td>-0.104 (0.009) ***</td>
<td>-0.076 (0.014) ***</td>
<td>-0.066 (0.012) **</td>
</tr>
<tr>
<td>Non-Hispanic and More Than One Race</td>
<td>-0.064 (0.005) ***</td>
<td>-0.030 (0.006) ***</td>
<td>-0.025 (0.006) ***</td>
</tr>
<tr>
<td>Disability</td>
<td>-0.169 (0.004) ***</td>
<td>-0.051 (0.005) ***</td>
<td>-0.055 (0.005) ***</td>
</tr>
<tr>
<td>Migrant</td>
<td>-0.004 (0.006)</td>
<td>0.009 (0.011)</td>
<td>0.011 (0.008)</td>
</tr>
<tr>
<td>Homeless</td>
<td>-0.136 (0.005) ***</td>
<td>-0.101 (0.006) ***</td>
<td>-0.101 (0.006) ***</td>
</tr>
<tr>
<td>Gifted (“highly capable”)</td>
<td>0.336 (0.009) ***</td>
<td>0.172 (0.012) ***</td>
<td>0.176 (0.012) ***</td>
</tr>
<tr>
<td>Receives bilingual services (&quot;transitional bilingual&quot;)</td>
<td>-0.031 (0.004) ***</td>
<td>0.001 (0.007)</td>
<td>0.001 (0.007)</td>
</tr>
<tr>
<td>Language spoken at home other than English</td>
<td>0.039 (0.004) ***</td>
<td>0.057 (0.008) ***</td>
<td>0.056 (0.007) ***</td>
</tr>
<tr>
<td>Attends public school part-time</td>
<td>-0.047 (0.030)</td>
<td>0.013 (0.038)</td>
<td>0.026 (0.037)</td>
</tr>
<tr>
<td>Attended 8th grade in Remainder of Western WA</td>
<td>-0.004 (0.004)</td>
<td>0.023 (0.009) *</td>
<td>0.019 (0.012)</td>
</tr>
<tr>
<td>Attended 8th grade in Eastern Washington</td>
<td>0.021 (0.003) ***</td>
<td>0.044 (0.010) ***</td>
<td>0.040 (0.013) **</td>
</tr>
</tbody>
</table>

Middle School Characteristics

| Average Math WASL (Standardized)                            | 0.141 (0.025) ***                                              |                                            |                                                      |
| 8th grade fall enrollment                                   | -0.010 (0.006)                                                 |                                            |                                                      |
| Percent of student body on FRPL                            | 0.000 (0.000)                                                  |                                            |                                                      |
| Undergrad enrollment within a 50-mile radius (Std.)         | -0.003 (0.009)                                                 |                                            |                                                      |
| Has a guidance counselor                                    | 0.030 (0.012)                                                  |                                            |                                                      |

Number of observations 76,566

Note: Standard deviations are in parentheses. WASL scores are based on 6th grade administration for post-policy cohorts and 7th grade for pre-policy cohorts. "Raw Differences" are computed by an ordinary least square regression of the outcome on the student characteristic (with no other controls).
Table 7: Simulated Effect of Sign-up Disparities on College Enrollment Disparities, Assuming Sign-up Raises College Enrollment by 3%

<table>
<thead>
<tr>
<th>Advantage Will Likely Increase</th>
<th>(1) Raw Sign-up Disparity</th>
<th>(2) Raw Pre-Policy College Enrollment Disparity</th>
<th>(3) Simulated Post-Policy College Enrollment Disparity</th>
<th>(4) Change in College Enrollment Disparity</th>
<th>(5) What Would the Effect of Sign-up on College Enrollment for the Reference Group Need to be to Hold the College Enrollment Disparity Constant (Holding Effect on This Group at 3%)?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advantaged Groups Whose College Enrollment Advantage Will Likely Increase</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gifted (“highly capable”)</td>
<td>0.129</td>
<td>0.336</td>
<td>0.339</td>
<td>0.004</td>
<td>4.2%</td>
</tr>
<tr>
<td>Language spoken at home other than English</td>
<td>0.115</td>
<td>0.039</td>
<td>0.042</td>
<td>0.003</td>
<td>4.0%</td>
</tr>
<tr>
<td>Non-Hispanic Asian</td>
<td>0.098</td>
<td>0.225</td>
<td>0.228</td>
<td>0.003</td>
<td>3.8%</td>
</tr>
<tr>
<td>Attended 8th grade in Eastern Washington</td>
<td>0.087</td>
<td>0.021</td>
<td>0.024</td>
<td>0.003</td>
<td>3.7%</td>
</tr>
<tr>
<td>Female</td>
<td>0.073</td>
<td>0.092</td>
<td>0.092</td>
<td>0.000</td>
<td>3.6%</td>
</tr>
<tr>
<td>Disadvantaged Groups Whose College Enrollment Disadvantage Will Likely Increase</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Hispanic Native American or Alaskan Native</td>
<td>-0.120</td>
<td>-0.104</td>
<td>-0.108</td>
<td>-0.004</td>
<td>2.2%</td>
</tr>
<tr>
<td>Non-Hispanic Hawaiian or Pacific Islander</td>
<td>-0.104</td>
<td>-0.141</td>
<td>-0.144</td>
<td>-0.003</td>
<td>2.3%</td>
</tr>
<tr>
<td>Attends public school part-time</td>
<td>-0.100</td>
<td>-0.047</td>
<td>-0.050</td>
<td>-0.003</td>
<td>2.3%</td>
</tr>
<tr>
<td>Disability</td>
<td>-0.090</td>
<td>-0.169</td>
<td>-0.172</td>
<td>-0.003</td>
<td>2.4%</td>
</tr>
<tr>
<td>Took a modified version of WASL</td>
<td>-0.080</td>
<td>-0.144</td>
<td>-0.147</td>
<td>-0.002</td>
<td>2.5%</td>
</tr>
<tr>
<td>Attended 8th grade in Remainder of Western WA</td>
<td>-0.055</td>
<td>-0.004</td>
<td>-0.005</td>
<td>-0.002</td>
<td>2.6%</td>
</tr>
<tr>
<td>Took WASL out-of-grade-level</td>
<td>-0.049</td>
<td>-0.134</td>
<td>-0.135</td>
<td>-0.001</td>
<td>2.7%</td>
</tr>
<tr>
<td>Homeless</td>
<td>-0.026</td>
<td>-0.136</td>
<td>-0.137</td>
<td>-0.001</td>
<td>2.8%</td>
</tr>
<tr>
<td>Non-Hispanic and More Than One Race</td>
<td>-0.019</td>
<td>-0.064</td>
<td>-0.064</td>
<td>-0.001</td>
<td>2.9%</td>
</tr>
<tr>
<td>Disadvantaged Groups Whose College Enrollment Disadvantage Will Likely Decrease</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Migrant</td>
<td>0.150</td>
<td>-0.004</td>
<td>0.000</td>
<td>0.004</td>
<td>4.4%</td>
</tr>
<tr>
<td>Receives bilingual services (“transitional bilingual”)</td>
<td>0.115</td>
<td>-0.031</td>
<td>-0.027</td>
<td>0.003</td>
<td>4.0%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.090</td>
<td>-0.032</td>
<td>-0.029</td>
<td>0.003</td>
<td>3.8%</td>
</tr>
<tr>
<td>Non-Hispanic African American</td>
<td>0.061</td>
<td>-0.006</td>
<td>-0.004</td>
<td>0.002</td>
<td>3.5%</td>
</tr>
</tbody>
</table>
Figure 2: Correspondence of Schools’ Predicted and Actual Sign-up Rates, by Region

Marker size is proportional to number of CBS-eligible students
### Table 8: Frequencies and Descriptive Characteristics of Schools By Actual vs. Predicted Sign-Up Rates

#### Panel A: Category Counts by Region

<table>
<thead>
<tr>
<th>School's Actual Sign-up Rate</th>
<th>School's Predicted Sign-up Rate</th>
<th>Category</th>
<th>Puget Sound Area</th>
<th>Remainder of Western Washington</th>
<th>Eastern Washington</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottom 20%</td>
<td>Bottom 20%</td>
<td>Predictably low</td>
<td>41</td>
<td>29</td>
<td>42</td>
<td>112</td>
</tr>
<tr>
<td>Bottom 20%</td>
<td>Upper 20%</td>
<td>Surprisingly low</td>
<td>9</td>
<td>5</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>40th-60th Percentile</td>
<td>40th-60th Percentile</td>
<td>Typical school</td>
<td>8</td>
<td>8</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>Upper 20%</td>
<td>Bottom 20%</td>
<td>Surprisingly high</td>
<td>3</td>
<td>6</td>
<td>11</td>
<td>20</td>
</tr>
<tr>
<td>Upper 20%</td>
<td>Upper 20%</td>
<td>Predictably high</td>
<td>23</td>
<td>1</td>
<td>9</td>
<td>33</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>84</td>
<td>49</td>
<td>70</td>
<td>203</td>
</tr>
</tbody>
</table>

#### Panel B: Category Counts by Region, 8th grade enrollment is ≥ 25

<table>
<thead>
<tr>
<th>School's Actual Sign-up Rate</th>
<th>School's Predicted Sign-up Rate</th>
<th>Category</th>
<th>Puget Sound Area</th>
<th>Remainder of Western Washington</th>
<th>Eastern Washington</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottom 20%</td>
<td>Bottom 20%</td>
<td>Predictably low</td>
<td>13</td>
<td>8</td>
<td>20</td>
<td>41</td>
</tr>
<tr>
<td>Bottom 20%</td>
<td>Upper 20%</td>
<td>Surprisingly low</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>40th-60th Percentile</td>
<td>40th-60th Percentile</td>
<td>Typical school</td>
<td>8</td>
<td>7</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>Upper 20%</td>
<td>Bottom 20%</td>
<td>Surprisingly high</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Upper 20%</td>
<td>Upper 20%</td>
<td>Predictably high</td>
<td>23</td>
<td>0</td>
<td>7</td>
<td>30</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>48</td>
<td>21</td>
<td>35</td>
<td>104</td>
</tr>
</tbody>
</table>

#### Panel C: Category Characteristics

<table>
<thead>
<tr>
<th>Category</th>
<th>Average 8th grade Enrollment</th>
<th>Average % Hispanic</th>
<th>Average % White</th>
<th>Average % Female</th>
<th>Average % eligible for FRPL</th>
<th>Average % receiving Special Ed</th>
<th>Average passing 8th grade math test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predictably low</td>
<td>47</td>
<td>11%</td>
<td>72%</td>
<td>45%</td>
<td>35%</td>
<td>21%</td>
<td>22%</td>
</tr>
<tr>
<td>Surprisingly low</td>
<td>43</td>
<td>17%</td>
<td>65%</td>
<td>48%</td>
<td>66%</td>
<td>17%</td>
<td>25%</td>
</tr>
<tr>
<td>Typical school</td>
<td>198</td>
<td>12%</td>
<td>71%</td>
<td>48%</td>
<td>49%</td>
<td>13%</td>
<td>58%</td>
</tr>
<tr>
<td>Surprisingly high</td>
<td>52</td>
<td>11%</td>
<td>64%</td>
<td>45%</td>
<td>49%</td>
<td>15%</td>
<td>30%</td>
</tr>
<tr>
<td>Predictably high</td>
<td>217</td>
<td>30%</td>
<td>35%</td>
<td>49%</td>
<td>64%</td>
<td>12%</td>
<td>51%</td>
</tr>
</tbody>
</table>

#### Panel D: Category Characteristics, 8th grade enrollment is ≥ 25

<table>
<thead>
<tr>
<th>Category</th>
<th>Average 8th grade Enrollment</th>
<th>Average % Hispanic</th>
<th>Average % White</th>
<th>Average % Female</th>
<th>Average % eligible for FRPL</th>
<th>Average % receiving Special Ed</th>
<th>Average passing 8th grade math test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predictably low</td>
<td>113</td>
<td>8%</td>
<td>78%</td>
<td>49%</td>
<td>33%</td>
<td>9%</td>
<td>42%</td>
</tr>
<tr>
<td>Surprisingly low</td>
<td>121</td>
<td>24%</td>
<td>58%</td>
<td>52%</td>
<td>47%</td>
<td>8%</td>
<td>62%</td>
</tr>
<tr>
<td>Typical school</td>
<td>207</td>
<td>12%</td>
<td>70%</td>
<td>48%</td>
<td>48%</td>
<td>13%</td>
<td>58%</td>
</tr>
<tr>
<td>Surprisingly high</td>
<td>117</td>
<td>11%</td>
<td>66%</td>
<td>47%</td>
<td>47%</td>
<td>14%</td>
<td>53%</td>
</tr>
<tr>
<td>Predictably high</td>
<td>238</td>
<td>30%</td>
<td>32%</td>
<td>48%</td>
<td>63%</td>
<td>11%</td>
<td>54%</td>
</tr>
</tbody>
</table>

Note: Percentile distributions are weighted by 8th grade enrollment.
**Appendix: Regional Officer Interview Questions**

**Background (5 min)**
I’d like to start with some questions about your background and role.

- How long have you been working in your current role as a College Bound Regional Officer with the College Success Foundation?
- What did you do before working for the College Success Foundation? How do your prior experiences relate to the work you’re doing for the College Success Foundation?
- Besides the College Bound Scholarship program, do you work with other college or career programs? If yes, How much of your time is dedicated to the College Bound Scholarship program versus these other programs?
- To what extent do you interact with the other College Bound Regional Officers? (Probe if needed) When and how do you communicate? What topics do you typically cover?

1. **Work with schools and districts in the region (5-10 min)**
   Now I’d like to ask about your work with schools and districts to promote the College Bound Scholarship program.
   - How many middle schools are there in your region? How many districts? (It’s okay to estimate if you don’t have the exact numbers on hand.)
     - How many of these do you work with?
     - Do you work with any high schools? If yes, About how many? And of how many are there in the region?
     - With so many schools in your region, it might be difficult to get to each one. How do you determine which schools or districts to prioritize?
   - How do you normally interact with these schools and districts?
     - Who is your main point of contact with the districts? With the schools?
     - What, if any, staff trainings do you conduct with schools or districts? (If offer trainings) Can you please describe these trainings? Are they with individuals or groups? Where and when are they held? Who attends? What topics are covered? How do you encourage people to come?
     - What kinds of workshops or events do you plan or host with schools or districts to promote the program or encourage students to participate? (If offer events) Can you please describe these workshops or events? Where and when are they held? Who attends? What topics are covered? How do you encourage people to come?
     - To what extent do you work with schools or districts to advise eligible students or their families about the program? (If offer advising:) Can you please describe how this works? How do you reach people? What topics do you cover when you advise them?
     - What other activities do you use to engage schools or districts with the program and get students to sign up for it? (If offer other activities) Please describe them.
   - Of all the ways you work with schools and districts what approaches do you think have been most successful in getting students to sign up for the College Bound Scholarship program?
   - What have been the greatest challenges in working with schools or districts?
   - To what extent do you find these challenges are particular to specific districts or types of schools? (If so) What do you think makes this so?

2. **Work with partner organizations (5-10 min)**
   Now I’d like to ask some questions about the other kinds of organizations you work with in the region.
   - Beyond districts and schools, what community organizations do you partner with to encourage students to participate in the College Bound Scholarship program?
     - How did you develop these partnerships?
Do you (or the districts or schools) have any formal agreements in place with these partner organizations—for example, contracts or memoranda of understanding?

- How often and in what ways do you interact with these partner organizations?
- What do these organizations do to encourage students to participate in the College Bound Scholarship program?
  - How do they get students to sign up for the program?
  - How do they help students to prepare for college?
  - What else do they do to promote participation in the program?
- To what extent do you think these partner organizations have helped increase the number of eligible students who sign up for the College Bound Scholarship?

3. College awareness and college-going culture (5-10 min)
Now I’d like to ask you some questions about efforts to build college awareness and a college-going culture in your region.

- What are districts, schools, or individual school staff and faculty that you work with in the region doing to support:
  - General college awareness?
  - Understanding of college readiness?
  - Understanding of how to pay for college?
- What do the community partner organizations that you work with do to support:
  - General college awareness?
  - Understanding of college readiness?
  - Understanding of how to pay for college?
- If you had to give a grade from A to F, how would you rate the general college-going culture in your region? On the same scale, how would you rate each of the following:
  - General college awareness?
  - Understanding of college readiness?
  - Understanding of how to pay for college?
- How much variation do you see in the college-going culture across the various middle schools in your region? [If appropriate] What about across the high schools?
- What do you think causes this variation?
- What do you think schools, districts, and partner organizations do particularly well to promote a college-going culture in the region?
- In what areas do you think they could do more to promote the college-going culture?
- How has the availability of the College Bound Scholarship helped to foster a college-going culture in your region?

4. Student participation (5-10 min)
Let’s switch gears and talk about student participation in the College Bound Scholarship program.

- How do you identify students who might be eligible for the program?
  - What information do you receive on eligible students? How do you receive this information?
  - What do you do with the information when you get it?
- We understand that WSAC provides materials (including a “toolbox”) to help middle school counselors encourage and track students’ participation in the program. Do you ever use these WSAC materials? [If yes] Of all the materials available, which do you think are the most useful? Why?
- What proportion of eligible students in your region do you think sign up? (It’s okay to estimate if you don’t have the exact figures.)
• How does the sign-up rate vary across middle schools and districts within your region? What do you think causes this variation?
• How has the sign-up rate changed over time? What do you think influenced the change?
• What kinds of students do you think are most likely to sign up? Why do you think these students are more likely to sign up than others?
• What kinds of students are least likely to sign up? Why do you think these students are less likely to sign up?
• In your opinion, what works best to encourage students to sign up for the program?
• What are the biggest challenges to getting students to sign up?

5. Program progress and results (5-10 min)
In this last section, I’d like to ask you about your impressions of the progress of the College Bound Scholarship program over time and how well it achieves its goals of improving low-income students’ college preparation and enrollment.
• In general, how well known do you think the College Bound Scholarship is among the people you work with in your region?
• For each of the following types of people, I’d like you to rate how well known the program is on a scale of 1 to 10, with 1 being completely unknown and 10 being completely known:
  o Middle school principals?
  o Middle school guidance counselors?
  o Other middle school faculty and staff?
  o High school principals?
  o Students and their families?
  o Community organizations that work with eligible youth?
• In your experience, how has knowledge of the program changed over time? What do you think influenced these changes?
• In what ways do you think the College Bound Scholarship actually influences students’ behavior while they’re still in middle or high school?
  o To what extent do you think it makes them prepare better for college? Does it change the sequence of courses they take?
  o How about encouraging them to stay out of trouble during adolescence?
  o To what extent does it change students’ beliefs about their own ability to go to college?
  o To what extent does it change their college aspirations?
  o What other ways do you think it might change students’ behavior?
• What is your sense of how effective the program is at getting students to enroll in college who might not otherwise have done so?
  o To what extent do you think it changes the type of college students enroll in?
  o To what extent do you think it helps them to persist in college?
  o What factors do you think make it effective?
  o What factors do you think limit the program’s success?
• What other ways might the state use its resources to get low-income middle school students to succeed in college?

Wrap-Up (less than 5 min)
• What other things do you think we should know about your efforts or the efforts of the organizations you work with to encourage students to participate in the College Bound Scholarship program?
• Do you have any questions for us?
Appendix: Principal/Guidance Counselor Interview Questions

Background

A. To begin, how long have you been working in your current role as [principal/guidance counselor] at your school?

B. What are your **main** responsibilities specifically with respect to the College Bound Scholarship program?

Promoting the College Bound Scholarship Program (15-20 min)

In this first section we’ll discuss activities to promote the College Bound Scholarship program at your school.

- **[PRINCIPALS]** What are the **main** activities used at your school to promote the program and encourage students to sign up for it? We don’t need to hear about everything, just those activities you consider most important to the program’s success.
  - Is working to support the College Bound program part of their expected job duties?
  - Roughly how much time do you expect them to spend during a year with work related to this specific program, as a percentage of their FTE?
  - What resources (financial or others) are available to help them promote the program or get students to sign up?
  - What individual do you consider to be **most** accountable for the program’s success?
- **[PRINCIPALS]** Who is the **primary individual** responsible for conducting these activities?
  - Is working to support the College Bound program part of their expected job duties?
  - Roughly how much time do you expect them to spend during a year with work related to this specific program, as a percentage of their FTE?
  - What resources (financial or others) are available to help them promote the program or get students to sign up?
  - What individual do you consider to be **most** accountable for the program’s success?
- **[COUNSELORS]** What are the main activities you use to promote the program and encourage students to sign up for it? We don’t need to hear about everything, just those activities you consider most important to the program’s success.
  - Do you consider working to support the College Bound program part of your expected job duties?
  - Roughly how much time do you spend during a year with work related to this specific program, as a percentage of your FTE?
  - What resources (financial or others) are available to help you promote the program or get students to sign up?
  - Of all your job duties, how would you rank the relative importance of your work with the College Bound program? Is it less important, about the same, or more important than **most** of your other duties?
- To what extent are other faculty and staff expected to help promote the program and get eligible students to participate?
  - Is it part of anyone else’s expected job duties?
  - What resources (financial or others) are available to help them promote the program or get students to sign up?
- In your view, what **individual** is the strongest champion for the College Bound program at your school?
  - What makes them an effective champion for the program?
  - What could your school or district do to help them be even more effective?
- **What organizations in the community are **most important** to the program’s success at your school?**
  - Do any of these partners actually sign students up for the program? What else do they do to help increase the number of eligible students who sign up for the College Bound Scholarship?
  - Does the school (or the district) have any formal agreements in place with these partner organizations—for example, contracts or memoranda of understanding?
- **What are the main things the** **district** **does to support the program’s success at your school?**
Does the district place any accountability requirements on you or your school with respect to your College Bound program performance?

Is there anyone at the district offices that you consider to be a champion for the program? If so, who (ideally, you can tell me their role – not their name)?

Targeting eligible students to encourage participation (5-10 min)

Let’s switch gears and talk about how you identify and target eligible students for participation in the College Bound Scholarship program.

A. What proportion of eligible students in your school do you think sign up? (It’s okay to estimate if you don’t have the exact figures.)
1. How has your school’s sign-up rate changed over time – would you say it’s decreased, stayed about the same, or increased?
2. What do you think influenced the change?

B. Do you receive information on sign-up rates from WSAC?
1. [IF YES re WSAC and MORE THAN 1 MS in district] What is your district’s current sign-up rate according to WSAC?
2. [IF NO re WSAC and MORE THAN 1 MS in district] Do you know your district’s current sign-up rate? If so, about what is it?

C. [COUNSELORS] When promoting the program, to what extent do you focus on specific types of eligible students?
1. Which types of students do you focus on?
2. How do you decide which types of students to focus on?
3. Do you ever ask students—whether individuals or in groups—to sign the pledge without first knowing if they are eligible?

D. [COUNSELORS] Do you receive lists of eligible students from WSAC, the district, or another source?
1. [IF YES] How and when do you receive this information?
2. [IF YES] Is there anything else you do to identify eligible students (besides use data from WSAC, the district, or another source)?
3. [IF NO] How do you identify students who might be eligible for the program?

E. [COUNSELORS] When and how often during the school year do you reach out to eligible students to encourage them to sign up for the program?
1. What does the typical sign-up process look like?
2. Where is the process most likely to break down?

F. [COUNSELORS] What are the characteristics of students who are most likely to sign up? Why do you think these students are more likely to sign up than others?

G. [COUNSELORS] We understand that WSAC provides materials (including a “portal”) to help middle schools encourage and track students’ participation in the program. Do you ever use these WSAC materials?
1. [IF YES] Of all the materials available, which do you think are the most useful? Why?
2. [IF NO] Why don’t you use these materials?
3. What could improve the WSAC materials?

H. [COUNSELORS] About what percentage of the time would you say you use the electronic (versus paper) applications provided by WSAC?

Program progress and results (5-10 min)

In this last section, I’d like to ask you about your impressions of the progress of the College Bound Scholarship program over time and how well it achieves its goals of improving low-income students’ college preparation and enrollment.
A. To what extent do you think students and families understand the program’s eligibility requirements? How has this changed over time – would you say it’s decreased, stayed about the same, or increased?

B. To what extent do you think students and families trust that the program will actually be available to pay for college costs when they need it? How has this changed over time – would you say it’s decreased, stayed about the same, or increased?

C. Of all the things your school does to encourage students to sign up for the College Bound Scholarship program, what approaches do you think have been most effective?

D. What have been the greatest challenges to getting students to sign up for the program?

Wrap-Up (less than 5 min)

Before we wrap up, I’d like you to step back and think about the broader college going culture at your school.

• If you had to give your school a grade from A to F, how well do you think your school promotes…
  o Students’ general college awareness?
  o Students’ understanding of college academic readiness?
  o Students’ and families’ understanding of how to pay for college?

• What average grade do you think your school would have earned on these items [IF THERE MORE THAN 4 YRS] …in the first year of the program (2012-13 school year)? / [IF THERE LESS THAN 4 YRS] …in the first year you worked there?

• To what extent has the availability of the College Bound Scholarship helped to foster the college-going culture at your school?

• What other things do you think we should know about your or your school’s efforts or the efforts of the people you work with to encourage students to participate in the College Bound Scholarship program?

• Do you have any questions for us?