



An Evaluation of College Summit Outcomes

Class of 2008

CERT Results
(College Enrollment Rate Trend)

March 31, 2010

Executive Summary

College Summit operates nationally in partnership with high schools and school districts to offer programs that help increase the number of students who stay on-track for and enroll in postsecondary education. Ten geographic areas are served by College Summit through regional offices. The offices work directly with multiple school districts providing support and training to the school staff in delivering and administering College Summit programs.

This paper provides an analytical framework for evaluating the effect of College Summit programs on improving college-going behavior at partner schools, and reports on program results using a time-series methodology.

We use College Enrollment Rate Trend (CERT), the percent change in college enrollment in program years relative to baseline years, to quantify the performance outcomes of schools. Participation levels varied significantly among schools, providing a quasi-experiment on the relationship between participation rates and program effectiveness. In some cases, nearly all seniors participated in the College Summit programs, while in other cases only about one-fifth of the seniors participated. In order to isolate the association between participation rate and program effectiveness, we developed a measure that normalized the overall CERT for the entire school to its participation level. Conceptually, this measure is analogous to school-level CERT had all seniors participated in the College Summit program.

Our analysis indicates that participation in the College Summit program significantly improved college enrollment rates for the participants. In schools where more than half of graduating seniors participated, which is the typical College Summit intervention, the CERT improvement for participants measured more than 20%. In schools where the program served more than 70% of graduating seniors, the improvement was more than 25%. A cross sectional comparison of seniors at the school level showed that program participants performed considerably better than their non-participant peers within the same school: College Summit participants enrolled in college at a rate over 7% higher than non-participants.

College Summit Peer Leaders, who are selected for their leadership traits and who attend special training workshops, performed remarkably well. Their enrollment rate was comparable to the generally accepted college enrollment rates for students from high income families as reported by the Department of Education.

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Introduction

Over the last decade, College Summit has partnered with high schools and school districts to increase college-going in communities. The organization's mission is to create a long-term college-going culture within high schools. It accomplishes this mission by administering four types of educational interventions:

1. A four-day workshop on a college campus for rising seniors, identified as influential Peer Leaders, comprising about 15 percent of the senior class;
2. A 12th grade curriculum taught in school throughout the senior year, including an on-line component called CSNav;
3. Training and professional development for educators with structured use of monitoring and tracking to guide students through the college application process;
4. Substantial use of data in systematic collection and communication processes, which motivate and inform students, educators and College Summit staff.

The achievement of college-going culture is difficult to quantify. Several intangible aspects, such as general awareness of college and appreciation for the value of a college education among students come into play. However, one outcome associated with college-going culture that can be measured directly is a change in students' enrollment in postsecondary education.

In the 2007-2008 school year, College Summit served over 12,000 seniors at 137 partner high schools across 40 school districts. This report focuses on the college enrollment outcomes for 55 of these partner schools, from which about 9,000 students graduated in 2008. The sample selection choice was based solely on data availability, with schools excluded only because of missing data.

College Summit Program Implementation

Student participation rates at College Summit partner schools vary considerably. The proportion of 12th grade students who participated in the program in 2007-2008 ranged from a handful of students in some schools to almost the entire class in other schools. To introduce new schools to the intervention, College Summit sometimes allows schools to enroll fewer than half of their seniors in the program. Typical program implementation targets more than half of the 12th graders. Table 1 shows the number of partner schools by level of graduating senior participation within the school. The table presents data from 92 of the 137 schools for which student-level graduation information is available. As shown in Table 1, 39 schools (42%) had complete or near-complete participation of their graduates, while College Summit had a modest presence in 5 schools (5%).

Table 1: Distribution of graduate participation level in College Summit Partner Schools

Program Participation Level	Number of High Schools	Percentage of High Schools
All College Summit high schools	92	
High schools with less than 20% participation	5	5.4%
High schools with at least 20% participation	87	94.6%
High schools with at least 50% participation	75	81.5%
High schools with at least 70% participation	63	68.5%
High schools with at least 80% participation	46	50.0%
High schools with at least 85% participation	39	42.4%

Measuring College Summit Program Effectiveness

While the achievement of college-ready culture within a school is hard to quantify, one of the definite indicators of the onset of a cultural change is an improvement in college enrollment rate. Although several factors affect college enrollment in a given year, such as changes in school leadership, scholarship fund levels or admission policies, in this analysis we focus on whether an upward trend in college enrollment measured can be correlated to the implementation of College Summit programs.

We structured this evaluation with a time-series approach, a *before and after* analysis of performance at the high school level. To accomplish this comparison we compared the college enrollment rate at a high school prior to College Summit involvement with the college enrollment rate during the years of College Summit involvement.

Methodology

We define the College Enrollment Rate Trend (CERT) as the change in the college enrollment rate during the period of College Summit involvement (program years) over the college enrollment rate prior to College Summit involvement (baseline years) in the high school. CERT is expressed as the percent change in program-year college enrollment rate over baseline-year college enrollment rate. For example, if a school had a college enrollment rate of 50% prior to College Summit involvement, and 55% during College Summit involvement, the CERT metric is calculated as $(55-50)/50$ and expressed as a 10% increase.

The college enrollment rate was measured by matching high school graduate records from each school with the college enrollment records maintained by the National Student Clearinghouse (NSC) for each year in which we could gather graduation records. Record matching was performed on the basis of the student identifiers including Social Security Number (SSN), full name and date of birth. For the schools in the West Virginia region, we used the college enrollment data published by the State Higher Education Policy Committee (HEPC). The program college enrollment rate is calculated as the average college enrollment rate over the all the program years, and the baseline college enrollment rate is calculated as the average college enrollment rate for all years prior to the program implementation where we had

data available. College enrollment rates include all graduates of each high school, whether or not the students participated in the College Summit intervention.

Data Limitations

One challenge with analyzing college enrollment trends is that there is no longitudinal data system available that represents a comprehensive collection of high school and post-secondary activities. NSC, which has the most comprehensive dataset available for analyzing college enrollment trends, comes close; but it has limitations:

Coverage: NSC collects enrollment records from about 3,600 postsecondary institutions (enrolling approximately 92% of the two-year and four-year students in the U.S.). In some cases, colleges may only provide NSC with a partial report of registered students (such as only those in degree-seeking or full-time programs).

Privacy: Under the Family Education Rights and Privacy Act (FERPA) of 2008, students and family members can block sharing of academic achievement data with external agencies. Students with blocked reports are not included in the detailed NSC reports.

Identifiers: NSC matching is based primarily on Social Security Numbers (SSN), and secondarily on name and date of birth. High schools are increasingly reluctant to share SSN data due to concerns of identity theft. In addition, an undocumented student does not have a SSN.

College Summit's software portal, CSNav, which supports students on the path to college and manages its program implementation, collects data on student attributes including SSN, full legal name and date of birth. This serves to improve the quality of data in graduation list and helps to improve the match rate. However, since this level of data enhancement is not available for the baseline year, there is the possibility of introducing a bias; the increased incidence of FERPA blocks in recent years may offset any bias.

College Enrollment Trend Estimation

Although NSC matching has limitations, we use match rates as directional indicators for this analysis. The percentage improvement in match rates during the program years relative to the baseline years (prior to College Summit involvement) is a valid estimator for CERT. Because measurement conditions are consistent between baseline and program years, the change in match rate can be used as a reasonable indicator of directional shift in college enrollment rate, and can serve as a valid estimator for CERT.¹

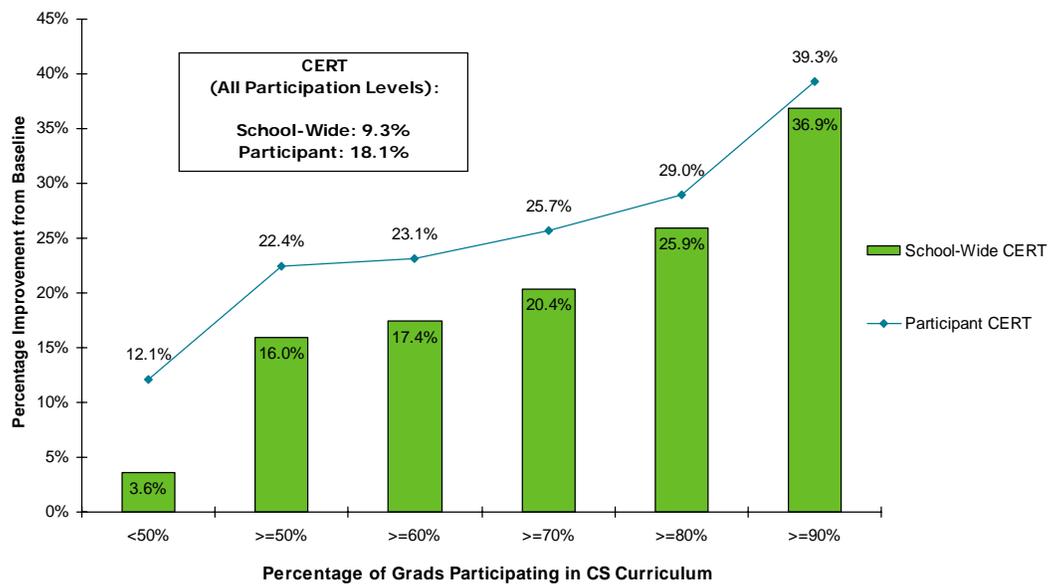
We estimated CERT at a high school level, normalized by the participation level for the program years. The school level estimates can be used to compare among schools, implementation types and regions. This analysis focused on overall national level measurement of effectiveness.

¹ This assumption may not be entirely true given that there is evidence of increasing sensitivity to privacy issues that makes matching difficult. We do not believe that the trend is rapid enough to invalidate this assumption.

Results

In 2008, student graduation records for baseline and program years were available for 55 of the 137 partner high school graduating classes. Approximately 9,000 students graduated from these schools in 2008. The analysis presented in this study takes into account all the program years for which data are available, and represents a total of over 20,000 graduates. Figure 1 shows a summary of results by participation level. Among the 55 high schools, the average participation level of graduates in the College Summit program was 51.4% and the average school-wide CERT was 9.3%. When normalized from reporting on the entire school to reporting on participants, the average CERT was 18.1%. When the typical College Summit intervention is considered, in which more than half of graduates participated in College Summit, the normalized CERT was above 22%. This level rose to almost 40% in schools where nearly all graduates participated.

Figure 1: College Enrollment Rate Trends for Schools and Students Served by College Summit



We examined results at both the school and student level for each participation rate. On average, schools with a higher proportion of participants performed much better than those with lower levels; this is consistent with the view that College Summit is associated with school cultural change rather than having a disproportionate effect on hand-picked students. The results are summarized in Table 2, which highlights the difference in match-rate performance between program participants and non-participants. Program participants showed a much higher match rate than non-participants, indicating a higher college enrollment rate. Peer Leaders showed a college enrollment rate of 69.3%. Non-Peer Leader participants performed significantly better than non-participants (46.7% versus 42.4%).

Table 2: Comparison of Participants and Non-Participants

Category	Found in College		
	Graduates	Databases	Match Rate
All Participants	5,481	2,716	49.6%
Peer Leaders	694	481	69.3%
Non- Peer Leader Participants	4,787	2,235	46.7%
Non- Participants	3,204	1,359	42.4%
Overall	8,685	4,075	46.9%

The Peer Leader program administered by College Summit is worthy of special mention. College Summit partner schools are typically located in economically disadvantaged areas, and the Peer Leaders in these schools (who were selected based on their ability to influence rather than on their academic performance) showed a very high tendency to enroll in college. Peer leader college enrollment rates are comparable to those of students from high income families.² This is, in itself, a remarkable fact. It highlights that, through concerted efforts, we can overcome the societal and environmental hurdles that stand in the way of educational achievements.

Recommendations for Future Analysis

Analysis of 2008 college enrollment performance indicates that results varied among partner schools. This may be attributable to environmental differences such as school leadership and demographic profile of schools. There exists an opportunity to study the differences in more detail and how to develop approaches for customizing programs based on an early assessment of school-specific attributes.

Measurement of results is dependent on obtaining graduation lists for program years as well as baseline years from schools. Primary challenges to graduation list collection include concerns about student privacy, difficulty producing graduation data from student information systems, and accountability structures that motivate focus on high school graduation rather than post secondary success. The field operations team should continue to engage schools and school district accountability functions to increase the yield of graduation lists.

While program evaluation may be estimated using CERT results, we recommend that College Summit invest in developing and implementing an analytical process which includes new data sources, such as state longitudinal databases, to supplement college enrollment rate measures from NSC.

²The match rates, as mentioned in the paper, are typically understated due to the data limitations described above. College Summit has conducted phone surveys to augment the results from the NSC matching process and has found increased enrollment, indicating peer leader enrollment rates as high as 80%. Phone survey data, however, are not included in this study. “The Condition of Education in 2009: Indicator 21 Immediate Transition to College” published by the National Center of Educational Statistics of the Department of Education places the high income college enrollment rate at 79%.

Conclusions

At a national level, for 2008 graduates, typical implementation of College Summit (with at least 50% participation) resulted in a student CERT increase of more than 20%. When schools with 70% participation levels are included, the participant CERT increase was 25%. These results constitute a statistically significant test of the difference of attribute means along a time series between pre- and post-intervention behaviors.

Across all schools, including those in which participation rates were low, student participants did much better than non-participants by a wide margin.

College Summit Peer Leaders showed college-going rates comparable to students from high-income families.

In summary, we conclude that College Summit programs are effective in providing systematic support for high school seniors to realize the value of college education and pursue it.