# The Post-Secondary Coach Program in Chicago:
## Does It Affect the College Going Process?

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**Council of the Great City Schools**

# The Senior Urban Education Research Fellowship Series

# Volume V:

## The Post-Secondary Coach Program in Chicago:

### Does It Affect the College Going Process?

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## THE SENIOR URBAN EDUCATION RESEARCH FELLOWSHIP PROGRAM

Large urban public school districts play a significant role in the American education system. The largest 65 urban school systems in the country – comprising less than one half of one percent of the nearly seventeen thousand school districts that exist across the United States – educate about 16 percent of the nation's K-12 public school students, approximately a quarter of the nation's economically disadvantaged students, and about a third of its African American students, Hispanic students, and English Language Learners.[1] Clearly, any attempt to improve achievement and to reduce racial and economic achievement gaps across the United States must involve these school districts as a major focus of action.

These school districts face a number of serious, systematic challenges. To better understand the problems in urban education and to develop more effective and sustainable solutions, urban districts need a program of rigorous scientific inquiry focusing on what works to improve academic outcomes in the urban context. Moreover, in order to produce such evidence and to move public education forward generally, the standards of evidence in education research must be raised in such a way as to bring questions regarding the effectiveness of educational interventions and strategies to the fore and to promote careful scrutiny and rigorous analysis of the causal inferences surrounding attempts to answer them.

It has been argued that, in order to move such an effort forward, a community of researchers, committed to a set of principles regarding evidentiary standards, must be developed and nurtured. We contend further that, in order to produce a base of scientific knowledge that is both rigorously derived and directly relevant to improving achievement in urban school districts, this community of inquiry must be expanded to include both scholars and practitioners in urban education.

Though a great deal of education research is produced every year, there is a genuine dearth of knowledge regarding how to address some of the fundamental challenges urban school districts face in educating children, working to close achievement gaps, and striving to meet the challenges of No Child Left Behind. Moreover, while there is a history of process-related research around issues affecting urban schools, relatively few studies carefully identify key program components, document implementation efforts, and carefully examine the effects of well-designed interventions in important programmatic areas on key student outcomes such as academic achievement. In sum, there is an absence of methodologically sound, policy-relevant research to help guide practice by identifying the conditions, resources, and necessary steps for effectively mounting initiatives to raise student achievement.

In order to address this need, the Council of the Great City Schools, through a grant from the Institute of Education Sciences, established the Senior Urban Education Research Fellowship (SUERF) program.

The Senior Urban Education Research Fellowship was designed to facilitate partnerships between scholars and practitioners focused on producing research that is both rigorous in nature and relevant to the specific challenges facing large urban school districts. We believe such partnerships have the potential to produce better, more practically useful research in at least three ways. First, by deepening researchers' understanding of the contexts within which they are working, the program may help them maximize the impact of their work in the places where it is needed the most. Second, by helping senior staff in urban districts become better consumers of research, we hope to increase the extent to which the available evidence is used to inform policy and practice, and the extent to which urban districts continue to invest in research. Third, by executing well-designed studies aimed at the key challenges identified by the districts themselves, we hope to produce reliable evidence and practical guidance that can help improve student achievement.

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[1]  Council of the Great City Schools (2011). *Beating the Odds: Analysis of Student Performance on State Assessments and NAEP*. Results from the 2009-2010 School Year. Washington, DC.

The primary goals for the Senior Urban Education Research Fellowship are to:

- promote high quality scientific inquiry into the questions and challenges facing urban school districts;

- facilitate and encourage collaboration, communication, and ongoing partnerships between senior researchers and leaders in urban school districts;

- demonstrate how collaboration between scholars and urban districts can generate reliable results and enrich both research and practice;

- produce a set of high quality studies that yield practical guidance for urban school districts;

- contribute to an ongoing discussion regarding research priorities in urban education; and

- promote the development of a "community of inquiry", including researchers and practitioners alike, committed to both a set of norms and principles regarding standards of evidence and a set of priorities for relevant, applied research in urban education.

The SUERF program benefitted greatly from the guidance and support of a Research Advisory Committee made up of experts and leaders from large urban school districts and the education research community. The committee included Dr. Katherine Blasik, Dr. Carol Johnson, Dr. Kent McGuire, Dr. Richard Murnane, Dr. Andrew Porter, and Dr. Melissa Roderick. This extraordinary group helped to identify and define the objectives and structure of the fellowship program, and we thank them for lending their considerable insight and expertise to this endeavor.

The following volume of the *Senior Urban Education Research Fellowship Series* documents the work of Dr. James Rosenbaum and Dr. Jennifer Stephan, working in collaboration with Chicago Public Schools and the Consortium on Chicago School Research. Both the research and reporting is the sole intellectual property of Dr. Rosenbaum and Dr. Stephan, and reflects their personal experience and perspective.

Dr. Rosenbaum's examination of the College Coaching Program in Chicago Public Schools yields important findings about the barriers to college enrollment facing urban high school students, and the critical role social capital plays in this process. His analysis reveals both a commitment to rigorous research and an interest in providing actionable guidance to schools and districts in their efforts to improve college counseling models and post-secondary student outcomes.

Dr. Rosenbaum's close collaboration with the district also demonstrates the potential impact of education research when researchers address the needs of practitioners, and practitioners are supportive and receptive to this work. Of course, this project was also made possible by the Consortium on Chicago School Research—one of the most successful models in the country for district/research partnerships—which provided Dr. Rosenbaum with the data and tools he needed to embark on this study.

We hope you will find this report both interesting and relevant to your own work in education.

Thank you.

**Michael Casserly**
Executive Director
Council of the Great City Schools

James E. Rosenbaum is Professor of Sociology, Education, and Social Policy at Northwestern University. His books include Crossing the Class and Color Lines, University of Chicago Press, 2000, and Beyond College for All, Russell Sage Foundation, 2001, which was awarded the Waller Prize in Sociology. His book, After Admission: From College Access to College Success was published in 2006, with co-authors Regina Deil-Amen and Ann Person. He is an advisor to *Education Week*, the National Assessment of Career and Technical Education, the New Community College at CUNY, the  Chicago Workforce Investment Council's *CWICstats* Advisory Council, and the National Opinion Research Center at the University of Chicago. His most recent research showed the positive impact of a college coach program in Chicago Public Schools, which led to expansion of the program.

### THE STRATEGIC EDUCATION RESEARCH PARTNERSHIP

This study began at the suggestion of Greg Darnieder, the head of postsecondary education at Chicago Public Schools. Greg had initiated the College Coach Program in 2004-2005, a pilot program wherein coaches specifically charged with improving college enrollment rates were deployed to twelve non-selective high schools throughout the district. Going into the fourth year, he was interested in having the program evaluated by an external researcher, and Melissa Roderick from the Consortium on Chicago School Research (CCSR) recommended me for that evaluation because of my background in studying counseling. I was intrigued by the program, and agreed to design a study that would utilize the rich database compiled by the Consortium.

Usually when an administrator asks for an evaluation of his own program, he is asking for a flattering description of how wonderful it is. In such cases, a strong research design and a commitment to objective research is difficult. However, in my initial discussions with Greg, it became obvious that that was not his intent -- he wanted to know how his program is working and how it could be improved.

Early in the coach research, I got a chance to see how serious Greg was about this. In 2008, Melissa Roderick and her colleagues at CCSR completed a study of the barriers to postsecondary education facing CPS students, identifying the "potholes" on which students got snagged in the process of applying to college. The potholes report was very well done, and very clear about the problems and challenges facing CPS. What was remarkable, and in my experience unprecedented, was Greg's reaction.

The results of the Potholes report were announced before a large public forum attended by over 100 people, including many journalists. Greg was the respondent, providing comments after the results were reported. Instead of displaying the usual defensive reaction and trying to explain why the results can't be changed, or why the research was defective, Greg agreed that this was

an excellent study—that it identified important problems in the system. Moreover, he offered some initiatives his office would be pursuing to address those problems.

Perhaps key to this receptive, constructive response to the study results was the open line of communication between the district and CCSR. Greg had been presented with these findings by the study team in advance; he had talked to Melissa and her colleagues and together they had come up with appropriate steps to address the problems. Instead of taking issue with the study, CPS was in a position to take responsibility and take charge of addressing these problems. Greg indeed was sincere in wanting to learn from research, and to use research findings to improve outcomes. Greg made CPS look impressive, ready to learn from research and ready to take effective action.

I wasn't involved in that interaction, but it made me optimistic about my collaboration. That optimism was reinforced over the course of our collaboration. As the research progressed, various administrative obstacles cropped up from time to time, any of which could have sidetracked this project. Each time, I notified Greg, and he took steps to handle the obstacle. In addition, I repeatedly needed information, access, or introductions, and each time Greg quickly provided them. Along the way, I had regular informal discussions with Greg, in which I shared impressions and raised questions. Each time he showed interest, and often made suggestions. After the first year, we issued a preliminary report, and shared the results at a meeting with Greg and others on his staff.

Of course, one of the primary challenges researchers face in their work with urban school districts is staff turnover, and this project was no exception. While we were conducting complex statistical analyses and observing coach behavior over three years, Greg Darnieder left the district for a job in Washington DC. We continued our correspondence and he even continued to read and respond to our reports. But by the time we were ready to issue reports formally, a new administration was heading CPS.

We first reported our findings to Melissa Roderick's research group, and then made a presentation to the executive committee of CCSR. They provided detailed feedback on the scholarly merit of the report and suggested ways to make it more accessible for CPS administrators. We then reported our findings to Jerusha Rodgers, who was appointed the Acting Officer for College and Career Preparation by CEO Ron Huberman in June 2009.

CPS was initiating major cutbacks at that time, and the coach program was a candidate for cuts or termination. In my experience, new administrators typically have no interest in programs they did not devise. My report on Greg's program might do nothing to benefit the careers of the current administrators, so they might have no personal interest in it. Remarkably, that bureaucratic reaction did not occur. Ms. Rodgers was impressed with our findings and eager to examine them further. Together we worked out a cost-benefit analysis of the program, and she was impressed at the magnitude of improved outcomes relative to the cost of the program. At her suggestion, we made a presentation directly to CEO Ron Huberman and other high-level administrators, and they agreed that this was a valuable program to preserve. Also at her suggestion, we made a webcast presentation to the postsecondary specialists who supervise the coaches, so they could learn how the coach program was operating and benefit from that.

I began this work with a significant amount of experience conducting studies of school systems. The extent of communication and collaboration with district personnel is typically limited to getting an initial OK and then presenting a final report when the study is complete. There's not a lot of interaction, and also not a lot of results beyond the release of another report. This study was a marked departure from that experience. Owing perhaps to the district's initial interest in the evaluation of the coaching program, or its general receptivity to research, there was extensive interaction with CPS from the outset, thorough cooperation and support throughout the study, and an interest in acting on the results at the end. Of course, in the field of research this research led to two strong Ph.D. dissertations and to several presentations at academic conferences. But in a very practical sense, Greg learned what his program was accomplishing and what it was not accomplishing, the subsequent administration at CPS learned the value of the program they inherited, and the field of educational counseling gained a better understanding of the challenges involved in raising post-secondary attendance rates, school level factors that support or hinder implementation of college advising programs, and alternate ways of supporting disadvantaged students.

# EXECUTIVE SUMMARY

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Following nearly all graduating seniors in Chicago Public Schools (CPS) from senior year through the fall after high school—44,627 students in total between 2004 and 2007—this study reveals gaps in the enrollment process that previous research has rarely discussed. In particular, analyses by Roderick, et al. (2008) find that not all students with general college plans form specific plans, and even specific plans do not result in college enrollment when students fail to complete key college actions, such as applying to multiple colleges, applying for scholarships, or filling out applications for student aid.

At the root of these gaps between general college plans and college enrollment lie important differences in access to college-related social resources such college knowledge, skills, assistance, and social support. These resources, referred to here as in previous literature as forms of "social capital," are more readily available to middle-class students. Yet while recent research documents socioeconomic differences in college-related social capital, almost none has considered whether and how schools may change it to improve college enrollment outcomes.

This study examines a new model of college advising—the College Coach Program—launched in a diverse group of twelve non-selective public high schools throughout Chicago in 2004-2005 to provide college-related social capital to all students. Unlike the traditional counseling model, college coaches use innovative strategies to engage new groups of students in social interactions to improve college enrollment outcomes. Coaches' strategies appear to create social capital resources, including social support in the enrollment process, detailed and ongoing help in the process, and monitoring of the completion of key college actions.

To further examine the impact of the program, we tested whether the onset of the coach program was associated with subsequent changes in students' college actions and enrollment. Using a difference-in-differences approach and a variety of controls including prior trend data, results indicate that students at coach schools were significantly more likely to attend less selective four-year colleges, which have much higher graduation rates than two-year colleges, and they were more likely to enroll in college (borderline significant at p=0.06). On the other hand, coaches have no effect on two-year college enrollment (versus no enrollment), which is not encouraged, or on more selective (versus less selective) four-year college enrollment (which was not a program emphasis during these years). Coaches appear to affect enrollment outcomes by increasing the number of students applying to three or more colleges and completing the Free Application for Federal Student Aid (FAFSA).

The most surprising result is the benefits for more disadvantaged students. While coaches are charged with improving college enrollment outcomes for all types of students, coaches' emphasis on social capital may have particular benefit for students often underserved by traditional approaches (lower SES and non-AP students); students with more difficulties in the application process (Latino students); and, students from schools with a low percent of college planners (which may reflect a lack of college-going culture). Moreover, analyses suggest that coaches reduce the gap in less selective four-year college enrollment between Latinos and African Americans and possibly between lower and higher SES students.

These findings support the inference that social capital deficits, not just academic and financial deficits, are barriers to college for disadvantaged students, and point to important new strategies urban schools and districts can pursue to address these deficits. Beyond simple replication of the coaching program, this study also yields important guidance and recommendations for making high school guidance counselors more effective at college counseling. For example, the study finds that college coaches employed innovative advising strategies such as group activities and proactive outreach to students to build trust and create a stronger college culture at the school. In addition, coaches were able to maintain their focus on college counseling because improving college enrollment was their sole assignment at the school site, and they reported directly to the postsecondary office within the school district rather than to principals. Although we assume high school guidance counselors provide college advising as a major part of their responsibilities, counselors are often assigned a multitude of other duties among which college counseling may be the least pressing. It is clear that in order to positively impact post-secondary student outcomes such as college enrollment, schools and districts will need to better align their resources behind these long-term objectives.

# INTRODUCTION

# SOCIAL CAPITAL BARRIERS TO COLLEGE ENROLLMENT AND THE DEVELOPMENT OF THE COLLEGE COACH PROGRAM IN CHICAGO PUBLIC SCHOOLS

Although the opportunity to attend college has dramatically increased over recent decades, the college choice process continues to reinforce existing patterns of social stratification. Nearly all graduating seniors, irrespective of family income, race, or ethnicity, plan to attend college (Berkner & Chavez, 1997). However, disadvantaged students plan and enroll in two-year or less selective colleges at higher rates[2], and these types of colleges are associated with lower educational attainment and earnings (Dougherty, 1994; Hoekstra, 2009; Long, 2008; Melguizo, 2008; Pascarella & Terenzini, 2005; Rosenbaum, Deil-Amen & Person 2006). Most research focuses on college cost and academic achievement as explanations for Socioeconomic Status (SES) differences in college enrollment, but neither completely accounts for differences. Increases in financial aid do not always increase the college enrollment of disadvantaged students (Hansen, 1983; Kane, 1999; Mundel, 2008), and at every achievement level, low-SES students attend four-year colleges at lower rates (Plank & Jordan, 2001).

Successfully navigating the complex and unpredictable procedures of four-year college applications and financial aid requires students to make plans and take actions (Roderick, Nagaoka, Coca, & Moeller, 2008) that in turn depend on certain social resources (college knowledge, skills, assistance, and social support). These social resources, referred to here as in previous literature as forms of "social capital" are more readily available to middle-class students. Lacking college-related social capital can pose additional barriers to attendance of four-year colleges for disadvantaged students (Avery & Kane, 2004; Rosenbaum, Stephan & Rosenbaum, 2010; Bloom, 2007; Lareau & Weininger, 2008; McDonough, 1997; Tierney, 2009). While recent research documents SES differences in college-related social capital, almost none has considered whether and how schools may change it to improve college enrollment outcomes. This study examines a new model of college advising (the college coach program) designed to provide college-related social capital to students and analyzes whether, how, and for whom it may reduce gaps in the college enrollment process.

Following nearly all graduating seniors in Chicago Public Schools (CPS) from senior year through the fall after high school—44,627 students in total between 2004 and 2007—this research shows gaps in the enrollment process that previous research has rarely discussed. Then, using a difference-in-differences approach and a variety of controls including prior trend data, we test whether the onset of the coach program is associated with subsequent changes in students' college actions and enrollment and whether, contrary to a typical finding of cumulative advantage (the rich get richer), it can benefit the most disadvantaged students.

In the remainder of this section, we review social capital barriers in the enrollment process, the constraints that counselors face in assisting students, and how the college coach program attempts to overcome some of these constraints. In subsequent chapters, we review our methods and analyze whether the coach program improves college enrollment outcomes.

## SOCIAL CAPITAL BARRIERS AND THE COLLEGE ENROLLMENT PROCESS

American public schools have the ambitious goal of providing equal opportunity regardless of family background. Although policymakers recognize the need to provide academic enrichment and financial aid, more subtle barriers are often not recognized or addressed. College knowledge, parental involvement, and social support are forms of social capital that are more accessible to middle-class families and that influence students' college choices (González, Stoner, & Jovel, 2003; Pérez & McDonough, 2008; Perna, 2000; Plank & Jordan, 2001).

College-related social capital is often not available to students whose parents have not attended college. Low-SES or minority students have less information about college cost (Grodsky & Jones, 2007; Kirst & Venezia, 2004), college requirements (Kirst & Venezia, 2004), admissions exams (Walpole, et al., 2005), and differences in institutional types and degrees (Rosenbaum, Redline & Stephan 2007; Rosenbaum, Deil-Amen & Person 2006).

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[2]  author's calculations using the National Education Longitudinal Study of 1988 (NELS:88)

While nearly all seniors state plans to attend college (Berkner & Chavez, 1997), low-SES students may be less confident about their plans (Bloom, 2007; Rosenbaum, Deil-Amen & Person 2006), often assume all colleges are the same (McDonough, 1997; Rosenbaum, Deil-Amen & Person 2006), and tend to view achievement as an immutable fact (McDonough, 1997; Walpole, et al., 2005). While the parents of low-SES students generally support their children's educational aspirations (González, et al., 2003; Lareau & Weininger, 2008; Stanton-Salazar, 2001), middle-class parents more often provide specific college knowledge or help, including information about admissions requirements, assistance with applications, (Bloom, 2007; Kirst & Venezia, 2004; Lareau & Weininger, 2008; McDonough, 1997), monitoring the completion of tasks (Lareau & Weininger, 2008; McDonough, 1997), and taking primary responsibility for planning college financing (Bloom, 2007; McDonough, 1997). Having college-related social capital is correlated with an increased likelihood of considering and being admitted to four-year or more selective colleges.

## CAN HIGH SCHOOLS PROVIDE COLLEGE-RELATED SOCIAL CAPITAL?

If families cannot provide college-related social capital, schools may be able to help, but students' needs are great and school resources limited. Providing detailed help related to financial aid can make a difference (Bettinger, Long, Oreopoulos, & Sanbonmatsu, 2009), but schools face many constraints. The average student-to-counselor ratio is high at urban high schools (318 to 1; Parsad, Alexander, Farris, & Hudson, 2003), and counselors' heavy work loads are often packed with non-counseling duties (Moles, 1991; Parsad, et al., 2003; Powell, Farrar, & Cohen, 1985). Moreover, the standard counseling model may make it difficult to serve students with the greatest need for help. In the standard model, counselors provide help one-on-one and at the request of students. While this model may work fine in elite high schools, it is problematic when student-to-counselor ratios and student needs are both high. Low-SES students often require more detailed assistance, but counselors with large caseloads have little time to meet individually with students. Moreover, a model

that requires student initiative to receive help can fail to reach disadvantaged students, who can be uncomfortable seeking out or receiving help or may not know when they need help (Bloom, 2007; Rosenbaum, Deil-Amen, & Person 2006; Stanton-Salazar, 2001). While counselors could conceivably address social capital barriers, constraints on counselors coupled with the standard counseling model may result in many disadvantaged students being poorly served.

Pre-college outreach programs (e.g., Upward Bound, AVID, Puente, I Have a Dream) have been developed to provide supplemental assistance. Most outreach programs provide college advising and help develop students' academic skills; many offer assistance with college and financial aid applications; and, a significant number provide scholarships (Gándara & Bial, 2001; Perna & Swail, 2001; Schultz & Mueller, 2006). In addition to being broader in content and goals than high school counseling, outreach programs use a wider variety of advising strategies. Some programs use a one-on-one counseling approach, but others (e.g., Posse, Puente) focus on groups as a way to build social support for college (Gándara & Bial, 2001; Grubb, Lara, & Valdez, 2002). Most programs focus on building relationships over time between staff and students [e.g., I Have a Dream; Kahne & Bailey (1999)], although others have little personal contact with students and instead provide scholarships (e.g., Indiana 21st Century Scholars program). Many outreach programs have been found to increase college-going overall or for the most disadvantaged students (Gándara & Bial, 2001; Kahne & Bailey, 1999; Myers, Olsen, Seftor, Young, & Tuttle, 2004). However, these programs limit which students they serve. Unlike counselors who aim (though not always successfully) to serve all students, the vast majority of outreach programs select students based on socioeconomic status or race/ethnicity and often also on academic achievement or staff recommendations (Gándara & Bial, 2001; Schultz & Mueller, 2006). While outreach programs are important for individual students, they are not meant to "fundamentally change the ways schools interact with students" (Gándara & Bial, 2001). Outreach programs serve an important role for some students, but they are not an alternative to counseling.

**INTRODUCTION**

## SOCIAL CAPITAL BARRIERS TO COLLEGE ENROLLMENT AND THE DEVELOPMENT OF THE COLLEGE COACH PROGRAM IN CHICAGO PUBLIC SCHOOLS (CONT'D)

Another model may be necessary. In a qualitative study of peer counseling groups organized around college enrollment, Tierney and Venegas (2006) suggest that social capital is an important resource for improving college enrollment outcomes. They hypothesize that schools may be able to improve college enrollment outcomes for disadvantaged students by intentionally creating peer groups around college and providing an adult with college knowledge who interacts frequently with students. In prior work (Rosenbaum, Stephan & Rosenbaum, 2010; Naffziger, 2011), we describe in detail one counseling model, the college coach program, that attempts to do these things. Here, we test the impact of this new counseling model on college enrollment outcomes.

### THE COLLEGE COACH PROGRAM : BACKGROUND AND GOALS OF THE COACH PROGRAM

In 2004-2005, CPS introduced the college coach program to a diverse group of twelve non-selective high schools. One coach was assigned per school and charged with improving students' college enrollment by providing help in the enrollment process (not academic or monetary assistance). The district encouraged coaches (and counselors) to focus on increasing the number of students attending four-year colleges (because of low graduation rates at local two-year colleges)[3] and to focus on the completion of key college actions that are particularly important for four-year college enrollment: applying to multiple colleges, completing the Free Application for Federal Student Aid (FAFSA), and applying for scholarships.

While the district directs both coaches and counselors to focus on the same goals, there are important differences between coaches and counselors. First, coaches and counselors differ in their professional backgrounds. Public high school counselors are school professionals who must meet state educational and certification requirements. Many counselors identify themselves as professional psychologists (McDonough, Ventresca, & Outcalt, 2000), and their actions are guided by a psychological services model, which deals with clients individually and at the initiative of the client. In contrast, coaches are experienced "youth workers," hired largely because of their experience outside of schools working with disadvantaged youth. The coach program was developed and directed by an administrator with extensive community organizing experience. Similarly, most coaches had previously worked in community-based youth organizations or youth-development programs outside of schools. Unlike counselors who report to the principal, coaches reported to the program director, who was employed at the district level.

Second, coaches and counselors differ in their job tasks. Unlike most counselors, coaches organize formal college programming (e.g., college fairs, workshops, tours) and also provide on-going assistance in a "college room." The college room is a space stocked with college-related literature and computers that students visit during their lunch hour or before or after school to work on the enrollment process. The college room typically also serves as the coach's office. This arrangement encourages many spontaneous interactions between the coach and students and students and their peers around college planning.

Interviews with coaches and students at coach schools show that coaches have innovative (relative to typical counselors) advising strategies (Rosenbaum, Stephan & Rosenbaum, 2010):

1. While counselors respond to student or parent initiatives, coaches proactively reach out and engage students in the enrollment process. Coaches summon students to the college room, wait outside classrooms, send personalized notes, eat lunch in the students' lunchroom (which other staff avoid), and even approach students in detention (a neglected captive audience) to discuss students' future plans.

2. Coaches build trusting relationships with students, a potentially important precursor to serving harder-to-reach students (Kahne & Bailey, 1999; Stanton-Salazar, 2001), by demonstrating an interest in

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[3]  Institutional graduation rates average just 10 percent among the two-year colleges attended by the majority of CPS graduates (based on the Integrated Postsecondary Education Data System (IPEDS)).

students (e.g., by attending after-school events), reducing their social distance to students, and being dependable and candid in their interactions with students.

3. Coaches enlist students to deliver college information to peers, to recruit peers to college activities, and to provide assistance to peers with some steps in the enrollment process. In some schools, this is formalized in a peer college counseling program. Prior research suggests that peers can play an important role in developing college-related social capital (Tierney & Venegas, 2006).

4. While counselors typically meet with students individually, coaches often use groups, both for formal activities (e.g., financial aid or essay writing workshops, college tours) and informally as students gather in the college room.

Coaches' strategies create or enhance students' college-related social capital. By using groups and enlisting students' peers, coaches can foster social support among students for college [see also Tierney & Venegas (2006)], a potentially important resource for disadvantaged students who can face large social and personal risks in pursuing college (Bloom, 2007). Counselors who work one-on-one with students do not have the opportunity to create social support. In addition, coaches' strategies enable them to interact more frequently with students than most counselors. Through frequent interactions, coaches can provide detailed and on-going college knowledge and assistance, which may be particularly important for disadvantaged students (Tierney, 2009). For example, unlike many counselors who do not address financial aid or do so only minimally (McDonough & Calderone, 2006), coaches provide detailed information and help with financial aid.

Coaches provide information about financial aid, help students and families actually complete the FAFSA (including explaining confusing questions), track completion of the FAFSA, and help students interpret financial aid award letters. Coaches also monitor completion of tasks in the enrollment process. In interviews, students repeatedly remarked on the multiple reminders (or nagging) that they received from coaches to complete application steps. Counselors who meet with students only a few times per year cannot provide much detailed help or monitoring. Finally, by reaching out to students and building trust, coaches appear to reach students who may not otherwise have sought out counselors' help. [See Rosenbaum, Stephan & Rosenbaum (2010) and Naffziger (2011) for detailed qualitative analysis of the coach program].

Like counselors, coaches are based in schools; they aim to serve all students; and, they attempt to improve the transition to college based on information and assistance (not by changing academic achievement or providing money). Like some outreach programs, coaches use advising strategies that differ from those of typical counselors. Counselors are trained in a psychological services model—serving students one-on-one and at their request—but coaches act like "community organizers." Coaches proactively recruit students into the college enrollment process, use existing peer networks and create new ones to disseminate information and engage students, and serve students in groups.

# METHODOLOGY

# METHODOLOGY

## DATA

This study uses data from Chicago Public Schools (CPS) provided by the Consortium on Chicago School Research (CCSR). Student data come from four cohorts (2004-2007) of all CPS graduating seniors and include demographics, ACT scores, transcripts, responses to a senior exit survey administered in May, and actual college enrollment data collected by the National Student Clearinghouse (NSC). Barron's rankings (2005) are used to classify college selectivity. The analytic sample excludes students who did not respond to the senior exit survey[4] and students at four types of schools: at charter schools, because achievement data are not available for them; at magnet schools, because unlike coach schools, they have selective enrollment; at schools that were opened or closed during the study period, to avoid issues related to restructuring; and, at one coach school with no survey data for 2004. The analytic sample has 44,627 students from 58 schools.

## ANALYTIC APPROACH

While coaches were assigned to a wide variety of schools, explicit random assignment was not used.[5] Instead, this analysis uses three procedures to reduce potential selection bias: a difference-in-differences design, controls for changes in the student composition of high schools over time, and controls for pre-program trends in college enrollment.

Using a difference-in-differences approach, we compare changes in college enrollment rates before and after program implementation at coach schools to the change at non-coach schools over the same time interval. This approach accounts for pre-program differences in coach and non-coach schools (in 2004) and any district-wide changes in college enrollment rates over the study period. The estimator is the coefficient associated with a dummy variable indicating whether a student attended a coach school after the onset of the program controlling for year and high school fixed effects.

A problem arises, however, if there are differential changes in student body composition over time favoring coach schools. Without controls for changes in student composition, this change would be identified as a coach effect. Instead, the analysis adds regression controls for many student characteristics important in college choice: race/ethnicity, gender, cumulative GPA (measured in fall of senior year), ACT composite score, neighborhood social status and poverty,[6] number of vocational and AP classes taken in fall of senior year, and participation in college prep programs (Upward Bound and district postsecondary programs).

Finally, coach and non-coach schools could potentially have had different trends in college enrollment prior to program implementation. If college enrollment rates were rising at coach schools prior to the onset of the program, this trend would be expected to continue and result in an enrollment increase between 2004 (before the program began) and 2005-2007 (the years after the program began) even without the coach program. To construct the trend variable, college enrollment was regressed on year for each high school separately using data from 2001 through 2004, and the coefficient associated with year (the estimated linear trend) was recorded. The trend variable is the product between the estimated slope and year, which varies across high schools.[7]

The aggregate model predicts an outcome for student i in school s in year t based on individual characteristics, attending a coach school after program implementation (the interaction between coach school and post-treatment period), year fixed effects, and a school-level linear trend in college enrollment based on pre-program data (to control for possible pre-existing trends). Since the models have dichotomous dependent variables, fixed effects logistic regression (also known as conditional

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[4]  Response rates were 85 percent in 2004 and over 97 percent in 2005 through 2007 for the analytic sample.

[5]  t-tests (Appendix A) show only one mean difference across 11 school-level characteristics (coach schools have lower total enrollment). Because of the small number of schools, statistical significance testing may not be meaningful. However, the raw differences do not appear to favor one type of school: coach schools had higher ACT scores, lower drop-out rates, and fewer low-income students but also lower graduation rates, more LEP students, and more Latinos, who have greater difficulties in the application process (Roderick et al., 2008).

[6]  Social status is a neighborhood measure reflecting the occupation and education status of adults within a student's block group. Family SES and income are not available.

[7]  College plans and actions were not available in years prior to 2004 and so the complete difference-in-differences models could not be estimated on prior years.

logistic regression) was used to estimate models that control for school fixed effects [see Allison (2005) for a detailed discussion of the technique][8] This statistical approach controls for all (observable and unobservable) time-invariant school-level characteristics, changes in observable student characteristics, district-wide trends in enrollment over time, and differences in enrollment trends prior to implementation for coach and non-coach schools. While studying just one school district results in some loss of generalizability, some internal validity is gained because doing so controls for district and state-level factors (e.g., college tuition, the structure of the state higher education system, and various policies) typically not controlled for in national studies. Time-varying changes in unmeasured school characteristics that favor coach schools remain a threat to internal validity, but given the multiple factors accounted for, this threat may be unlikely.

While fixed effects reduce bias in the estimation of treatment effects, this approach typically leads to relatively higher standard errors because it ignores between-unit variation (Allison, 2005). For this reason, we note when coefficients are borderline statistically significant, which are more noteworthy than they might be ordinarily.

## COLLEGE SELECTIVITY

This study uses Barron's rankings (2005) to classify colleges by selectivity. Four-year colleges are classified as more selective (a Barron's ranking of very, highly, or most competitive), less selective (a ranking of non-competitive, less competitive, or competitive), and unrated or special.[9] Among the institutions attended by CPS graduates, institutional graduation rates are lowest for two-year colleges (24.6 percent), higher for less selective four-year colleges (35.0 percent to 49.2 percent), and highest for more selective four-year colleges (63.9 percent to 88.6 percent). Just 7% of CPS graduating seniors who plan to attend college enroll in more selective four-year colleges. Appendix B lists the three most frequently attended colleges for CPS students by Barron's rankings.

## MISSING DATA

Rates of missing data on independent variables were relatively low: 13 percent missing for ACT scores,[10] 4 percent for transcripts (used for GPA and the number of AP and vocational classes), and 0.3 percent for neighborhood poverty and social status. Among students with general college plans, less than 4 percent are missing college actions. These missing values were replaced with mean values and dummy variables were added to the regressions to indicate a missing value.

For indicators of college enrollment, CPS matches student records of graduates to the NSC database, which collects enrollment information from over 3,300 colleges (National Student Clearinghouse, 2009). Student records that match indicate a student enrolled in college. The vast majority of students without an NSC record are not enrolled in college, but others could be enrolled in non-participating institutions. Non-enrollment cannot be distinguished from enrollment that is missing because a student attended a non-participating institution. However, this may have a limited impact on conclusions. First, just 9 percent of students who reported specific plans in the spring of senior year planned to attend a non-participating institution, so missing enrollment is likely rare.[11] Second, of students who planned a non-participating institution, 63 percent planned to attend a for-profit institution and an additional 10 percent planned to attend a private institution that was previously a for-profit institution. Despite evidence that for-profit or private two-year colleges have some advantages relative to community colleges (Bailey, Badway, & Gumport, 2001; Rosenbaum, Deil-Amen & Person, 2006), the district doubts the benefits of these institutions and may not count attending a for-profit college as a successful enrollment.

In sum, imputing values for missing data and enrollment for students who stated plans to enroll in a non-participating institution does not change conclusions about the relationship between coaches and enrollment outcomes.

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[8]   In addition, we estimated models using linear fixed effects regression with a correction for clustered standard errors with and without propensity weighting that gives greater weight to students from non-coach schools that look similar to coach schools. Results were similar for most outcomes and most subgroups. We present the fixed effects logistic regression because the dependent variables are binary and not continuous [see Allison (2005), Melguizo (2010)].

[9]   Barron's designates colleges as special if their admissions criteria are not primarily academic, for example institutions that specialize in art (Barron's Profiles of American Colleges 2007, 2006).

[10]  As part of Illinois state accountability, all juniors take the ACT.

[11]  This calculation is based on a comparison of CPS survey responses to a list on the NSC website indicating when an institution began participating.

# RESULTS

# EXAMINING COLLEGE ENROLLMENT PATTERNS AND THE ROLE OF COACHING

## DESCRIPTION OF CPS STUDENTS AND THEIR COLLEGE ENROLLMENT

CPS graduating seniors are primarily African American (52 percent) and Latino (34 percent) (Table 1), low-income (92 percent receive free/reduced price lunch), and below-average academic achievers (89 percent score below the state average on the ACT).[12] Despite financial and academic barriers, in the spring of senior year, 80 percent of graduating seniors plan to enroll in college in the fall (general college plans). However, almost half (47 percent) of students with general college plans (to attend "some college") do not actually enroll; another 20 percent enroll at two-year colleges, and 33 percent at four-year colleges. Just 7 percent enroll at more selective four-year colleges.

## TWO GAPS IN THE ENROLLMENT PROCESS

While most research focuses on the difference between students' college plans and their enrollment,[13] this study finds two gaps in the enrollment process: one gap between general and specific plans and another between specific plans and enrollment. While 80 percent of graduating CPS seniors stated a general plan to enroll in college in the fall, just 62 percent of students with general college plans named a specific college they planned to attend at the end of senior year (Table 1). Furthermore, 37 percent of students with a specific plan to enroll (in a specific named college) in the fall did not enroll in any college four months later. Not completing key college actions may in part explain these gaps. Among students with general college plans, 15 percent did not apply to any college by the end of senior year; 47 percent did not complete a scholarship application (even though some scholarships have no academic requirements); and, 36 percent of students did not complete the FAFSA, although nearly all would qualify (92 percent of students receive free/reduced price lunch).[14] Specific college plans do not flow automatically from general plans, and having specific plans does not guarantee enrollment. These gaps in the

application process vary by student characteristics with Latino, lower SES, and non-AP students having bigger gaps (see Table 1).

In sum, although most students plan to attend college, many do not take key college actions or form specific plans by the end of senior year. If coaches are going to improve college attendance, they need to address these intervening actions. Indeed, the district encourages coaches, as well as counselors, to increase the number of students completing key actions, and as discussed earlier, coaches have strategies that appear to allow them to do so.

## COMPARING CHANGES OVER TIME AT COACH VERSUS NON-COACH SCHOOLS

As a first step in examining coach impacts, this analysis compares changes in coach versus non-coach schools before and after program implementation. The entire CPS school district has increasingly focused on improving postsecondary outcomes, which is reflected in some mean changes in non-coach schools (Table 2). In non-coach schools, among students with general plans, enrollment in any college and in four-year (less selective) colleges increased after 2004 (by 1.9 and 1.1 percentage points respectively), and two-year college enrollment decreased by 0.9 percentage points (discouraged because of their poor graduation rates). Over the same time period, coach schools showed even greater gains for some outcomes compared with these district-wide trends. Compared with non-coach schools, college enrollment increased more for coach schools (an additional 1.7 percentage points); enrollment at four-year colleges (less selective) increased by an additional 3.5 percentage points, and enrollment at two-year colleges fell by slightly more (an additional 0.3 percentage points). Enrollments at more selective four-year colleges, however, dropped somewhat more at coach schools than at non-coach schools (-1.0 and -0.3 percentage points respectively). In these raw comparisons, which ignore changes in school composition, enrollment outcomes

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[12] Statistics represent aggregate of all graduating seniors from 2004-2007

[13] See Roderick et al (2008) for an important exception.

[14] Undocumented students cannot receive federal financial aid. While CPS does not record students' immigration status, using estimates from Roderick et al (2008) suggests fewer than 8 percent of students were undocumented.

appear to have improved at coach schools relative to non-coach schools except at more selective four-year colleges, a small but important segment (discussed later).

Coaches emphasize key actions and the formation of specific plans as important steps in converting general plans into enrollment. Relative to a substantial 3.7 percentage point gain in completing 3 or more college applications in non-coach schools, applications at coach schools increased by an additional 4.7 percentage points, and FAFSA completion increased by 2.6 percentage points more at coach schools. Despite a general decline in students forming specific plans (9.6 percentage points in non-coach schools, likely due to discouraging community college plans), this decline was substantially less (4.1 percentage points less) in coach schools.

These differences, however, do not control for changes in school composition. While achievement and SES changed little, the proportion of Latinos increased more in coach schools (2.5 percentage points more), which, given Latinos' gaps in the enrollment process, may have posed greater challenges to coaches.

## ESTIMATING COACH EFFECTS USING FIXED EFFECTS LOGISTIC REGRESSION

Focusing on the 80 percent of seniors with general college plans (n=35,777), regression analysis is able to predict students' enrollment outcomes controlling for student characteristics, pre-program school trends in college enrollment, school and year fixed effects, and attending a coach school after program implementation (Table 3). Relative to white/other students in Chicago, African Americans are more likely to enroll in college, in less selective four-year colleges versus two-year colleges, and in more selective four-year colleges. This "net black advantage" has been well documented (Bennett & Lutz, 2008; Bennett & Xie, 2003). Latinos are less likely to enroll in college compared to white/other students, but among those who do enroll, they are more likely to enroll in four-year (less selective) colleges, controlling for other

background characteristics. While women are as likely as men to enroll in college, they are less likely to enroll in four-year colleges. Men graduate from CPS at lower rates than women (46 percent versus 63 percent in 2008; Chicago Public Schools, n.d.), but men who graduate do relatively better in terms of four-year college enrollment, controlling for background characteristics.[15]

Like previous research, results show that improving academic achievement is critical for improving enrollment outcomes for disadvantaged students. GPA is a positive predictor of enrolling in college, in a four-year (less selective) college, and in a more selective four-year college. Other measures of academic achievement (ACT score and number of AP classes) positively predict all outcomes except enrolling in a two-year college (versus not enrolling).

Some measures of SES matter for some enrollment outcomes. The social status of a students' neighborhood (occupation and education status of adults in a student's residential block group), relates positively to enrolling in college and enrolling in less selective four-year colleges (versus two-year colleges). However, it is not a significant predictor of the selectivity of four-year college. Neighborhood poverty rate is not a significant predictor of any outcome.

Do schools matter beyond individual characteristics? Over the study period, the district encouraged all schools to improve college enrollment, especially attending four-year colleges (versus two-year). While college enrollment increased district-wide in 2005 and 2007 (versus 2004), the increase was not uniform, and there was a significant decline in 2006 in less selective four-year enrollment (versus two-year) and in more selective four-year enrollment (versus less selective four-year) in 2007.

Given the district-wide emphasis on these goals, does the coach program have additional impact? Attending a coach school was associated with a 13 percent increase in the odds of attending college and a 24 percent increase

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in attending a less selective four-year college (versus two-year college, Table 3). As noted, while encouraging four-year college attendance, the district discouraged two-year college attendance, and indeed coaches do not increase two-year college enrollment. Consistent with the program goals, coaches appear to increase enrollment at less selective four-year colleges and may also increase enrollment overall (borderline significant).[16]

On the other hand, during this period, the coach program did not focus on increasing selective four-year college attendance, and we find there was no significant relationship between attending a coach school and enrolling in a more (versus less) selective four-year college. Attending a more selective four-year college is an important outcome. However, since few students in CPS qualify to attend a more selective four-year college (Roderick et al., 2008), and just 7 percent of CPS graduates with general college plans enroll in one, coaches' lack of impact on this outcome involves relatively few students (discussed below).

### PROCESSES MEDIATING COACH EFFECTS

The district instructs schools to improve college enrollment by getting students to complete college and scholarship applications and financial aid forms. Coaches' methods for accomplishing these goals differ, however, from counselors' methods. By changing social interactions around the enrollment process, coaches create social support for the enrollment process and are able to provide detailed and ongoing help and monitoring of task completion. This social capital may increase the completion of college actions, a potentially important mediator of improved college enrollment outcomes.

Results show that the odds of completing three or more college applications were 20 percent higher for students attending coach schools and the odds of completing the FAFSA were 17 percent higher, significant at <.01 and .02 respectively (Table 4, columns 1-2). Students in coach schools were also

19% more likely to form specific plans (p= .01), a relationship that becomes insignificant after controlling for college actions (Table 4, columns 5-6). These results suggest that coaches help students convert general college plans into specific plans by getting students to complete two college actions (3 or more college applications and the FAFSA).

Turning to enrollment outcomes, we find that, controlling for specific plans, these actions predict all enrollment outcomes (Table 4, columns 7-10). Together, actions and specific plans explain the relationship between coaches and enrollment outcomes (attending a coach school no longer has a significant impact on less selective four-year college enrollment after actions and plans are added, Table 4, column 9). In the aggregate, coaches appear to improve the type of college students choose (less selective four-year versus two-year), and may increase enrollment overall (borderline significant result) by increasing the completion of two key actions (applications and FAFSA).

### DIFFERENCES BY STUDENT AND SCHOOL CHARACTERISTICS: DOES THE COACH PROGRAM CONTRIBUTE TO CUMULATIVE ADVANTAGE?

Universal interventions often create a "cumulative advantage:" they widen gaps between privileged and disadvantaged students (Ceci & Papierno, 2005). For example, an analysis of Sesame Street's effects on children's cognitive development suggests that it widened the gap between low- and middle-SES children because of differences in viewing habits (Cook, 1975). Coaches are meant to serve all students, and they hoped to serve disadvantaged students who were less well served by the ordinary process. Can coaches impact students not typically reached by counselors? Can coaches also reduce gaps in enrollment outcomes between relatively advantaged and disadvantaged students? Coaches seek to increase students' access to college expertise by proactively reaching out to students, building trusting relationships with students, and enlisting peer networks

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[16]  Because fixed effects ignore between unit variation, standard errors are relatively large (Allison, 2005), and therefore borderline significant results are more noteworthy than ordinarily.

in delivering help, which may give credibility to coaches' messages (Rosenbaum, Stephan & Rosenbaum, 2010). These strategies may allow coaches to serve students who otherwise would not seek out help. This analysis examines whether traditionally underserved students (Latino, lower SES, non-AP students, and students at low college-planning high schools)[17] benefit from the coach program, and whether they benefit relatively more than other students.

Results suggest that coaches do have benefits for students often underserved by counselors. Latino students, lower SES students, non-AP students, and students at low college-planning high schools are more likely to enroll in less selective four-year versus two-year colleges if they attended a coach school (odds ratios of 1.86, 1.71, 1.35, and 1.56 respectively; Table 5). The odds ratios associated with the coach program for these underserved groups are significant, and they are of large magnitude. Non-AP students at coach schools may also be more likely to enroll in college (odds ratio=1.16, p-value=0.06). On the other hand, there are no significant positive relationships between coaches and enrollment outcomes for many students with typically better enrollment outcomes: white, African American, higher SES, and AP students. One group of African American students, however, appears to benefit from the coach program: lower-SES African Americans may be more likely to enroll in a less selective four-year college versus a two-year college (odds ratio=1.60, p-value=0.06). The coach program appears to benefit students typically facing the most difficulties in the application process.

t-tests comparing the coach coefficients between subgroups show significant differences in the coach impact on less selective four-year college enrollment (versus two-year) for Latino versus African American students and possibly for lower versus higher SES students (p-value=.06) [but not for AP versus non-AP students (p-value=.46)]. In addition to benefiting more disadvantaged students, coaches appear to narrow some ethnic and SES gaps in college enrollment.

On the other hand, the coach program did not focus on improving attendance at more selective four-year colleges (versus less selective), and we find that coaches appear to lower the chances of attending a more selective four-year college (versus less selective) for African Americans (odds ratio=0.69), non-AP students (odds ratio=0.55), and perhaps those at high college-planning high schools (odds ratio=.74, p-value=0.06). This finding deserves attention. Some CPS students who would qualify for a more selective college do not attend one (Roderick, et al., 2008), and attending a more selective college corresponds with higher degree attainment and earnings, as previously discussed.

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[17] Defined as a school with a below median percent of students stating general college plans in spring 2004 (prior to the coach program).

# DISCUSSION

# DISCUSSION

This study follows nearly all students in a large urban school district from senior year of high school through the fall after graduation. The data allow for distinct insights into the college application process for low-income and minority students. These data have many more African American, Latino, and low-income students and more detailed survey measures related to college plans and actions than national datasets. In addition, the cross-sectional panel dataset with measures before and after the onset of the coach program allows for a rigorous test of the coach program's effectiveness. This research provides a detailed picture of points of stratification in the high-school-to-college transition and how a social capital-based reform may reduce barriers.

The analysis finds two gaps in the enrollment process: not all students with general college plans form specific plans, and specific plans are not sufficient for enrollment. These gaps are larger for three kinds of disadvantaged students: Latino, non-AP, and lower-SES students. This finding is important for school staff or researchers who sometimes mistakenly assume that specific plans at the end of senior year translate into actual college enrollment in the fall. Schools may have greater success at reducing the first gap since students are in school when they form specific plans. However, schools may also be able to take some measures during the school year to reduce the second gap (e.g., the ways coaches help students complete actions or anticipate and plan for challenges likely to arise in the summer), or they may offer summer help to graduated seniors. These results indicate that one cannot assume the college choice process is over when the school year ends. Students face serious challenges after schools close for the summer.

College actions appear to be an important mechanism for reducing gaps in the enrollment process. Many students who have general college plans do not take actions to make college happen. While this does not preclude attending college, students who do not complete these actions risk missing key deadlines, have less access to school help, and may have fewer (and perhaps less

desirable) college options. Students who complete college actions are more likely to form specific plans, and controlling for specific plans, also more likely to enroll in college, in less selective four-year versus two-year colleges, and in more versus less selective four-year colleges.

Unlike the traditional counseling model, college coaches use innovative strategies to engage new groups of students in social interactions to improve college enrollment outcomes. Coaches' strategies appear to create social capital resources, including social support in the enrollment process, detailed and ongoing help in the process, and monitoring of the completion of actions (Rosenbaum, Stephan & Rosenbaum, 2010). Students at coach schools were significantly more likely to attend less selective four-year colleges, which have much higher graduation rates than two-year colleges,[18] and they were more likely to enroll in college (borderline significant at p=0.06). On the other hand, coaches have no effect on two-year college enrollment (versus no enrollment), which is not encouraged, or on more selective (versus less selective) four-year college enrollment (which was not a program emphasis during these years). Coaches appear to affect enrollment outcomes by increasing the number of students applying to three or more colleges and completing the FAFSA.

The most surprising result is the benefits for more disadvantaged students. In many programs, the rich get richer. While coaches are charged with improving college enrollment outcomes for all types of students, coaches' emphasis on social capital may have particular benefit for students often underserved by traditional approaches (lower SES and non-AP students); students with more difficulties in the application process (Latino students); and, students from schools with a low percent of college planners (which may reflect a lack of college-going culture). Moreover, analyses suggest that coaches reduce the gap in less selective four-year college enrollment between Latinos and African Americans and possibly between lower and higher SES students. These

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[18] We are not suggesting that four-year colleges are the only or even the best option for all students, but shifting enrollments from two-year to four-year colleges was a goal of the coach program.

findings support the inference that social capital deficits, not just academic and financial deficits, are barriers to college for disadvantaged students.

On the other hand, the reduced odds of attending more selective four-year colleges for some groups of students (African Americans, non-AP students, and possibly students from high college-planning high schools) are a concern, particularly since more selective colleges have higher graduation rates and earnings. We think this finding results from the program's lack of emphasis on this outcome during the study period. If so, then it may have already changed because the program increasingly has focused on improving "college match" for higher achieving students in the last two years.[19]

More speculatively, these results may suggest new avenues for advising procedures that improve college actions and social capital. In other words, if guidance counselors or other staff provided the kinds of procedures and affected the kinds of college actions seen in this program, they might have comparable benefits. Of course, this is only a conjecture, but it is noteworthy because so little thought is given to alternative approaches to counseling that might better help underserved groups and their post-secondary outcomes.

Although improving access to financial aid and academic preparation are important ways to improve the college enrollment outcomes of disadvantaged students, policy research should also consider other barriers. The enrollment process itself is a mechanism of social stratification. While middle-class parents often supply the necessary knowledge, support, and monitoring for their children in the enrollment process, other children may falter on small details. Advising models that provide strong social capital in the application process, such as the college coach program, may be an important lever for helping disadvantaged students to make specific plans

and take the requisite college actions to improve their educational attainment.

## LESSONS OF THE COACH PROGRAM FOR GUIDANCE COUNSELORS

The coach program is very promising, and these findings suggest that it may be worthwhile to expand. But beyond simple replication, these findings may have implications for making high school guidance counselors more effective at college counseling. Of course the first important realization is that although we assume high school guidance counselors do college advising as a major part of their responsibilities, counselors are assigned a multitude of other duties, among which college counseling is often the least pressing. High school guidance counselors are required to do course scheduling every term, to do crisis counseling as needed, to handle the paperwork for testing, to handle school discipline (sometimes), and to do lunchroom and hall monitoring. While one of the justifications for accountability reforms is to increase college attendance, the time-consuming test administration tasks of accountability often fall on guidance counselors, who consequently have less time for advising students about college. Even before NCLB, research indicated that over half of guidance counselors spent less than 20% of the time on college counseling (Parsad, Alexander, Farris, & Hudson, 2003). One of the reasons college coaches are effective at improving college applications is because they are able to be devoted to the task full time.

Herein lies a warning. The college coaches were able to maintain this total focus on college counseling because they reported to the postsecondary office within the school district, not to principals. Principals must accomplish a wide variety of tasks, and guidance counselors are the easiest to recruit because they don't have classroom schedules. In more recent years, coaches have reported

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[19] Other possible explanations for this result could be: (1) Coaches may simply lack the time to help all students and reason that spending a great deal of effort helping a small group of students qualified to attend more selective colleges (which have more time-consuming applications) would take time away from helping the majority of students who qualify for less selective colleges. (2) Because coaches serve students in groups, they may talk more about the types of colleges that most students attend (just 7 percent of students attend more selective four-year colleges; Table 1). Discussing the complex procedures for more selective colleges may discourage or confuse students considering less selective ones. (3) The negative effect for non-AP students, could suggest that coaches intentionally discourage more selective four-year colleges for students they consider to have "unrealistic" plans. (4) Coaches may focus closely on the fit between a student and a college on dimensions other than college selectivity. (5) Coaches may recommend less selective colleges to students believing that such colleges will offer students more financial aid (Naffziger, 2011). Although the data do not allow investigation of these speculations, this negative finding raises important questions.

**DISCUSSION** (CONT'D)

to principals, and we don't know how this has affected the allocation of their time. To its credit, CPS provides incentives for principals to work for improved college attendance and scholarship receipt, so it is possible that coaches can still devote their time to those goals.

The coach program also has many specific lessons for how guidance counselors might benefit from using similar techniques. As we noted, coaches are proactive, not just responsive to students' initiation and questions. Coaches reach out to all students, they don't just work with the most motivated students. While counselors work with students individually, coaches work with groups of students. This enables them to convey information, advice, and skills more efficiently. It also enables them to take advantage of peer networks. A student who has learned how to use a search engine or how to fill out a college application can help other students who are just beginning. Getting students involved and getting them to persist is a major challenge, and coaches use peer outreach techniques to bring students to the college resource room and keep them returning. None of these tasks requires difficult skills, and counselors could do them. Of course, they might need some training, they will need time to do this, and they will need group space and computer terminals.

The coach program also emphasized certain actions and goals. The program strongly emphasized attending four-year colleges, since the local city colleges have very low degree completion rates.

Toward that end, coaches encouraged all students to apply to three or more colleges and to three or more scholarships. In CPS generally, and particularly in the coach schools, students were encouraged to complete FAFSA, and CPS implemented a rapid feedback program where the federal government sent CPS information about specific items students had not completed on the FAFSA application. This information was sent to the local high schools, where coaches would contact students and get them to answer the needed items. While this is being done in all CPS schools, coaches give this task higher priority than many guidance counselors who have competing duties.

In sum, the coach program had some impressive successes. Our research was able to assess changes in outcomes attributable to the program and to identify changes in mediating actions that likely contributed to the improved outcomes. Our research was also able to observe the techniques used by coaches. These procedures are innovative and powerful, but not complex. If counselors were given appropriate training, and given the time and resources required, it is likely that they could accomplish similar improvements.

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# TABLES

# TABLES

**TABLE 1:** SUMMARY OF SAMPLE AND KEY VARIABLES FOR GRADUATING SENIORS (2004-2007)

| | AGGREGATE (n=44,627) | AFRICAN AMERICAN (n=23,303) | LATINO (n=15,208) | ASIAN (n=1,870) | WHITE/ OTHER (n=4,246) | LOWER SES (N=23,127) | HIGHER SES (n=21,500) | NO AP CLASSES (n=31,327) | 1+ AP CLASSES (n=11,391) |
|---|---|---|---|---|---|---|---|---|---|
| **RACE/ETHNICITY** | | | | | | | | | |
| African American | 52% | 100% | 0% | 0% | 0% | 43% | 62% | 56% | 42% |
| Latino | 34% | 0% | 100% | 0% | 0% | 48% | 19% | 33% | 36% |
| Asian | 4% | 0% | 0% | 100% | 0% | 3% | 6% | 3% | 9% |
| White/Other | 10% | 0% | 0% | 0% | 100% | 6% | 14% | 8% | 14% |
| **RECEIVE FREE OR REDUCED PRICE LUNCH** | 92% | 93% | 94% | 90% | 74% | 95% | 88% | 93% | 88% |
| **ACT SCORE AT OR ABOVE STATE AVERAGE (ACT=20.3)** | 11% | 8% | 10% | 32% | 30% | 9% | 14% | 8% | 30% |
| **PLANNING COLLEGE IN FALL AFTER SENIOR YEAR** | 80% | 84% | 74% | 90% | 79% | 78% | 83% | 76% | 89% |
| **AMONG THOSE PLANNING COLLEGE IN FALL...** | (n=35,777) | (n=19,594) | (n=11,170) | (n=1,652) | (n=3,361) | (n=17,931) | (n=17,846) | (n=24,521) | (n=10,126) |
| Actions completed by end of senior year | | | | | | | | | |
| Completed at least 1 college application | 85% | 88% | 79% | 88% | 82% | 84% | 85% | 82% | 92% |
| Completed 3 or more college applications | 47% | 54% | 37% | 50% | 40% | 45% | 49% | 43% | 60% |
| Completed financial aid form (FAFSA) | 64% | 72% | 51% | 72% | 60% | 61% | 67% | 60% | 75% |
| Applied to at least one scholarship | 53% | 61% | 44% | 47% | 43% | 52% | 54% | 48% | 67% |
| Received at least one scholarship | 23% | 26% | 18% | 21% | 24% | 21% | 25% | 19% | 33% |
| Specific college planned by end of senior year | | | | | | | | | |
| 2-yr college | 19% | 17% | 24% | 14% | 20% | 21% | 17% | 22% | 12% |
| Less selective 4-yr college | 29% | 34% | 20% | 34% | 24% | 26% | 32% | 25% | 39% |
| More selective 4-yr college | 9% | 8% | 7% | 23% | 17% | 7% | 11% | 4% | 22% |
| Special/Unranked 4-yr college | 5% | 6% | 6% | 2% | 4% | 6% | 5% | 6% | 4% |
| No specific college named | 38% | 36% | 44% | 26% | 35% | 40% | 36% | 43% | 23% |
| College enrollment in fall after senior year | | | | | | | | | |
| 2-yr college | 20% | 20% | 20% | 20% | 25% | 20% | 20% | 23% | 13% |
| Less selective 4-yr college | 24% | 28% | 17% | 33% | 24% | 21% | 28% | 20% | 36% |
| More selective 4-yr college | 7% | 6% | 5% | 21% | 15% | 5% | 9% | 2% | 19% |
| Special/Unranked 4-yr college | 2% | 2% | 2% | 1% | 1% | 2% | 2% | 2% | 2% |
| Not enrolled | 47% | 45% | 56% | 25% | 36% | 52% | 41% | 53% | 29% |
| **AMONG THOSE WITH SPECIFIC COLLEGE PLANS...** | (n=22,272) | (n=12,588) | (n=6,281) | (n=1,230) | (n=2,173) | (n=10,833) | (n=11,439) | (n=14,018) | (n=7,757) |
| College enrollment in fall after senior year | | | | | | | | | |
| 2-yr college | 19% | 18% | 19% | 15% | 22% | 19% | 18% | 23% | 11% |
| Less selective 4-yr college | 32% | 35% | 25% | 38% | 29% | 28% | 36% | 28% | 41% |
| More selective 4-yr college | 11% | 8% | 9% | 27% | 22% | 8% | 13% | 3% | 24% |
| Special/Unranked 4-yr college | 2% | 2% | 2% | 1% | 1% | 2% | 2% | 2% | 2% |
| Not enrolled | 37% | 37% | 45% | 19% | 25% | 43% | 32% | 44% | 22% |

**TABLE 2:** STUDENTS' ENROLLMENT, PLANS, ACTIONS, AND CHARACTERISTICS:
COACH AND NON-COACH SCHOOLS BEFORE AND AFTER PROGRAM IMPLEMENTATION

| | STUDENTS AT COACH SCHOOLS | | | STUDENTS AT NON-COACH SCHOOLS | | | "COACH DIFFERENCE - NON-COACH DIFFERENCE" |
|---|---|---|---|---|---|---|---|
| | 2004 | 2005-2007 | DIFFERENCE | 2004 | 2005-2007 | DIFFERENCE | DIFFERENCE |
| % with general college plans | 83.4% | 81.7% | -1.7% | 80.9% | 79.2% | -1.7% | **0.0%** |
| **ENROLLMENT AMONG STUDENTS WITH GENERAL PLANS** | | | | | | | |
| % who did not enroll | 43.7% | 40.2% | -3.6% | 50.2% | 48.3% | -1.9% | **-1.7%** |
| % who enrolled in <=2-yr college | 18.4% | 17.2% | -1.2% | 22.0% | 21.1% | -0.9% | **-0.3%** |
| % who enrolled in less selective 4-yr college | 23.7% | 28.2% | 4.5% | 22.4% | 23.5% | 1.1% | **3.5%** |
| % who enrolled in more selective 4-yr college | 13.7% | 12.7% | -1.0% | 5.2% | 4.9% | -0.3% | **-0.7%** |
| % who enrolled in unrated/ special 4-yr college | 0.5% | 1.8% | 1.3% | 0.1% | 2.2% | 2.1% | **-0.8%** |
| **COLLEGE ACTIONS AND SPECIFIC PLANS AMONG STUDENTS WITH GENERAL PLANS** | | | | | | | |
| % who applied to 3 or more colleges | 43.5% | 51.8% | 8.3% | 43.6% | 47.3% | 3.7% | **4.7%** |
| % who completed FAFSA | 64.6% | 68.5% | 3.9% | 61.7% | 63.1% | 1.3% | **2.6%** |
| % who applied to at least one scholarship | 51.8% | 55.2% | 3.5% | 49.5% | 53.6% | 4.1% | **-0.6%** |
| % who received 1 or more scholarships | 26.5% | 26.0% | -0.5% | 22.9% | 21.6% | -1.2% | **0.8%** |
| % with specific plans among students | 70.8% | 65.3% | -5.5% | 68.0% | 58.5% | -9.6% | **4.1%** |
| **STUDENT CHARACTERISTICS** | | | | | | | |
| % African-American | 49.5% | 49.3% | -0.3% | 56.9% | 56.8% | -0.1% | **-0.1%** |
| % Asian | 6.7% | 5.9% | -0.8% | 3.8% | 4.2% | 0.4% | **-1.2%** |
| % Latino | 33.4% | 36.0% | 2.6% | 29.6% | 29.7% | 0.1% | **2.5%** |
| % Female | 59.2% | 58.4% | -0.7% | 61.4% | 59.8% | -1.5% | **0.8%** |
| Average social status | -0.1 | -0.2 | 0.0 | -0.3 | -0.3 | 0.0 | **-0.1** |
| Average poverty | 0.1 | 0.1 | 0.0 | 0.3 | 0.3 | 0.0 | **0.0** |
| Average ACT composite score | 17.3 | 17.7 | 0.5 | 15.8 | 16.1 | 0.4 | **0.1** |
| Average cumulative GPA (fall senior year) | 2.8 | 2.8 | 0.0 | 2.6 | 2.6 | 0.0 | **0.0** |
| % who participated in Upward Bound | 6.9% | 8.0% | 1.1% | 7.2% | 8.3% | 1.1% | **0.0%** |
| % who participated in District Postsecondary Programs | 16.6% | 16.2% | -0.4% | 17.9% | 14.6% | -3.3% | **2.9%** |

**TABLE 3:** FIXED EFFECTS LOGISTIC REGRESSION OF COLLEGE ENROLLMENT ON COACH PROGRAM AND STUDENT CHARACTERISTICS

| | ENROLLED IN COLLEGE VS. NOT ENROLLED | 2-YR COLLEGE VS. NOT ENROLLED | "LESS SELECTIVE-4-YR COLLEGE VS. 2-YR" | MORE VS. LESS SELECTIVE 4-YR COLLEGE |
|---|---|---|---|---|
| | (N=35,777) | (N=23,944) | (N=15,961) | (N=11,247) |
| | "ODDS RATIO (SE)" | "ODDS RATIO (SE)" | "ODDS RATIO (SE)" | "ODDS RATIO (SE)" |
| COACH SCHOOL X POST- IMPLEMENTATION | 1.13 † | 1.08 | 1.24 * | .82 |
| | (.07) | (.09) | (.13) | (.11) |
| AFRICAN-AMERICAN | 1.42 *** | .86 * | 3.49 *** | 1.30 * |
| | (.08) | (.06) | (.30) | (.15) |
| ASIAN | 1.48 *** | 1.30 ** | 1.56 *** | .94 |
| | (.11) | (.12) | (.16) | (.11) |
| LATINO | .69 *** | .62 *** | 1.43 *** | 1.19 |
| | (.03) | (.04) | (.11) | (.13) |
| FEMALE | .99 | 1.05 † | .88 ** | .81 *** |
| | (.02) | (.03) | (.03) | (.05) |
| SOCIAL STATUS | 1.10 *** | 1.07 ** | 1.13 *** | 1.05 |
| | (.02) | (.03) | (.04) | (.05) |
| POVERTY | 1.00 | .99 | 1.06 | 1.00 |
| | (.02) | (.03) | (.04) | (.05) |
| ACT SCORE | 1.09 *** | 1.00 | 1.21 *** | 1.14 *** |
| | (.01) | (.01) | (.01) | (.01) |
| CUMULATIVE GPA | 2.04 *** | 1.17 *** | 3.27 *** | 3.41 *** |
| | (.04) | (.03) | (.12) | (.19) |
| # OF AP CLASSES | 1.04 ** | .89 *** | 1.13 *** | 1.21 *** |
| | (.02) | (.02) | (.03) | (.03) |
| # OF VOCATIONAL CLASSES | .98 | 1.00 | .95 * | .99 |
| | (.01) | (.02) | (.02) | (.04) |
| UPWARD BOUND | 1.27 *** | 1.05 | 1.47 *** | 1.22 * |
| | (.06) | (.06) | (.10) | (.12) |
| DISTRICT POSTSECONDARY PROGRAM | 1.06 † | 1.01 | 1.00 | 1.26 *** |
| | (.04) | (.04) | (.05) | (.08) |
| YEAR=2005 | 1.08 * | 1.03 | .99 | .83 † |
| | (.04) | (.05) | (.06) | (.08) |
| YEAR=2006 | 1.00 | 1.00 | .87 * | .91 |
| | (.04) | (.05) | (.05) | (.09) |
| YEAR=2007 | 1.10 * | 1.05 | 1.00 | .70 ** |
| | (.05) | (.05) | (.07) | (.08) |
| SCHOOL ENROLLMENT TREND (2001-2004) | .65 | .56 | 1.53 | .55 |
| | (.27) | (.29) | (1.00) | (.57) |

Note. Omitted race/ethnicity category is white/other.
†<10, *p < .05, **p < .01, ***p<.001 (two-tailed).

**TABLE 4:** FIXED EFFECTS LOGISTIC REGRESSIONS OF ACTIONS, PLANS, AND ENROLLMENT ON COACH PROGRAM

| | "(1) APPLIED TO 3+ COLLEGES" | "(2) COMPLETED FAFSA" | "(3) APPLIED TO 1+ SCHOLARSHIPS" | "(4) RECEIVED 1+ SCHOLARSHIPS" SPECIFIC COLLEGE PLANNED | "(5) SPECIFIC COLLEGE PLANNED" | "(6) SPECIFIC COLLEGE PLANNED" | "(7) ENROLLED IN COLLEGE VS. NOT ENROLLED" | "(8) 2-YR COLLEGE VS. NOT ENROLLED" | "(9) LESS SELECTIVE 4-YR VS. <=2-YR COLLEGE" | "(10) MORE VS. LESS SELECTIVE 4-YR COLLEGE" |
|---|---|---|---|---|---|---|---|---|---|---|
| | "ODDS RATIO (SE)" (N=34,651) | "ODDS RATIO (SE)" (N=34,558) | "ODDS RATIO (SE)" (N=34,532) | "ODDS RATIO (SE)" (N=34,439) | "ODDS RATIO (SE)" (N=35,761) | "ODDS RATIO (SE)" (N=35,761) | "ODDS RATIO (SE)" (N=35,777) | "ODDS RATIO (SE)" (N=23,944) | "ODDS RATIO (SE)" (N=17,252) | "ODDS RATIO (SE)" (N=11,679) |
| COACH SCHOOL X POST-IMPLEMENTATION | 1.20 ** (.08) | 1.17 * (.08) | .94 (.06) | 1.02 (.07) | 1.19 ** (.08) | 1.12 (.08) | 1.04 (.07) | 1.03 (.08) | 1.15 (.12) | .83 (.11) |
| APPLIED TO 3 OR MORE COLLEGES | | | | | | 2.31 *** (.06) | 1.37 *** (.04) | 1.20 *** (.04) | 1.33 *** (.05) | 1.33 *** (.08) |
| COMPLETED FAFSA | | | | | | 2.40 *** (.06) | 2.70 *** | 1.86 *** (.06) | 2.43 *** (.12) | 1.67 *** (.18) |
| COMPLETED AT LEAST ONE SCHOLARSHIP | | | | | | 1.38 *** (.04) | .91 ** (.03) | .84 *** (.03) | 1.22 *** (.05) | 1.12 (.08) |
| RECEIVED AT LEAST ONE SCHOLARSHIP | | | | | | 1.42 *** (.05) | .98 (.03) | .82 *** (.04) | 1.10 † (.06) | 1.50 *** (.09) |
| HAD A SPECIFIC COLLEGE PLAN | | | | | | | 1.51 *** (.04) | 1.15 *** (.04) | 2.01 *** (.09) | 1.39 ** (.09) |

Note. Regressions control for race/ethnicity, gender, neighborhood social status and poverty, GPA, number of AP and vocational classes, participation in Upward Bound and District Postsecondary Programs, year fixed effects, and a high school trend in college enrollment. †<.10, *p < .05, **p < .01, ***p<.001 (two-tailed).

**TABLE 5:** ODDS RATIOS FOR COACH EFFECT ON ENROLLMENT OUTCOMES BY STUDENT GROUP

| | ENROLLED IN COLLEGE VS. NOT ENROLLED | | 2-YR COLLEGE VS. NOT ENROLLED | | "LESS SELECTIVE 4-YR COLLEGE VS. 2-YR" | | MORE VS. LESS SELECTIVE 4-YR COLLEGE | |
|---|---|---|---|---|---|---|---|---|
| | "ODDS RATIO (SE)* | P-VAL | "ODDS RATIO (SE)* | P-VAL | "ODDS RATIO (SE)* | P-VAL | "ODDS RATIO (SE)* | P-VAL |
| **AGGREGATE** | 1.13 † (.07) | .06 | 1.08 (.09) | .33 | 1.24 * (.13) | .04 | .82 (.11) | .14 |
| **LATINO** | 1.17 (.13) | .16 | .93 (.13) | .58 | 1.86 ** (.37) | .00 | 1.64 (.51) | .11 |
| **AFRICAN AMERICAN** | 1.12 (.10) | .21 | 1.18 (.13) | .15 | 1.08 (.15) | .59 | .69 * (.13) | .04 |
| **WHITE** | 1.03 (.23) | .90 | 1.07 (.31) | .81 | 1.16 (.43) | .69 | .64 (.26) | .16 |
| **LOWER SES** | 1.13 (.10) | .20 | .96 (.11) | .71 | 1.71 *** (.27) | .00 | .87 (.20) | .53 |
| **HIGHER SES** | 1.13 (.10) | .17 | 1.23 † (.15) | .08 | .97 (.14) | .81 | .79 (.14) | .17 |
| **NON-AP** | 1.16 † (.09) | .06 | 1.09 (.10) | .35 | 1.35 * (.17) | .02 | .55 ** (.13) | .01 |
| **AP** | 1.13 (.15) | .36 | 1.03 (.21) | .89 | 1.01 (.21) | .97 | 1.11 (.19) | .56 |
| **LOW COLLEGE-PLANNING HIGH SCHOOL** | 1.11 (.11) | .32 | .96 (.12) | .75 | 1.56 * (.27) | .01 | 1.16 (.36) | .65 |
| **HIGH COLLEGE-PLANNING HIGH SCHOOL** | 1.17 † (.10) | .07 | 1.18 (.13) | .13 | 1.14 (.15) | .34 | .74 † (.12) | .06 |
| **LOWER SES AFRICAN AMERICANS** | .99 (.16) | .97 | .90 (.17) | .59 | 1.60 † (.39) | .06 | .51 † (.18) | .06 |

Note. Odds ratios come from fixed effects logistic regressions that control for race/ethnicity, gender, neighborhood social status and poverty, GPA, number of AP and vocational classes, participation in Upward Bound and district postsecondary programs, year fixed effects, and a high school trend in college enrollment. †<.10, *p < .05, **p < .01, ***p<.001 (two-tailed).

# APPENDICES

## APPENDIX A: COMPARISON OF COACH AND NON-COACH SCHOOLS IN 2004 (N=58)

| | COACH SCHOOLS | | NON-COACH SCHOOLS | | MEAN DIFFERENCE? |
|---|---|---|---|---|---|
| | MEAN | STD. DEV. | MEAN | STD. DEV. | P-VALUE |
| AVERAGE ACT COMPOSITE | 16.4 | 2.3 | 15.3 | 1.0 | 0.17 |
| % LIMITED ENGLISH PROFICIENT | 6.7 | 7.7 | 5.0 | 6.5 | 0.51 |
| MOBILITY RATE | 20.2 | 9.8 | 28.0 | 15.4 | 0.05 |
| % ASIAN | 3.6 | 5.8 | 2.0 | 4.7 | 0.42 |
| % AFRICAN AMERICAN | 49.9 | 45.4 | 66.8 | 36.5 | 0.27 |
| % LATINO | 39.3 | 41.6 | 24.9 | 28.0 | 0.30 |
| % WHITE | 6.7 | 8.9 | 6.1 | 11.2 | 0.20 |
| ATTENDANCE RATE | 85.9 | 3.5 | 85.0 | 4.6 | 0.49 |
| 1-YR DROPOUT RATE | 11.8 | 6.1 | 13.1 | 6.4 | 0.53 |
| GRADUATION RATE | 70.5 | 7.2 | 72.2 | 14.7 | 0.58 |
| % LOW-INCOME | 80.5 | 18.0 | 87.9 | 8.9 | 0.21 |
| TOTAL ENROLLMENT | 1772 | 446 | 1254 | 654 | 0.00 |

Note. p-value refers to a t-test for mean differences (does not assume equal variances)

**APPENDIX B: THREE MOST FREQUENTLY ATTENDED COLLEGES
BY COLLEGE SELECTIVITY (CLASS OF 2007)**

| MOST COMPETITIVE |
| --- |
| University of  Chicago |
| Northwestern University |
| New York University |

| HIGHLY COMPETITIVE |
| --- |
| University of Illinois at Urbana-Champaign |
| Illinois Institute of Technology |
| Miami University-Oxford |

| VERY COMPETITIVE |
| --- |
| DePaul University |
| Loyola University Chicago |
| Bradley University |

| COMPETITIVE |
| --- |
| University of Illinois at Chicago |
| Northern Illinois University |
| Southern Illinois University-Carbondale |

| LESS COMPETITIVE |
| --- |
| DeVry University |
| Columbia College Chicago |
| East-West University |

| NON-COMPETITIVE |
| --- |
| Northeastern Illinois University |
| Mississippi Valley State University |
| Grambling State University |

| SPECIAL/UNRATED |
| --- |
| Robert Morris College |
| The Franciscan University |
| School of Art Institute of Chicago |

| TWO-YEAR |
| --- |
| City Colleges of Chicago-Wilbur Wright |
| City Colleges of Chicago-Harold Washington |
| City Colleges of Chicago-Kennedy-King |

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