



PEER GROUP CONNECTION

High School Transition Program Improves Student Graduation Rates

A Report on Study Findings

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ABSTRACT

With federal funding from the United States Department of Health and Human Services (HHS)¹, Rutgers University conducted a randomized, four-year longitudinal study of the impact on student outcomes of *Peer Group Connection* (PGC), a program of the Center for Supportive Schools (CSS, formerly Princeton Center for Leadership Training), a national not-for-profit corporation based in Princeton, New Jersey. PGC is a high school transition program that leverages the potential leadership skills of older high school students to provide instruction and facilitation to groups of 12-14 students in the ninth grade, a grade during which the critical transition from middle to high school takes place and academic achievement, school attendance, and student behavior frequently decline (Isakson & Jarvis, 1999). While the overall study investigated the impact of PGC on a variety of student outcomes, this report focuses on the four-year cohort graduation rates of students who were randomly assigned to participate in either the PGC program or a control group during their ninth grade year of high school. Results show that PGC improves the graduation rates of participants by nine percentage points (77% of the students in the program group graduated from high school compared to only 68% in the control group).

BACKGROUND

The Transition from Middle to High School. The transition to a new educational setting requires major adaptations that can be quite stressful for students. Particularly challenging is the transition from middle to high school, when adolescents' academic achievement and school attendance frequently decline (Isakson & Jarvis, 1999).

The changes and stressors associated with the transition from middle to high school often contribute to a significant decline in school connectedness, one of the most important predictors of student success (Bonny et al., 2000). During the transition from middle to high school, students often lose the relationships that they had with teachers and peers throughout middle school; they experience larger class sizes and fewer opportunities to interact with teachers; they experience a more competitive, impersonal, grade-oriented environment (Eccles, Midgley, & Adler, 1984); they develop a more negative view of themselves; and they feel an increased need for peer friendships (Hertzog et al., 1996).

As students make the transition into high school, they are faced with increased academic demands for which an alarming number are unprepared academically (MacIver & Epstein, 1992, as cited in Cohen & Smerdon, 2009). Simultaneously, they must make important academic and social decisions that determine their likelihood of graduating from high school, going to college, or entering the workforce. The transition from middle to high school often marks the beginning of a number of problem behaviors (Graber & Brooks-Gunn, 1996), including substance use, aggressive and violent behavior, and high-risk sexual behavior. For many, the transition proves too difficult and they leave school altogether.

Students are most vulnerable for dropping out of school during and immediately following their first year of high school (Cohen & Smerdon, 2009). This is particularly evident in high schools with large low-income student populations, where up to 40% of students drop out after ninth grade (Editorial Projects in Education Research Center, 2006, as cited in Cohen & Smerdon, 2009). In fact, in many urban and rural communities across the country, *50% of the students who enter ninth grade will not graduate* (Balfanz & Legters, 2004).

Effective Transition Programming. Because of the significant challenges associated with the transition from middle to high school and the high number of students who drop out shortly after entering high school, students need extra support and programming during this period. Unfortunately, transition programs vary widely across schools, and many fall short of the comprehensive support that students need to successfully navigate this critical transitional period. Many administrators, teachers, and parents view transition programming as a one-day tour or informational orientation to the new school setting. However, schools with programs that consist of minimal activities, building tours, and registration assistance reported the highest dropout rates (Hertzog & Morgan, 1999).

Since the transition from middle to high school is not a one-time event, but rather a process that takes place over an extended period of time (Hertzog & Morgan, 1999), it is essential that students receive support and guidance throughout the transition. Students who are enrolled in the most extensive and comprehensive transition programs are able to maintain their grade-level placement in high school and have the lowest dropout rates (Hertzog & Morgan, 1999). Research also indicates that students who participate in transition programs that actively involve students, parents, and staff members are less likely to drop out of high school (Smith 1997; Hertzog & Morgan, 1999).

Successful transition programs are multi-faceted. They facilitate caring relationships, create a culture of support and sense of community, provide students with cognitive challenges, and make the connection between what students are learning in school to life after graduation (Feller, 2003). Effective programs also provide students with mentoring, life skills, and opportunities to get to know and develop positive relationships with older students and other incoming students (Holland & Mazzoli, 2001; Mizelle & Irvin, 2000; Smith, 2006). Finally, it is essential for schools to respond to the challenges, demands, and risks associated with the transition from middle to high school by developing a school climate that is supportive and nurturing, thus enhancing students' sense of belonging and ownership of learning (NASSP, 2005).

PROGRAM DESCRIPTION

Peer Group Connection (PGC) is a high school transition program that incorporates the essential elements of successful transition programming for ninth grade students. PGC provides a structure that leverages the potential leadership skills of older students to provide instruction and facilitation to groups of 12-14 ninth grade students. PGC is a multi-tiered program that involves school administrators, counselors, teachers, parents, community members, and students. The primary focus of the program is on developing student competency in specific skill areas that lead to academic and social success, motivating students to want to stay in school, and promoting positive social relationships.

During weekly sessions facilitated by junior and senior peer leaders in caring, supportive environments, ninth grade students participate in activities that examine the impact of decision-making on high school graduation and life after high school. In addition, these activities enable students to develop concrete skills and a motivation to do well, thereby setting them on a path to succeed academically and socially. Skills addressed in the sessions include goal setting, problem solving, decision making, negotiation, refusal skills, feedback skills, time management, and teamwork. These are essential and foundational skills that support academic and social success.

Because both academic and social success are important factors for improving student persistence and desire to want to continue to stay in school semester after semester, year after year, both of these areas are emphasized throughout the program. The freshmen in PGC feel supported and cared for by both their peer leaders and the other ninth graders in their peer group, thus creating a sense of belonging and motivating students to want to attend school.

A parent involvement component is also built into the program. Family Night events are held for all of the ninth grade program participants, their peer leaders, and their parents/guardians. These events are designed to open the lines of communication between parents and their children and between parents and the school and to increase parental involvement in their child's education.

STUDY PURPOSE

There are few studies that have examined the four-year cohort graduation rate for students who participate in a high school transition program compared to those who have not. A purpose of the current study was to examine whether participating in PGC improved the likelihood of graduating from high school in four years. The current study, conducted by Rutgers University with funding from HHS, is one of the first of its kind in that it examines a peer-led high school transition program with the scientific rigor of random assignment, the gold standard of evaluation methods.

PARTICIPANTS

Participants were 268 ninth grade students (133 females; 135 males) from a low-income, Mid-Atlantic urban high school. The majority of the participants were Latino/Hispanic (92%), followed by "other" (6%), and African-American (2%).

METHODS

Random Assignment. In September 2005, ninth grade students were randomly assigned to either participate in PGC once per week as a component of their physical education course ($n = 94$) or to receive no program and participate in a standard physical education course five days per week ($n = 174$). There were approximately equal proportions of females and males in both the program and control groups.

Program Implementation. The following section describes the program as received by the students who were assigned to the program group:

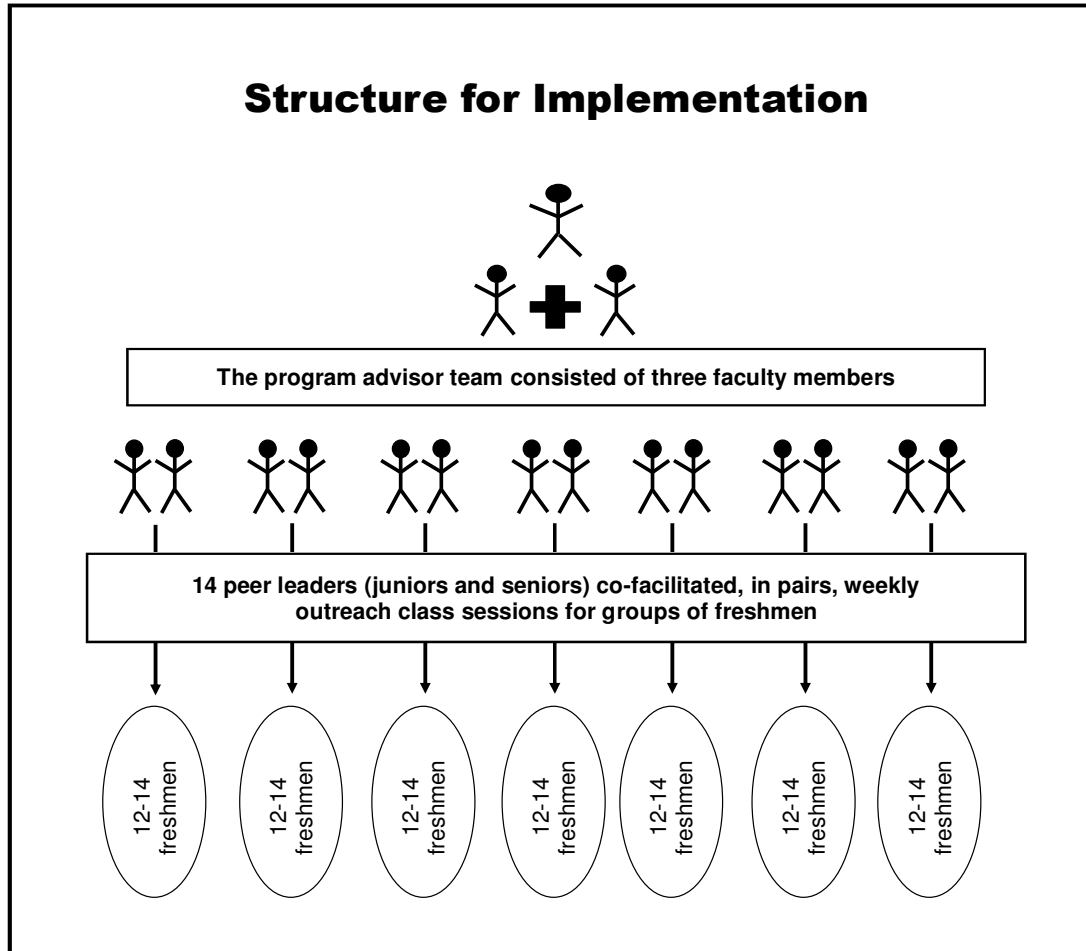
A team of three teachers were selected from the faculty of the urban high school to become program advisors. They participated in an intensive, 11-day training regimen to prepare them for their role, which included a four-day residential training conference prior to program start-up and another three-day residential training during program implementation. These advisors/instructors team-taught a daily leadership course in which 14 students in their junior and senior years were trained to become peer leaders for freshmen. The peer leaders were chosen based on various leadership qualities and received credit toward their graduation requirements for their participation in the daily program. The peer leadership course met five times per week for the duration of the 2005-2006 school year.

Each week, the program advisors (i.e., teachers) led three class sessions for the 14 junior and senior students that focused on skill development and preparing for and practicing the freshman outreach class sessions. The fourth class period was led by the peer leaders (i.e., the 14 junior and senior students) who conducted outreach/mentoring class sessions with the ninth grade participants. The final class period was led by the program advisors and focused on evaluating the outreach/mentoring class sessions. In the 40-minute freshman outreach/mentoring class sessions, peer leaders worked in teams of two facilitating activities with groups of approximately 12-14 freshman students. These sessions occurred one period each week in place of the ninth graders' standard physical education class for that day.

The program advisors and peer leaders used the structured PGC activity-based curriculum, which included the *PGC Faculty Advisor Handbook* and the *PGC Freshman Outreach Guidebook*. The program advisors used the *PGC Faculty Advisor Handbook* to conduct class sessions with the peer leaders and the peer leaders used the *PGC Freshman Outreach Guidebook* to conduct the weekly outreach/mentoring class sessions. The *Freshman Outreach Guidebook* includes outreach modules designed to focus on addressing issues important to students who are transitioning into high school, including interpersonal relationships, making decisions, goal setting, the importance of attending school, academic achievement, planning for the future, safety, communicating with others, and making friends. On average, program students participated in approximately 18 weekly outreach sessions (*standard deviation* = 5). Figure 1 depicts the implementation structure.

In addition, three peer-led booster sessions were provided to program students during their sophomore year. On average, program students participated in two of these booster sessions (*standard deviation* = 1.23) as sophomores.

Figure 1
PGC Program Implementation Structure



Data Collection. All ninth grade students completed a baseline survey prior to program participation in September 2005 (N=269) and a post-program survey in May 2006 (N =253). Follow-up surveys were administered to all continuing students in May of their sophomore (N= 200) and junior (N=168) years. Survey results show no statistical differences on key baseline measures between students who did not complete the follow-up assessments as compared to those who did; therefore, any potential attrition bias was deemed negligible. In June 2009, a list of all students in the study who graduated from the high school (N=190) was obtained from the school.

PROGRAM FIDELITY

In order to monitor fidelity of the program, trained observers conducted observations of the instructional classes with the peer leaders, both the freshman outreach classes and the sophomore booster sessions. Attendance was recorded at the freshman outreach classes and booster sessions. Analyses of fidelity data indicated the overall effectiveness of the teacher-advisors was rated as “excellent” or “good” in 13 of 15 observations. Observer ratings of the overall effectiveness of the peer leaders in the outreach sessions indicated that 89% rated as satisfactory or above. These results indicate that program fidelity was maintained.

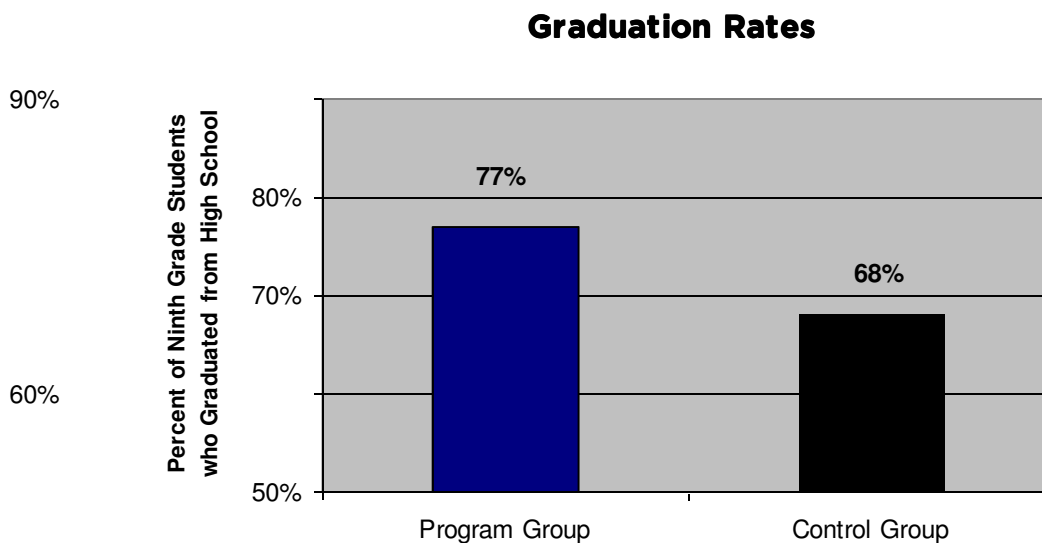
RESULTS

All Students. The number and percentage of students from the study sample who graduated from high school in four years is reported below in Table 1 and Figure 2. The results of the one-tailed, chi-square analysis on the categorical variable, graduated vs. did not graduate, yielded a trend toward a statistically significant value, $X^2(1, N = 269) = 2.477, p = .075$.

TABLE 1
Graduation Status of Study Participants

Status	Program Group		Control Group	
	N	%	N	%
Graduated	72	76.6%	118	67.8%
Did Not Graduate	22	23.4%	56	32.6%
Total	94		174	

FIGURE 2
Graduation Rates of Study Participants by Program Group vs. Control Group

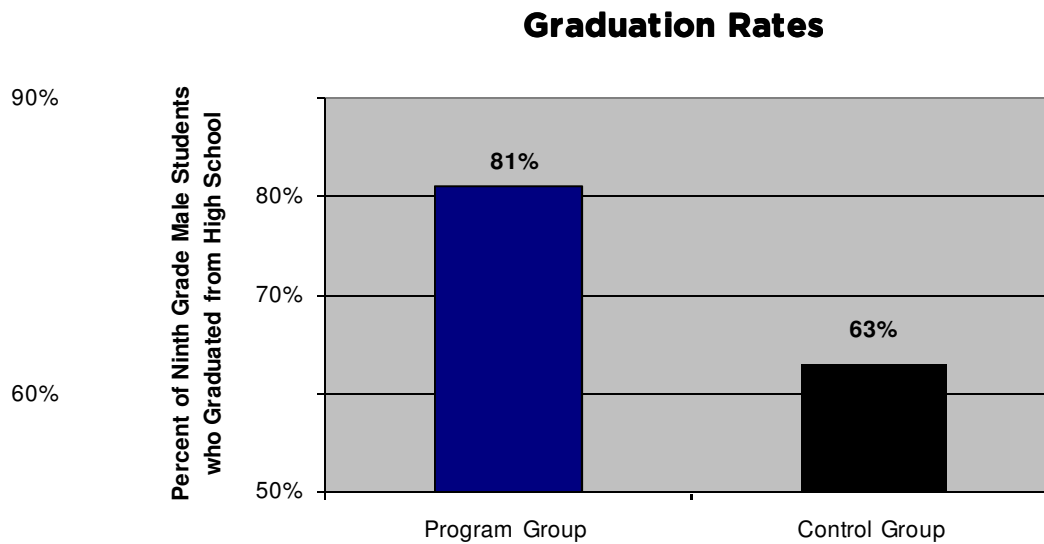


Males. The number and percentage of male students from the study sample who graduated from high school in four years is reported below in Table 2 and Figure 3. The results of the one-tailed, chi-square analysis on the categorical variable, graduated vs. did not graduate, yielded a statistically significant value, $X^2(1, N = 136) = 4.632, p = .023$.

TABLE 2
Graduation Status of Male Study Participants

Status	Program Group		Control Group	
	N	%	N	%
Graduated	37	80.5%	56	62.9%
Did Not Graduate	9	19.5%	33	37.1%
Total	46		89	

FIGURE 3
Graduation Rates of Male Study Participants by Program Group vs. Control Group



Females. The results of the one-tailed, chi-square analysis on the categorical variable, graduated vs. did not graduate, indicated that there was no statistically significant difference in graduation rates between females in the program group as compared to the control group, $X^2(1, N = 133) = .001, p = .572$.

DISCUSSION

The results of this study show that CSS's Peer Group Connection program significantly improves student graduation rates. The program had a dramatic impact on the graduation rates of males with 81% of the males in the program group graduating from high school in four years compared to 63% of males in the control group graduating within the same time frame. This is an 18 percentage point jump in high school completion rates and compares favorably to the national graduation rate of 65% for all males and 49% for Hispanic males (Greene & Winters, 2006). This is an unprecedented finding in research on school interventions that focus on the transition from middle to high school. PGC is designed to address directly many of the common reasons that students cite for dropping out of school, such as a lack of connection to the school environment, a perception that school is boring, and feeling unmotivated and uninspired to work hard and do well (Bridgeland, Dilulio, & Morrison, 2006).

While the results of the present study indicated no difference in graduation rates for females in the program group as compared to the control group, previous research findings suggest PGC positively impacts other outcomes among females. These findings include higher academic self-efficacy (Johnson, Pandina, Bry, Powell, & Barr, 2006); better ability to set goals (Johnson, Mun, & Pandina, 2008), to cope with problems (Johnson, Pandina, Bry, 2008), and to resist peer pressure (Johnson, Mun, & Pandina, 2008); and higher attendance and grades (Hannaway & Senior, 1989; Johnson, Mun & Pandina, 2008) as compared to students in a comparison group.

A limitation of this study is the lack of information about the students who did not graduate. It is likely that a portion of these students moved out of the district and transferred to other schools. However, because students were randomly assigned either to the program group or the control group and because the program was not designed to impact the rate at which families moved out of the district, it is expected that students moved or transferred out of the district in equal proportions in the program and control groups. Therefore, it is reasonable to conclude that the significant difference in graduation rates between the program group and control group is primarily explained by the ability of the PGC program to reduce the number of students who drop out of school.

SUMMARY

The results of this study show that PGC can dramatically improve graduation rates among participants. ***This finding strongly suggests that a multi-faceted, peer-led high school transition program such as PGC is an important component of any comprehensive dropout prevention initiative.***

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ENDNOTES

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