Chapin Hall Issue Brief

Policy research that benefits children, families, and their communities

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Postsecondary Educational Trajectories of Urban Youth: Addressing Vulnerabilities and Barriers to Enrollment and Persistence

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Educational attainment beyond high school has been established as a crucial factor in a successful transition to adulthood. A college education is strongly associated with employment prospects and increased earning potential. In addition to serving as a pathway to economic self-sufficiency, higher levels of education are associated with better self-reports of health, decreased participation in risk behaviors, and increased civic engagement.

Much research and many policy initiatives to date have focused on access to postsecondary education. However, despite the fact that college attendance has increased considerably over the last three decades, the proportion of college students who complete college has decreased. This lack of persistence and degree completion in college, especially among disadvantaged students, has become an increasing concern to policymakers interested in fostering the development of competence and self-sufficiency in young adults.

At the federal level, there has been a shift in focus from *access* to *persistence* in postsecondary education. In the summer of 2009, President Obama announced the American Graduation Initiative, a plan to reform our nation's community colleges and generate an additional 5 million community college graduates by 2020. One year later, the President reiterated his commitment to increasing college graduation rates and referred to education as "the economic issue of our time." This focus aligns with the Bill and Melinda Gates Foundation's Postsecondary Success Strategy, aimed at "doubling the number of low-income adults who earn a college degree or credential with genuine marketplace value by age 26." ²

Researchers at Chapin Hall at the University of Chicago, in studying the educational trajectories of Chicago youth, have learned that nearly half of public school graduates enroll in 2- or 4-year colleges, and two-thirds of those students persist past the first

¹ In remarks made at the University of Texas, Austin on August 9, 2010.

² This issue brief presents findings of a study funded by the Bill and Melinda Gates Foundation as part of this initiative.

year. The study documents individual and contextual factors that are associated with college access and persistence for Chicago youth and identifies promising points of intervention for promoting engagement in postsecondary education.

Description of the Study

This issue brief explores the educational trajectories of Chicago youth from high school to college. We track the range of pathways that they follow through postsecondary education and suggest policies and programs that have the potential to support these young adults as they pursue their postsecondary educational goals. We find that urban youth do not follow uniform pathways into or through postsecondary education. In fact, their multiple paths are strewn with different obstacles that affect rates of advancement through postsecondary education, including the following:

- varying levels level of academic preparedness and credentials upon entering postsecondary education
- different points of initial entry into postsecondary educational institutions
- different rates of persistence in postsecondary education, depending on the initial entry point and the student's individual characteristics

The research presented here:

- tracks enrollment and persistence in postsecondary education for Chicago youth, both in 2-year and 4-year colleges
- documents individual and contextual factors that are associated with college access and persistence for Chicago youth

 identifies promising points of intervention for promoting engagement in postsecondary education

In order to examine the postsecondary educational trajectories of Chicago youth who attend public school, we linked three datasets:

- The Project on Human Development in Chicago Neighborhoods (PHDCN) is an interdisciplinary study of how families, schools, and neighborhoods affect child and adolescent development. PHDCN includes family and individual characteristics from longitudinal survey data.³
- The Chicago Public Schools (CPS) provides records on attainment of the high school diploma.
- The National Student Clearinghouse (NSC) provides enrollment history and degree attainment data for current and former students from more than 2,800 colleges. Approximately 91 percent of all accredited U.S. colleges and universities report individual enrollment information to NSC.

We started with a sample of 1,279 Chicago youth who were ages 12 and 15 in 1994 through 1997, corresponding to PHDCN's first wave of data collection. We focus on these two youth cohorts for two reasons: 1) they were old enough at the time of data collection to have begun and potentially completed postsecondary education by the end of our study period, and 2) the factors we expected would be associated with postsecondary education trajectories were gathered as part of the data collection process before initial entry into postsecondary education. It is important to note that this sample is more racially and ethnically diverse and more socioeconomically disadvantaged than the national average. Compared to urban youth from a nationally representative sample, PHDCN includes a higher

³ PHDCN Research Staff includes Principal Investigator Felton J. Earls, M.D., and Scientific Directors Jeanne Brooks-Gunn, Ph.D., Stephen Raudenbush, Ed.D., and Robert J. Sampson, Ph.D.

Detailed information on PHDCN is available at http://www.icpsr.umich.edu/PHDCN/about.html Also see Earls, F. J., & C. A. Visher. 1997. Project on Human Development in Chicago Neighborhoods: A Research Update [NIJ Research in Brief]. Washington, D.C.: U.S. Department of Justice, Office of Justice Programs, National Institute of Justice. NCJ 163603 (9).

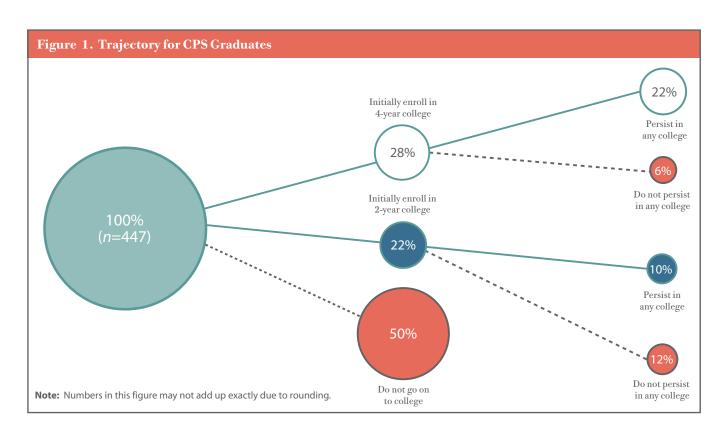
proportion of Hispanics and blacks⁴ and a higher proportion of youth with low levels of maternal education.5

CPS data provided records on high school diploma attainment for 89 percent or 1,132 of the youth in our PHDCN sample. We were able to link NSC records about postsecondary educational enrollment histories for 1,021 CPS students (or 90% of the CPS sample). Matching these two data sources to the PHDCN sample, we mapped out the postsecondary education trajectories for these youth. These data allowed us to focus on two key aspects of the postsecondary education trajectory:

- **Initial enrollment**, or the first enrollment of any duration in any accredited postsecondary educational institution after high school
- Persistence to a second year, or completion of a first year of college and at least the start of a second year in any accredited postsecondary educational institution

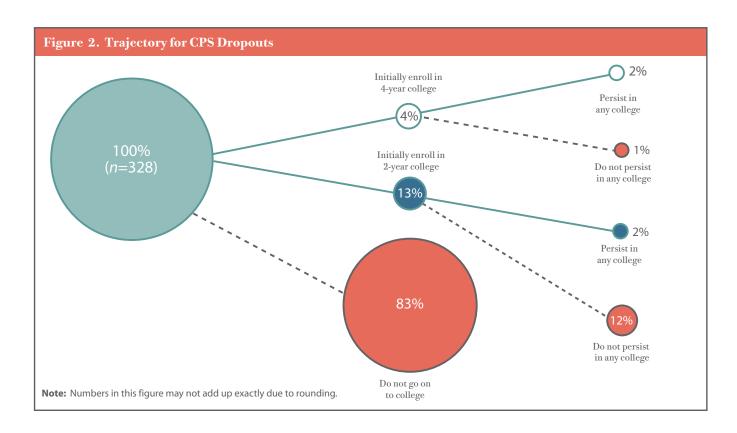
We describe the prevalence of initial enrollment and persistence for two subgroups that make up our sample:

- 447 youth who attain a high school degree from CPS ("CPS graduates")
- 328 youth who dropped out of CPS ("CPS dropouts")⁶



⁴ The racial make up of these two PHDCN youth cohorts is 18% white, 37% black, and 45% Hispanic. In contrast, the racial make up of youth ages 12-16 residing in urban areas in the National Longitudinal Survey of Youth 1997 is 64% white, 18% black, and 17% Hispanic. ⁵ Maternal education levels of the two cohorts of PHDCN are 46% with less than high school diploma, 14% high school graduates, 31% some postsecondary education, and 9% bachelor's degree or higher. Maternal education levels of youth ages 12-16 residing in urban areas in the National Longitudinal Survey of Youth 1997 is 18% with less than high school diploma, 34% high school graduates, 25% some postsecondary education, and 23% bachelor's degree or higher.

⁶ A third group of 246 respondents who transferred out of CPS before graduation was not included in the analysis because we could not be certain they had graduated from high school.



We also conducted multivariate analyses to determine what individual and contextual factors are associated with enrollment and persistence in postsecondary education.

Findings on Enrollment and Persistence

Figure 1 illustrates the postsecondary education pathways for 447 CPS graduates and Figure 2 illustrates the pathways for 328 CPS dropouts. The numbers in the figures represent the percentages of the initial set of students (depicted in the far left bubble) who make it to each subsequent stage.

Enrolling in College

Although both CPS graduates and dropouts enroll in postsecondary education, a much larger proportion of CPS graduates pursue some level of postsecondary education. Fifty percent of the CPS graduates enroll in either a 2- or a 4-year college compared to only 17 percent of the CPS dropouts. Among the high school graduates, about the same number initially enroll in a 2-year college as in a 4-year college. In contrast, among CPS dropouts, three times as many youth who enroll in postsecondary education begin in a 2-year college as in a 4-year college. It is important to note that it is possible that a postsecondary education enrollment spell in a 2-year college for CPS dropouts may reflect enrollment in a GED program for which they would not receive any college-level credit.

Persisting in College

Once enrolled in college, high school dropouts are less likely than their counterparts who do graduate to continue to a second year. According to Figure 1, 50 percent of high school graduates enroll in a 2- or 4-year college. However, 32 percent of the initial group

of high school graduates go on to a second year of college. In other words, of high school graduates who enroll in college 64, percent return for a second year.

High school dropouts, however, do not fare as well. According to Figure 2, only 17 percent of dropouts enroll in college at all, and only 4 percent of the initial group of high school dropouts go on to a second year of college. In other words, of high school dropouts who enroll in college, 24 percent return for a second year.

Figure 1 also shows that students who enter a 4-year college show greater persistence than those who enter a 2-year college. More than twice as many of the students who start a second year of college immediately after their first year began at a 4-year college than at a 2-year college. Of the CPS graduates who first enroll in a 4-year college, 79 percent persist to a second year of college compared with only 45 percent of those who first enroll in a 2-year college.

Individual and Family Characteristics Associated with Enrollment and Persistence in Postsecondary Education

We performed multivariate analyses in order to determine which characteristics were associated with greater and lesser degrees of enrollment and persistence in postsecondary education. The factors we considered are enumerated in the text box below. These multivariate analyses provide insight into some potential obstacles for success in postsecondary education.

Entering Postsecondary Education

Among CPS graduates, we found that a range of factors—both academic and nonacademic—are negatively associated with initial enrollment in any type of college. Being black, living in a low-income

Our Multivariate Analyses

The multivariate analyses took into account indicators in two domains—youth demographic characteristics and individual and family characteristics.

Youth demographic characteristics

- age
- gender
- race and ethnicity

Individual and family characteristics

- having a mother with no postsecondary education experience (i.e., highest level of education is high school or less)
- being born to teen mother (mother age 19 or less when subject was born)
- having a primary caregiver who is not married

- living in a household that is in the lowest income quintile of the sample's distribution
- being exposed to extreme violence (subject reports having seen someone attacked with knife or shot)
- having a standardized reading score that is in the lowest quartile of the sample's distribution (Wide Range Achievement Test – 3, WRAT-3)
- having externalizing scores above a clinical threshold, according to the primary caregiver report in the Child Behavior Checklist protocol
- the youth not planning on pursuing college
- whether youth initially enrolled in a 2- or 4-year college

All these factors were measured at the first wave of PHDCN data collection (1994-1997), with the exception of youth's educational plans, which were measured at the second wave (1997-1999).

⁷ It is important to note that we cannot distinguish youth who enroll in 2-year colleges in order to obtain a GED from youth who already earned a GED and enroll in postsecondary education to attain a postsecondary degree or credential because NSC does not provide program-level data on postsecondary educational enrollment.

household, and having witnessed extreme violence are associated with statistically significant lower odds of entering a 2- or a 4-year college, even when we take into account individual and family characteristics. For instance, youth who have witnessed violence are 52 percent less likely to enroll in a 4-year college than to enroll in no college at all, and 61 percent less likely to enroll in a 2-year college than not to enter any college.

Not surprisingly, given the open-admission policy of 2-year colleges, our results indicate that there are more obstacles to enrollment in 4-year colleges than 2-year colleges. In addition to the three factors identified above as associated with enrollment in both types of college, we found that low maternal education, low reading scores, and lack of plans to pursue college decrease the odds of entering a 4-year college, but do not decrease the odds of entering a 2-year college in a statistically significant way.

Persisting in Postsecondary Education

Once youth enter college, the vulnerability factors associated with initial enrollment in college are not exactly the same as the factors associated with persistence in college. For instance, externalizing behavior during adolescence (i.e., aggression, hyperactivity, and noncompliant or undercontrolled behavior) is not significantly associated with initial enrollment in college, but it does reduce the chances of persistence in postsecondary education. This finding is consistent with prior research documenting the reduced educational attainment of youth who exhibit externalizing behavior during adolescence, and it supplements prior research by highlighting the point within students' trajectories at which externalizing behavior is more strongly associated with disconnection from postsecondary education (during the first year of postsecondary attendance).

Supportive of our descriptive results, the multivariate analyses show that initial enrollment in a 2-year college

significantly reduces the chances of persistence in postsecondary education. Students who first enrolled in a 2-year college are 71 percent less likely to persist, after taking into account observed individual and family factors that may be associated with their initial enrollment in a 2-year college.

What Does this Mean for Policy?

Any educational policy must consider a number of potential intervention points and systems of supports throughout students' trajectories in order to maximize the potential of highly motivated youth as well as to engage youth who struggle and are more prone to discontinuing their education after high school. Current collaborative efforts are underway in Illinois to create a longitudinal data system that would maintain individuallevel data from educational institutions starting from pre-K through postsecondary education. Additionally, periodically collected longitudinal survey data would provide greater information about a range of factors related to youth's educational trajectories. One study underway at Chapin Hall tracks CPS students' academic achievement beginning with 3rd-grade reading scores in an effort to learn how they relate to educational trajectories through high school and beyond.8

Potential Points of Intervention

Our analyses reinforce the finding that there are a variety of pathways into and through postsecondary education. In light of these complexities, we highlight several points of intervention that have the potential to foster connections to postsecondary education and improve the likelihood that students will persist. We recommend the following:

 Enhance connections between high school and postsecondary education to better prepare students

⁸ Lesnick, J., Goerge, R., Smithgall, C., & Gwynne, J. (2010). Reading on Grade Level: Does It Predict College Attendance? Manuscript in preparation: Chapin Hall at the University of Chicago

for postsecondary education success.

- Target student support services in college that address academic, nonacademic, and contextual factors. In particular, some students may require guidance and assistance in emotional and behavioral management in order to persist in college—this may be especially salient in 2-year college settings.
- Focus on 2-year colleges as a connector to further postsecondary education for students seeking a GED.

Our findings for the sample of Chicago youth indicate that the question of persistence is very relevant for individuals who initially enroll in 2-year colleges. Two-year colleges offer an array of continuing education opportunities such as GED certification and job training programs. Students in our sample seeking a GED or less-than-one-year vocational certificate may have persisted in reaching their immediate educational or training goals despite not being counted in our analysis as persisting to a second year of postsecondary education. Nevertheless, 2-year colleges are prominently situated in the postsecondary education pipeline to serve as a connector to further engagement for these youth. However, these institutions may be limited in their capacity to provide the multiple educational and training functions that their students seek or the range of supports that their students need in order to stay engaged in postsecondary education. Two-year colleges can play a crucial role in reaching the ambitious goal to significantly increase college completion rates set forth by the Obama administration and the Gates Foundation.

We need to better understand how to maximize the position of 2-year colleges as a connector in the postsecondary education pipeline as well as how to effectively target their limited resources so that they can foster continuing engagement for youth more likely to become disconnected. Appropriately targeted and administered student supports at 2-year colleges, particularly academic preparation as well as setting

clear expectations for how to succeed as a student and beyond, would also be critical to the long-term success of these students. We also suggest that colleges partner with high schools to determine what academic and behavioral standards are necessary for students' success in postsecondary education and develop supports that bridge the transition from high school to college. In addition, high schools and 2-year colleges could collaborate to identify high school dropouts and develop new ways to attract and engage them in postsecondary education starting with GED and job training programs.

The individual-level (externalizing behavior during adolescence) and contextual-level (initial entry into a 2-year college) factors that we found to be significantly associated with lower persistence suggest that although open admissions policies of 2-year colleges may facilitate initial entry into postsecondary education, some students are less successful at adapting to the expectations of the college environment. While postsecondary educational institutions set the boundaries for behavioral expectations, we need to better understand how to bridge the gap between expectations and behavior in college and provide the kinds of supports that can address a broad set of student needs. For example, providing more opportunities to build peer networks, offering opportunities for students to practice emerging social skills, and facilitating socio-emotional development through modeling and mentoring may all increase the likelihood that youth will thrive in postsecondary education as well as in their work and relationships as adults. Again, encouraging connections between high schools and 2-year colleges that foster the developmental processes of youth with externalizing behaviors would jump start the focus on the adaptive skills that these youth need to succeed in postsecondary education and society at large. Further research is needed to better understand the degree to which these findings and policy implications are relevant in other locations.

ChapinHall at the University of Chicago

Established in 1985, Chapin Hall is an independent policy research center whose mission is to build knowledge that improves policies and programs for children and youth, families, and their communities.

Chapin Hall's areas of research include child maltreatment prevention, child welfare systems and foster care, youth justice, schools and their connections with social services and community organizations, early childhood initiatives, community change initiatives, workforce development, out-of-school time initiatives, economic supports for families, and child well-being indicators.

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