

# Measuring Two-Generation Effects of Capital IDEA Program Participation

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May 2015



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This report was prepared with funds provided from Capital IDEA to the Ray Marshall Center for the Study of Human Resources. The views expressed here are those of the authors and do not represent the positions of the funding agency or The University of Texas at Austin

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## Background

Capital IDEA is a leading-edge sectoral training program based in Austin, Texas. It was launched in the late 1990s from a grassroots effort spearheaded by Austin InterFaith. The Ray Marshall Center (the Center) has evaluated the outcomes and impacts of Capital IDEA participation on participant employment, earnings and other outcomes of interest (see Smith, King & Schroeder, 2011) and has also estimated the return-on-investment (ROI) for participants, taxpayers and society (see Smith & King, 2011). Capital IDEA participation is associated with large, long-lasting labor market impacts for participants and yields sizeable ROIs from all three perspectives: society, taxpayers and individuals.

Anecdotal accounts from Capital IDEA staff, as well as panel discussions of Capital IDEA parents and their older children (Ray Marshall Center/Foundation for Child Development/*Ascend 2-Generation Strategies Convening*, 2012), and initial descriptive research conducted by a Southwestern University undergraduate student (McCollum, 2012) suggest that parental participation in Capital IDEA may be associated with both higher rates of high school completion and college enrollment among older children. Such effects are consistent with expectations from the emerging literature on two-generation strategies and programs in the United States (for example, see King, Chase-Lansdale, and Small, 2015; King, Smith and Glover, 2011; Chase-Lansdale and Brooks-Gunn, 2014; and Gruendel, 2014).

Capital IDEA contracted with the Ray Marshall Center to explore these relationships using participant data from Capital IDEA and student data from area independent school districts (ISDs). This report provides results of that analysis.

## Research Sample and Methodology

Center researchers first worked to obtain approval to use individual student level data to identify high school graduates between 2006 and 2013 from Austin, Del Valle, Manor, Pflugerville, and Round Rock independent school districts (ISDs). While the Center has standing

data sharing agreements in place with each of the ISDs for its ongoing Student Futures Project, researchers determined that under the Family Educational Rights and Privacy Act (FERPA) separate approval was needed from the districts to use student-level data for this analysis. For each district the approval process varies according to local policies and procedures, resulting in a protracted period of negotiations. Once approval was obtained from all of the districts targeted, Center researchers analyzed the data to develop a final research sample including both children of Capital IDEA participants (the research subjects) and a matched comparison group of similar high school students whose parents had not participated in Capital IDEA. The following sections provide further detail on this process.

Sample size: The Center obtained information for 182 children of Capital IDEA participants and linked these data to public school data obtained as part of the Student Futures Project. Seventeen (17) children were excluded from the analysis because they exited public school prior to their parent entering training at Capital IDEA. Two (2) additional children were dropped from the analysis due to missing data and the inability to compute a propensity score. Of the 163 children remaining in the study, 38 exited school during the study timeframe (not including transfers to other schools). Postsecondary education was examined for these 38 children and a matched comparison group.

Sample attributes: The comparison group was formed by using propensity score matching (see Heinrich et al., 2010), which compares potential comparison group members with treatment group members on eight variables: school campus, grade level, gender, race, income status (free or reduced lunch), at-risk status, language spoken at home, and special education status. Table 1 provides demographic information for both the subject group and the comparison group and illustrates how closely they were matched on these variables.

**Table 1. Characteristics of Subject and Comparison Groups on Matched Variables  
(all children of Capital IDEA participants and matched comparison group)**

	Subject Group n=163	Comparison Group n=163
<b>Gender</b>		
Female	49.7%	55.2%
<b>Race</b>		
White	11.7%	11.0%
African American	31.9%	31.3%
Hispanic	51.5%	52.2%
Other or Unknown	4.9%	5.5%
<b>Low Income Status</b>		
On Free or Reduced Lunch	66.9%	65.0%
<b>Home Language</b>		
English	83.4%	81.6%
Spanish	12.9%	13.5%
Other	3.7%	4.9%
<b>At-Risk Status</b>		
At-Risk	44.8%	42.9%

In addition to the variables that were used to match the subject and comparison groups, other variables were explored to further determine how closely the groups matched: special education status, gifted status, ADA eligibility, bilingual, limited English proficiency, ESL, Title I Part A status<sup>1</sup>, and immigrant status. The subject and comparison groups were very similar on all of these additional variables.

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<sup>1</sup> Indicates whether the student is participating in a program authorized under ESEA, Title I, Part A of the Improving America's Schools Act.

## Research Findings

The number and percent of children who exited school and the reason for exiting were analyzed for both groups. Table 2 shows that nearly all of the treatment and comparison group members who exited school during the studied timeframe did so because they graduated. There is no significant difference between the subject and comparison groups in the percentage who graduated ( $p=.57$ ).

**Table 2: Number and Percent of Sample who Exited School**

	Subject Group n=38	Comparison Group n=37
Graduated	36 94.7%	36 97.3%
Exited but did not graduate*	2 5.3%	1 2.7%

\*Does not include exits due to school transfer.

Table 3, identifies, among those who graduated from high school, the number and percent of students in the subject group and the comparison group who enrolled in at least one semester of post-secondary education or who never enrolled. While a larger percentage of the subject group (56%) had enrolled in college as compared to the comparison group (42%), this difference is not significant ( $p=.24$ ).

**Table 3: Number and Percent of Sample who Enrolled in College for at Least One Semester or who Never Enrolled in College**

	Subject Group n=36	Comparison Group n=36
Enrolled in college for at least one semester	20 55.6%	15 41.7%
Never enrolled in college	16 44.4%	21 58.3%

As seen in Table 44, among those students who attended postsecondary education, about half attended a 4-year school. Although a higher percentage of students in the subject group had attended a 4-year school as compared to those in the comparison group, this difference is not significant ( $p=.52$ ).

**Table 4: Of those Enrolled in College, the Number and Percent who Attended a 2-Year or 4-Year School**

	Subject Group n=20	Comparison Group n=13*
2-year college	10 50.0%	8 61.5%
4-year college	10 50.0%	5 38.5%

\*College type unknown for two students;

**Error! Reference source not found.** shows the number and percent among those who attended post-secondary education who persisted (graduated or were still enrolled) and those who ceased enrollment. Although the percent of the comparison group who persisted is higher than that of the subject group, this difference is not significant ( $p=.27$ ).

**Table 5: Of those Enrolled in College, the Number and Percent who Persisted or Ceased Enrollment**

	Subject Group n=20	Comparison Group n=15
Persisted (graduated or still enrolled)	11 55.0%	11 73.3%
No longer enrolled	9 45.0%	4 26.7%

Table 6 shows the number of students who enrolled in college in each fall semester in the years after high school graduation. In the first fall after high school graduation, 80% of the

subject group and 87% of the comparison group were enrolled in school. For both groups, the percent enrolled declines in each subsequent semester.

**Table 6: Of those who Enrolled in College, the Number and Percent who were Enrolled in Each Fall Semester after High School**

		Fall after High School Graduation				
	N	Fall 1	Fall 2	Fall 3	Fall 4	Fall 5
Subject Group	20	16 80.0%	11 55.0%	6 30.0%	5 25.0%	2 10.0%
Comparison Group	15	13 86.7%	7 46.7%	5 33.3%	4 26.7%	2 13.3%

### Conclusions

Unfortunately, the small sample size and limited available data on postsecondary outcomes precluded estimation of statistically significant impacts. The data available suggest that parental participation in Capital IDEA training may have a positive impact on a child’s likelihood of attending postsecondary education, however the data are too limited to draw strong conclusions. It is recommended that a future study be conducted with many more participants to examine this relationship further in addition to exploring other outcomes such as school attendance and grade point average.

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