



5 THINGS TO KNOW ABOUT POTENTIAL FIRST GENERATION COLLEGE STUDENTS



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Introduction

This report looks at the educational aspirations of Potential First Generation College Students – high school students who would be the first in their families to earn postsecondary degrees. These high school students are united by the fact their parents did not graduate from college.

Increasing attention has been devoted to First Generation College Students¹ – their demographics, academic performance, graduation rates, and economic outcomes.² There are good reasons for this. First Generation College Students are a majority of U.S. college students (56% to be exact).³ If the U.S. economy depends on an adequate supply of highly skilled, highly trained workers, (as it does⁴), First Generation College Students will determine whether the nation succeeds in the global economy. Currently, they are less likely than their peers with college-educated parents to graduate.⁵

Yet the success of First Generation College Students affects more than “the greater good.” Education is powerful predictor of personal economic success. Even among 25-34 year olds, workers with bachelor’s degrees earn 63% more than high school graduates.⁶ And education’s impact spans generations. Especially in America,⁷ the likelihood a high school student successfully pursues postsecondary education is much higher if their parents are college educated.⁸ The success of these Potential First Generation Students is a verdict on the health of the American Dream.

Those who make it to campus and earn the label “First Generation College Student” are only a fraction of young people whose parents did not earn college degrees.⁹ Because the path to enrollment in postsecondary education is often complicated, some suggest greater attention should be given to the much larger pool of high school students from which First Generation College Students are drawn: Potential First Generation College Students. This report answers that call, highlighting five of the most interesting findings when Potential First Gens are compared with “Dual Legacies” – high school students who report both parents hold Bachelor’s Degrees.¹⁰

Method

The Data. This report is based on data from nationwide in-class surveys of high school students conducted in Fall 2021. A total of 52,555 students responded to versions of the Student Research Foundation surveys which asked students whether their mother and/or father had earned a Bachelor’s Degree.

“First Generation College Student” has been defined in a variety of ways.¹¹ This report uses the most widely accepted standard, defining a “Potential First Gen” as a high school student who reports neither parent has earned a Bachelor’s Degree.¹² We compare self-reported aspirations of students who differ in parental education, gender, race/ethnicity, and GPA. Those interested in the logic guiding our analysis should continue reading. Others may opt to skip straight to the next section: Findings.

Parental education matters. Why parental education matters and how to categorize it remain contested. The explanations generally center around multiple types of “capital”:

- Social and Cultural Capital: “College Knowledge,” rooted in parents’ own first-hand experience navigating higher education can help students navigate the complex process.
- Financial Capital: College graduates earn more than those without a degree. Higher income allows parents more choices about schools and enrichment activities for their children.
- Aspirational Capital: A parent’s desire for their child to have opportunities they did not have is capital that money cannot buy. It gives moral support to challenge history and to persist.

The analysis focuses on differences based on parental education levels, but the data provided by students will not allow us to determine the reason(s) that education matters.

Racial and Ethnic Differences. Previous research has found higher education achievement may have different meanings and different challenges for racial/ ethnic groups. “College Knowledge” may include different insights when it comes from parents whose racial/ethnic groups were the majority on campus rather than the minority. And being a Dual Legacy may send different messages about the value of higher education if one is part of a racial/ ethnic group less burdened by student loans and more likely to reap the full economic benefits of a degree. At each step of the analysis, we will compare the responses of students from groups historically underrepresented (URGs)¹³ and overrepresented (ORGs) in U.S. higher education.

Gender. Males are a declining segment of college classes. No single reason seems to explain it. Even when First Gen students enroll, males and females may think about the benefits in very different terms – terms that create different incentives for “Firsts” to persist in the face of adversity. Thus, aspirations are further segmented by gender as well.

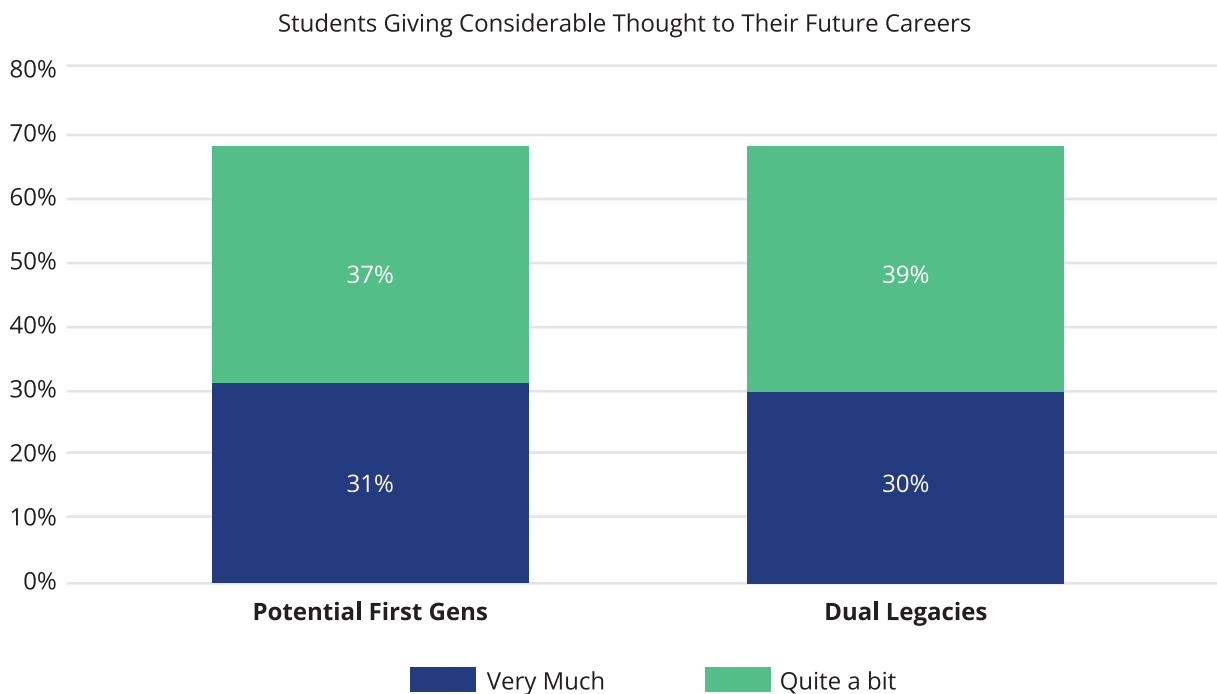
GPA. In addition, the analysis also looks at the intersection of the factors above with GPA. GPA affects students’ options for higher education, and it may be a better predictor of postsecondary success than some other measures. In addition, high school GPA may reflect student attitudes about the education experience.

Findings

1. Potential First Gens and Dual Legacies are equally likely to be thinking about their futures. But their high school experiences diverge in notable ways.

Potential First Gens and Dual Legacies have at least one thing in common: roughly 7 in 10 students have been giving considerable thought to their future careers.¹⁴ (See Table 1)

Table 1: 7 in 10 Students Have Given Considerable Thought to Their Future Careers



Yet Potential First Gens on average will encounter more obstacles than the children of college graduates as they move from contemplation to action.¹⁵ Potential First Gens are less likely than Dual Legacies to be “A students” or to have at least a “B” average (Table 2).¹⁶ This puts them on average at a decided disadvantage in everything from college admissions to the college experience. So may the differences in access to AP classes. Fewer Potential First Gens attend schools with high levels of enrollment in AP classes (41% vs. 28%).¹⁷ These patterns among those students who are still in high school are consistent with research on First Generation College Students.

Table 2: Dual Legacies Have Higher GPAs than Potential First Gens

GPA Profiles	Potential First Gen	Dual Legacy
“A” Average	32%	51%
“B” Average or higher	65%	77%

Potential First Gens are more likely than Dual Legacies to be interested in learning about student loans (74% vs. 67%).¹⁸ This is not surprising given that Potential First Gens and Dual Legacies are being educated in high schools with very different socioeconomic environments. Compared with Dual Legacies, Potential First Gens are more likely to attend schools with higher poverty levels (measured by students eligible for free/ reduced lunch)¹⁹ and that are eligible for Title I funding (Table 3).

Table 3: Potential First Gens Attend Lower SES Schools

GPA Profiles	Potential First Gen	Dual Legacy
High Level of Free/ Reduced Lunch	62%	39%
Title I Eligible	72%	59%

These patterns are consistent with research at the college level showing First Generation College Students face academic obstacles that their peers with college-educated parents do not.²⁰ While Potential First Gens may have some control over some of these factors (e.g., GPA,²¹ thinking about their future, willingness to consider student loans), they have substantially less control over schools they attend.²² Meeting the need for a highly skilled workforce and giving every American a chance at a better life may mean addressing the inequalities students confront through no fault of their own.



2. Potential First Gens are not monolithic.

Potential First Gens and Dual Legacies have different racial/ ethnic profiles (Table 4). Roughly six in ten Potential First Gens are members of groups historically underrepresented (URGs) in higher education (African Americans, Hispanics, and Native Americans) while six in ten Dual Legacies are from groups historically overrepresented (ORGs) in higher education (Whites and Asians). This is not surprising given historical differences in access to higher education and the declining share of Whites (the largest share of ORGs) in the U.S. population

Table 4: Potential First Gens Are More Likely to Be Members of Racial/ Ethnic Groups Historically Underrepresented in Higher Education		
Racial Ethnic Composition	Potential First Gen	Dual Legacy
ORGs	39%	62%
URGs	61%	38%

While the racial/ ethnic profile of Potential First Gens and Dual Legacies may differ, it would be a mistake to assume that race and ethnicity are meaningless in understanding Potential First Gens. Potential First Gens who are members of groups historically underrepresented in postsecondary education are less likely than their ORG counterparts to have high GPAs (Table 5). URGs and ORGs who share the label of “First Generation College Students” are being prepared for life in decidedly different secondary school communities as well. URGs in this group are more likely to attend schools that serve economically struggling students, whether measured by Title I status or the proportion of students qualifying for free or reduced lunch. (Table 6) The racial/ethnic composition of their schools diverge sharply. While 73% of Potential First Gens who are ORGs attend schools that have higher proportions of White students,²³ only 23% of URGs do.

Table 5: Among Potential First Gens, Racial/ Ethnic Difference in GPAs May Pose Even More Challenges for Historically Underrepresented Groups		
GPA of Students	ORG	URG
“A” Student	38%	30%
“B” Average or higher	69%	64%

Table 6: Among Potential First Gens, Students from Racial/ Ethnic Groups Historically Underrepresented in Higher Education Come from Lower SES Schools		
School Characteristics	ORG	URG
Title I Eligible	61%	80%
Highest Poverty Districts	26%	38%

3. Gender matters in boosting the postsecondary education outcomes of “Potential First Gens,” for boys in this segment are generally less likely than girls to aspire to postsecondary education.

Today, boys and young men are trending topics in education – and for good reason. Males are opting out of postsecondary education at higher rates than girls.²⁴ The reasons this is happening remain unclear.

We see this in the aspirations of Potential First Gens.²⁵ When matched on GPA and URG/ORG status, boys generally are less likely than girls to aspire to postsecondary education. This pattern holds when the educational goal is broad – postsecondary education of any type (Table 7). It holds in most cases as well when goal narrows to specific options – traditional four-year college (Table 8), community college (Table 9), or online college (Table 10).²⁶

Table 7: Interest in Postsecondary Educational Options among Potential First Gens is Higher among Females than Males at Every GPA Level

GPA	Females	Males
	ORGs	ORGs
C	75%	56%
B	82%	69%
A	89%	82%
	Females	Males
	URGs	URGs
C	80%	67%
B	85%	75%
A	90%	82%

Table 8: Interest in Traditional Four-Year Colleges among Potential First Gens is Higher among Females than Males at Every GPA Level

GPA	Females	Males
	ORGs	ORGs
C	59%	33%
B	67%	47%
A	81%	71%
	Females	Males
	URGs	URGs
C	65%	49%
B	75%	62%
A	83%	72%

Table 9: Interest in Community Colleges among Potential First Gens is Higher among Females than Males at Every GPA Level		
GPA	Females	Males
	ORGs	ORGs
C	38%	26%
B	41%	28%
A	39%	30%
	Females	Males
	URGs	URGs
C	47%	38%
B	44%	38%
A	43%	35%

Table 10: Interest in Online Colleges among Potential First Gens is Higher among Females than Males at Every GPA Level		
GPA	Females	Males
	ORGs	ORGs
C	22%	8%
B	21%	10%
A	18%	9%
	Females	Males
	URGs	URGs
C	21%	13%
B	21%	14%
A	20%	17%

It may be tempting to attribute this to boys' greater desire to get an early start on their career – skipping added years of education to get right to the paycheck. But the data do not support this. Among Potential First Gens, boys are less likely than girls to indicate they have given considerable thought to their future careers (60% vs. 74%).²⁷

In an environment where every minute must count in the classroom and teachers are concerned about student performance on standardized tests, adding one more thing is difficult. However, research suggests that when students are encouraged to create career plans and have regular check-ins with adults to assess their progress along the way, they are more likely to exhibit the behaviors and actions associated with pursuit of postsecondary education.²⁸ This may help the U.S. reap the talents of more young men who would benefit from additional education and training to match the careers they ultimately choose.

4. Potential First Gens most at risk of forgoing postsecondary education²⁹ may be persuadable. Most with reservations about postsecondary education seem confused about what to do.

Willingness to consider attending some type of postsecondary institution is a first step toward earning a credential. With 84% of Dual Legacies and 77% of Potential First Gens expressing interest in at least one type of postsecondary educational institution, it is fair to say that overwhelming majorities of high school students – regardless of parental education – would consider continuing their education beyond the high school diploma.

If we consider high school aspirations to be a marker of the “starting line” for Potential First Gens and Dual Legacies, that 7-point gap may be a warning sign of even greater gaps to come. First Generation College Students who make it to college tend to have more academic, financial, family, and social challenges that reduce persistence.³⁰ Even between acceptance and arrival on campus, “summer melt” fueled by lack of “college knowledge” and limited resources leave too many students – likely Potential First Gens³¹ – unable to navigate the final steps to enroll.

Bringing students to comparable points at the “starting line” may not be as challenging as it seems. Potential First Gens are much more likely to say they are “not sure” (29%) than to say they will not pursue (8%) education beyond their high school diploma.³² We see the potential for persuasion among Potential First Gens who report:

- “A” Averages. These seemingly well qualified students may have been less likely than Dual Legacies to express interest in a postsecondary institution (Table 11, compare yellow and orange cells), but they are also more likely than “A Students” who are Dual Legacies to respond “Not Sure” when asked about education beyond the high school diploma. (Table 12, compare yellow and orange cells)
- Less than “A” Averages. As GPAs decline, Potential First Gens are less likely to express interest in one or more types of postsecondary institutions (Table 11, compare yellow and green cells). But as their confidence about next steps decline, they grow more likely to respond “Not Sure” rather than declaring they will not continue their education. (Table 12, compare yellow and green cells)

Table 11: Interest in Postsecondary Educational Options

GPA	Females ORG		Male ORG	
	Potential First Gen	Dual Legacy	Potential First Gen	Dual Legacy
C	75%	83%	56%	67%
B	82%	88%	69%	80%
A	89%	94%	82%	88%
GPA	Females URG		Male URG	
	Potential First Gen	Dual Legacy	Potential First Gen	Dual Legacy
C	80%	82%	67%	69%
B	85%	87%	75%	81%
A	90%	89%	82%	88%

Table 12: "Not Sure" about Postsecondary Educational Options

GPA	Females ORG		Male ORG	
	Potential First Gen	Dual Legacy	Potential First Gen	Dual Legacy
C	36%	25%	41%	36%
B	26%	20%	34%	25%
A	19%	13%	23%	17%
	Females URG		Male URG	
	Potential First Gen	Dual Legacy	Potential First Gen	Dual Legacy
C	30%	26%	37%	35%
B	25%	23%	30%	28%
A	18%	16%	26%	20%

However, it is unclear who will deliver the persuasive messages. Previous research suggests that career guidance is often lost in the crush of mandates and testing pressures. Because guidance counselors have many other responsibilities, the decision to provide career counselling is often made at the discretion of principals.³³ But Potential First Gens on their own may be ill-positioned to find reasons to go into debt to fund their education and they may have fewer caring adults in their lives to show them why they should. At the risk of being repetitive, interventions that encourage students to chart a career/ educational path and review progress at least annually with a caring adult, might help more Potential First Gens not only aspire to postsecondary education, but also stay on track to complete all steps to enroll.³⁴



5. Community Colleges may not be the most popular choice among Potential First Gens, but their potential to make a college education possible is appreciated especially by Potential First Gens.

It is hard to see the high value of community colleges to Potential First Gens. When students are asked about the type of postsecondary institution they would like to attend, the most common response is a 4-year state college/ university. This holds whether students are Dual Legacies (72%) or Potential First Gens (62%).

Table 13: Potential First Gens and Dual Legacies Overwhelmingly Aspire to Attend State Colleges/ Universities		
Postsecondary Preferences	Potential First Gens	Dual Legacies
State College/ University	62%	72%
Private College/ University	21%	31%
Community College	37%	27%
Online College	16%	12%
Career Technical College	29%	25%
Will Not Attend	8%	4%
Not Sure	29%	23%

The importance of community colleges for Potential First Gens comes through in their patterns of interest in community colleges. When gender and ORG/URG status are the same:

- Potential First Gens are generally more likely than Dual Legacies to consider attending community college. (Table 13)
- Potential First Gens' interest in community colleges is stable across GPAs, but that is not always the case with Dual Legacies.³⁵ (See Table 9)
- Among A students, Potential First Gens are more willing to consider attending community college than Dual Legacies are. (See Table 9)

Community colleges have a lot of competition. Community colleges are seldom the only postsecondary option students aspire to, whether Potential First Gens (4%) or Dual Legacies (2%). But ultimately, they will win out, for half of all First Generation College Students, compared to only a quarter of those with college-educated parents, will start their college career at a community college.³⁶

Conclusion

This initial look at Potential First Generation Students suggests that while there are some indications of a gap in aspirations to pursue higher education, an even greater challenge is a playing field that is not level. Potential First Gens attend schools with striking socioeconomic differences from the children of college-educated parents. Increasing K-12 educational equity may mean more students will actually become First Generation College Students and the first in their families to graduate from college. This will obviously yield personal benefits. But the impact will be more than personal as the U.S. struggles to fill jobs that required advanced skills and education. With demographic change comes an urgency to ensure that more students from groups historically underrepresented in higher education – and more likely to be Potential First Generation College Students – dream big and achieve their goals.

1 They are often defined differently. Depending on the definition they they comprise 22% to 77% of the undergraduate population. See Robert K. Toutkoushian, Robert A. Stollberg, and Kelly A. Slaton, (2018) "Talking 'Bout My Generation: Defining "First-Generation College Students" in Higher Education Research," in Teachers College Record, April, Volume 120, Issue 4 <https://doi.org/10.1177/016146811812000407>; also see <https://www.insidehighered.com/news/2018/02/08/students-postsecondary-education-arcs-affected-parents-college-backgrounds-study>

2 See for example, Emily Forrest Cataldi, Christopher T. Bennett, Xianglei Chen, "First-Generation Students: College Access, Persistence, and Postbachelor's Outcomes," <https://nces.ed.gov/pubsearch/pubinfo.asp?pubid=2018421>. Also see <https://www.pewresearch.org/social-trends/2021/05/18/first-generation-college-graduates-lag-behind-their-peers-on-key-economic-outcomes/>

3 RTI International. (2019). First-generation College Students: Demographic Characteristics and Postsecondary Enrollment. Washington, DC: NASPA. Retrieved from <https://firstgen.naspa.org/files/dmfile/FactSheet-01.pdf>

4 Challenges and Opportunities in Achieving the National Postsecondary Degree Attainment Goals - Nettles - 2017 - ETS Research Report Series - Wiley Online Library
<https://onlinelibrary.wiley.com/doi/10.1002/ets2.12141#ets212141-bib-0041>

5 <https://www.insidehighered.com/news/2018/02/08/students-postsecondary-education-arcs-affected-parents-college-backgrounds-study#.Y5xTxyPvvQM.link>

6 National Center for Education Statistics. (2022). Annual Earnings by Educational Attainment. Condition of Education. U.S. Department of Education, Institute of Education Sciences. Retrieved [11/12/22], from <https://nces.ed.gov/programs/coe/indicator/cba>.

7 <https://www.theatlantic.com/education/archive/2014/04/are-college-degrees-inherited/360532/>

8 <https://www.pewresearch.org/social-trends/2021/05/18/first-generation-college-graduates-lag-behind-their-peers-on-key-economic-outcomes/>

9 https://nces.ed.gov/whatsnew/press_releases/1_12_2022.asp

10 Analyses of college students would label students of college graduates as "Continuing Generation College Students." Because we do not know if high school students will follow in the footsteps of their college educated parents, these students are given the title of "Legacy." The number of parents holding degrees separates the high school students who are "Single Legacies" from the "Dual Legacies." The results presented in this report concentrate on the contrast between Potential First Gens and Dual Legacies. This is made to simplify the presentation. "Single Legacies" often fall between Potential First Gens and Dual Legacies. The reasons are unclear.

11 See Robert K. Toutkoushian, Robert A. Stollberg, and Kelly A. Slaton, (2018) "Talking 'Bout My Generation: Defining "First-Generation College Students" in Higher Education Research," in Teachers College Record, April, Volume 120, Issue 4 <https://doi.org/10.1177/016146811812000407>; also see <https://www.insidehighered.com/news/2018/02/08/students-postsecondary-education-arcs-affected-parents-college-backgrounds-study>

12 Potential First Gens answered "No" and Dual Legacies answered "Yes" to each of the following questions: Do you have a: Mother / Female guardian with a Bachelor's Degree? Father/ Male guardian with a Bachelor's

13 URGs are African Americans, Hispanics, and Native Americans. ORGs are Whites and Asians.

14 69% of Potential First Gens and 68% of Dual Legacies report they have thought about their future career “Very Much” or “Quite a Bit.”

15 <https://www.nytimes.com/2017/11/03/education/edlife/first-generation-college-admissions.html?smid=url-share>; also see Emily Forrest Cataldi, Christopher T. Bennett, Xianglei Chen, “First-Generation Students: College Access, Persistence, and Postbachelor’s Outcomes,” <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2018421>.

16 Students were asked their GPA on a 4-point scale. About 14% of students overall chose not to respond to this question. Non-responses are treated as valid data and included in the calculating percentages.

17 High enrollment is defined as at least 22% of students enrolled in AP classes.

18 Students’ interest in student loans was determined by the following question: Would you like to receive information about how to plan and pay for your education, including student loans? Yes or No

19 High poverty was defined as 46% or more students qualifying for free or reduced lunch.

20 <https://www.insidehighered.com/news/2018/02/08/students-postsecondary-education-arcs-affected-parents-college-backgrounds-study#.Y5xTxyPvvQM.link>

21 The reader should note that many high school students must work to support their families, and thus the control they have over GPA is limited by the economic necessities of their lives.²² In many cases, schools are assigned based on zip codes.

23 Higher is defined in this analysis as 37% or more White students.

24 National Center for Education Statistics. (2022). Undergraduate Enrollment. Condition of Education. U.S. Department of Education, Institute for Education Sciences. Retrieved [11/12/22], from <https://nces.ed.gov/programs/coe/indicator/cha>.

25 The reader should note that the same pattern is observed among Dual Legacies. So the gender gap in matriculation rates is not concentrated among Potential First Gens.

26 There was one exception to this pattern: Potential First Gen boys are more likely than girls to aspire to attend a Career Technical College. (Table X)

27 This is not unique to Potential First Gens. This same pattern occurs among Dual Legacies (62% vs. 73%).

28 Torre Gibney, T., & Rauner, M. (2021). Education and career planning in high school: A national study of school and student characteristics and college-going behaviors (REL 2022–127). U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory West. <http://ies.ed.gov/ncee/edlabs>.

29 Those at are students who do not choose at least one type of postsecondary institution of interest or who respond “not sure” or “will not attend” when asked their preferences.

30 This point is supported by a variety of sources. See for example <https://www.theatlantic.com/education/archive/2014/04/are-college-degrees-inherited/360532/>; <https://firstgen.naspa.org/journal-and-research/national-data-fact-sheets-on-first-generation-college-students/7A515490-E6AA-11E9-BAEC0242AC100002>; The Pell Institute, Indicators of Higher Education Equity in the United States, 2021 Historical Trend Report; <https://www.pewresearch.org/social-trends/2021/05/18/first-generation-college-graduates-lag-behind-their-peers-on-key-economic-outcomes/>; National Center for Education Statistics. (2022). Characteristics of Children's Families. Condition of Education. U.S. Department of Education, Institute of Education Sciences. Retrieved 11/12/22 from <https://nces.ed.gov/programs/coe/indicator/cce>.

31 Antar Tichavakunda and Carlos Galan, (2020) "The Summer Before College: A Case Study of First-Generation, Urban High School Graduates. *Urban Education*, pg. 1 –29.

32 Students were allowed up to four responses. Some students responded with "don't know" or "will not attend" while also specifying interest in one or more institutions. Both types of responses are treated as valid.

33 See Laturno Hines et al. (2011). Poised to lead: how school counselors can drive college and career readiness. The Education Trust

34 Torre Gibney, T., & Rauner, M. (2021). Education and career planning in high school: A national study of school and student characteristics and college-going behaviors (REL 2022–127). U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory West. <http://ies.ed.gov/ncee/edlabs>.

35 As the GPAs of Dual Legacy females (but not males) decline, more students consider attending a community college.

36 RTI International. (2019). First Year Experience, Persistence, and Attainment of First-generation College Students. Washington, DC: NASPA. Retrieved from <https://firstgen.naspa.org/files/dmfile/FactSheet-02.pdf>