

# BALLARD BRIEF

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## Drop-Out Rates among First- Generation Undergraduate Students in the United States

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# Summary

For first-generation college students, receiving an acceptance letter to an institution of higher education is a milestone: a means to secure economic and social opportunities not afforded to their family members. However, for many first-generation students, college acceptance does not equate to a college credential or degree, with only 27.4% graduating within 4 years. These lower attrition rates stem from a lack of familial financial resources and inadequate academic preparation in high school. Additionally, a different set of rules, jargon, and expectations between home life and institutions of higher education create a 'hidden curriculum' for first-generation students, making college completion challenging to navigate. Adverse effects of an early exit from college include diminished earning potential and employability, decreased quality of life, and an increased risk of defaulting on student debt. Organizations such as the Center for First-Generation Student Success and the Gantry Group work to eliminate the achievement gap between first-generation and continuing-generation

students through high-impact practices at individual institutions.

## Key Terms

**Common Core Standards**—Adopted by 41 states and the District of Columbia, the Common Core Standards are used in high school to define “ what a student should know and be able to do at the end of each grade.”<sup>7</sup> These standards focus on mathematics and English language literacy and prepare high school students for life, college, and careers.<sup>8</sup>

**Continuing-Generation Students**—An undergraduate is considered to be a continuing-generation student if they are continuing on the path of their college-educated parents. In other words, at least one of the continuing-generation students has a parent who has achieved a bachelor's degree.

**Cost of Attendance (COA)**—When differentiating the expenses of a college education, the cost of attendance refers to tuition and fees, books, and on-campus room and board.<sup>9</sup> However, COA does not include many of the daily expenses of life, such as transportation or student loan

interest.<sup>10</sup>

**Dependent**—The IRS' definition of dependent includes minor children and relatives such as siblings or parents.<sup>11</sup>

**First-Generation Student**—According to the US Federal Government, a first-generation student is an undergraduate whose parents did not complete their bachelor's degree.<sup>12</sup> In a single-parent household, a student would still be considered first-generation if the parent with whom they reside did not receive a bachelor's degree.<sup>13</sup>

**Hidden Curriculum**—In academia, a

## Context

### Q: What does it mean to be a 'first-generation' college undergraduate?

**A:** In the 1998 Higher Education Acts Amendments, the US Federal Government defines a first-generation college student as an undergraduate attending a two or four-year institution whose parents did not complete a baccalaureate degree or in a single-parent household, the parent who is the legal guardian of the child has not received a baccalaureate degree.<sup>15</sup>

hidden curriculum is a set of expectations that may include values, beliefs, jargon, and norms that instructors do not openly teach but still anticipate.

**Higher Education**—After completing high school (also known as secondary education), students can enroll in an institution of higher education such as a college or university.

**Time Poverty**—The phenomenon of too many tasks to complete and not enough time to do so, time poverty is often linked to decreased physical and mental health as well as lower productivity.<sup>14</sup>

However, some exceptions complicate this definition, such as extenuating circumstances where partial college completion or the higher education attainments of extended and adoptive families complicate first-generation status. For example, the National Center for Education Statistics narrows the previously provided definition to students whose parents have had no postsecondary experience.<sup>16</sup> This classification excludes students who would be recognized as first-generation under the official federal definition even though the parents did not receive a

bachelor's degree.<sup>17</sup> These slight discrepancies in definition continue among institutions in many universities across the United States. In a comprehensive overview of 273 intuitional programs designed for first-generation students, the Lumina Foundation found that while 73% of organizations had a formal definition of 'first-generation,' 15% did not have a definition, and 12% were unsure if an institution-wide definition existed.<sup>18</sup> In this same study, 56% of universities utilized the federal definition (neither parent nor guardian has received a bachelor's degree), meaning that definitional variance exists among the remaining 44% of universities.<sup>19</sup> At New York University, for example, the term first-generation refers "to students who are first in their immediate family to attend college in the US," meaning international students would automatically qualify as first-generation regardless of their parents' academic achievements in their home countries.<sup>20</sup> Harvard, however, considers students to be first-generation if they are the first of their "immediate family to graduate from a four-year college or the

equivalent."<sup>21</sup> This definition would omit international students whose parents obtained degrees abroad from a first-generation student status even though they would be considered first-generation at New York University. Additionally, the term 'immediate' can confuse students navigating higher education as they may have an older sibling or another close relative attending college. However, the federal definition focuses exclusively on the educational attainments of parents and guardians.

In these cases, it can be helpful to view first-generation degrees or, as explained by Inside Higher Education, levels. These levels may range from students whose parents enrolled but did not complete college, siblings who have attended college, extended family members who have had collegiate experience, and a family where no one has attended college.<sup>22</sup> While students in each of these levels have different strengths and need different support, for the sake of this brief, first-generation will be defined by the federal definition for first-generation students as referenced in the first paragraph of this section.

\*It will be noted if a study or statistic is

used for a more specific subset of first-generation status.

## **Q: What commonalities exist among first-generation students? Where do they enroll?**

**A:** Within this demographic, there are common characteristics worth noting. Of first-generation students whose parents enrolled in college but did not receive a baccalaureate degree, 61% were white, and 39% were people of color.<sup>23</sup> Most notably, Hispanic students only comprised 9% of continuing-generation students and represented 27% of first-generation students, according to a 2017 report commissioned by the US Department of Education.<sup>24</sup> Additionally, from the same report, 27% of the first-generation college students were from low-income families (households earning less than \$20,000 a year) compared to 6% of continuing-generation students.<sup>25</sup> Other miscellaneous details about first-generation include: 62% of student veterans were first-generation college attendees,<sup>26</sup> 59% of first-generation students were also the first siblings in their family to attend a

university,<sup>27</sup> and 28% of first-generation students were over 30.<sup>28</sup>



While first-generation students attend various colleges and universities across the United States, there are common trends in the types of higher education institutions in which first-generation students enroll. To illustrate these tendencies, the National Center for Education Statistics followed a cohort of high school sophomores in 2002 to gauge the types of postsecondary institutions they enrolled in by 2012.<sup>29</sup> Among students whose parents did not attend any college, 46% enrolled in a public two-year institution, and 26% at a public four-year institution.<sup>30</sup> Another study showed that in the 2015–2016 school year, first-generation students enrolled at two-year public institutions at 44.1% compared to 35.3% of their peers.<sup>31</sup> This enrollment rate reverses when compared to students whose parent(s) have completed a

bachelor's degree, with 26% attending a public two-year institution and 45% at a public four-year college.<sup>32</sup> For students whose parents attended some college but did not receive a bachelor's degree, the data is as follows: 42% attended a public two-year institution, and 33% attended a public four-year institution.<sup>33</sup> These statistics demonstrate that parental education increases the likelihood of a student enrolling at a public four-year university, while lower levels of parental education achievement increase the likelihood of enrollment at a public two-year institution. It is important to note that while a significant percentage of first-generation students attend private for-profit four-year and two-year institutions (72% and 70%, respectively), this brief will focus on public institutions.<sup>34</sup> This decision is due to research availability, as the majority of studies on dropout rates among first-generation students occur at public two-year and four-year institutions.

## **Q: How do college completion rates among first-generation students in the United States compare to other countries?**

**A:** When defined as undergraduates whose parents do not have a bachelor's degree, first-generation students make up 56% of students enrolled in higher education institutions in the United States for the 2015–16 academic school year.<sup>35</sup> Despite their prominent presence on American college and university campuses, first-generation students drop out of higher education institutions disproportionately. Various studies have consistently found higher dropout rates among first-generation students compared to continuing-generation undergraduates, though exact ratios depended on the sample size of students.<sup>36,37</sup> The most widely accepted statistic on this social issue shows a nearly 14-point percentage difference in graduation, with first-generation students obtaining a bachelor's degree after four years at rates of 27.4% and continuing-generation students at a rate of 42.1%.<sup>38</sup> This difference in degree attainment continues 6 years after first-generation students first enter

college.<sup>39</sup> Though the exact ratio of attrition between first-generation students and continuing-generation students may fluctuate depending on the sample size, this data suggests that first-generation college students have an increased tendency toward dropping out.

Studies on first-generation undergraduates outside of the United States are sparse. This deficit in data is likely due to the vastly different systems that fund higher education in other high-income countries outside of the United States. For example, in France, all students who graduate the French equivalent of high school and pass an exam receive a baccalauréat, which grants entry to the higher education options available in France.<sup>40</sup> Many other nations in the European Union provide either free or highly subsidized higher education options, making college more financially accessible.<sup>41</sup> As such, research on first-generation students in European or North American countries is often conducted concurrently with a study of another demographic. One study in Canada focused on educational access for first-generation refugees, and another studied the characteristics of first-generation migrant

students in Finland, though neither study emphasized dropout rates in their research.<sup>42,43</sup> In low-income countries, research on first-generation students is targeted toward younger demographics of schoolchildren. One in three 8-year-olds in Ethiopia are first-generation primary students, and in countries such as India and Vietnam, two-thirds of students are first-generation in secondary school at the age of 15.<sup>44</sup>

Despite the prevalence of United States-based first-generation attrition rate studies, a handful of preliminary international studies are worth noting. Conducted in 2020, one of the first comprehensive studies on first-generation students in England found that first-generation students are only 4% more likely to drop out of college than their peers whose parents have a degree.<sup>45</sup> In South America, the percentages are much higher. For example, in Brazil, 38.9% of undergraduates are first-generation<sup>46</sup> and among all students, there is a 33% completion rate.<sup>47</sup> Considering these two factors as independent, the first-generation drop-out rate of Brazil is about 25%.<sup>48</sup> Using statistics from the

Organization for Economic Cooperation and Development (OECD), the difference between the first-generation graduation rate in Australia and the United States becomes evident. While only 14% of US adults (ages 25–34) whose parents did not receive college degrees earned one themselves, 40% of first-generation students in Australia have earned a postsecondary degree.<sup>4</sup>

### **Q: When did higher dropout rates among first-generation college students reach public attention?**

Concerns over the needs of first-generation students did not arise in a vacuum but rather stemmed from larger conversations concerning economic equality in the United States. The Lyndon

B. Johnson Administration codified the Economic Opportunity Act (EOA) into law as part of its War on Poverty in 1964.<sup>50</sup> This legislation included a program titled "Upward Bound," which specifically prepared high school students from disadvantaged backgrounds to enter and excel in college.<sup>51</sup> This program acted as a pipeline for other federal education-based acts, such as the Talent Search program, introduced in the 1965 Higher Education Act.<sup>52</sup> Later, the Student Support Services were implemented in the 1968 Amendments to the Act.<sup>53</sup> These three initiatives collectively became TRIO, focused on providing education equality for underrepresented populations, which has since expanded to include eight separate programs.<sup>54</sup>

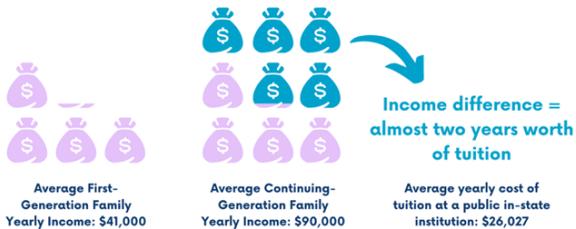
low-income and then more likely to face financial obstacles later on in their educational journeys. To illustrate this point, first-generation students have a familial median income of \$41,000 compared to \$90,000 for continuing-generation student families.<sup>57</sup> When viewed in the context of the average yearly cost of a public four-year in-state institution (\$26,027), this difference in income (\$49,000) accounts for

## **Contributing Factors**

### ***Financial Obstacles***

Due to the rising cost of higher education, financial concerns are a leading cause of first-generation undergraduate dropout rates. This demographic is initially more likely to qualify as

approximately 2 years of schooling.<sup>58</sup> Lack of accessible funds to spend on higher education expenses is particularly exacerbated for 27% of first-generation students whose households earn less than the yearly cost of attendance (COA).<sup>59</sup> The intersection of low-income and first-generation student status thus has repercussions on college affordability.



This distinction is significant as family support is a major source of funding for both continuing generation and first-generation students.<sup>60</sup> However, while 78% of continuing-generation students utilized family funds to finance their education, only 58% of first-generation students did.<sup>61</sup> Instead, first-generation students were significantly more likely to fund their schooling using federal and private loans, scholarships, grants, and credit cards.<sup>62</sup> The reliance first-generation students have on fiscal means outside their family

members becomes a ripple effect where they have less disposable income to spend on their education, which may necessitate an early exit from college. Furthermore, the systems that substitute familial financial contributions create barriers for first-generation students.

For example, the Free Application for Federal Student Aid (FAFSA), designed to help students disadvantaged by collegiate systems, is often inaccessible or insufficient for the needs of first-generation students. The inaccessibility of FAFSA has been linked to its application process, with nearly half of students who did not apply for FAFSA citing either a lack of information or being overwhelmed by the time-consuming process as their reason for not applying.<sup>63</sup> In particular, researchers have found FAFSA's complexity to be a hindrance to student completion.<sup>64</sup> One study identified acronyms, tax-related jargon, and unclear distinctions between state, institutional, and federal requirements as leading causes of confusion on FAFSA forms.<sup>65</sup> Furthermore, recent data from the NCES (2018) show first-generation students as being less knowledgeable about key financial concepts compared to students whose parents completed a bachelor's degree or higher, indicating possible issues with financial literacy.<sup>66</sup> Considering that a FAFSA application requires many financial documents, including

federal income tax returns, W-2s, bank statements, records of investments, and untaxed income, financial literacy is a likely barrier to completing the FAFSA for first-generation students.<sup>67</sup> For the 72% of first-generation students who overcome these obstacles, federal financial support only covers a portion of the total cost of attendance (COA).<sup>68,69</sup> With the average Pell Grant being \$4,299 for a student at a public four-year university, this grant covers approximately 25% of a school year's tuition.<sup>7</sup> For public two-year universities, Pell Grants pay for 57% of COA when students live with family members and 31% when students live off-campus.<sup>71</sup> While FAFSA is an important resource for first-generation students in financing their education, the inaccessibility of its application forms and the shortage of FAFSA-related funds can lead to increased financial strain for these students. This strain, in turn, causes first-generation students to find other means to afford higher education, causing students to experience time poverty.

A final financial factor that leads to increased dropout rates of first-generation students is varied personal circumstances that complicate and increase the cost of a college education. Life circumstances and a lack of formal institutional support can cost students time, money, or both. One significant cause of time poverty is

employment. The need to finance one's own education often causes first-generation students to work more hours than continuing-generation students.<sup>72</sup> One in five first-generation first-year students worked more than 20 hours per week, while only 1 in 10 continuing-generation freshmen did.<sup>73</sup> The need to work is detrimental to college completion rates, as students who work over 15 hours a week have a higher probability of dropping out.<sup>74</sup> As semesters pass and costs compound, the need to work only intensifies for undergraduate students, with 39% of first-generation and 25% of continuing-generation seniors working over 20-hour weeks.<sup>75</sup> These statistics reveal the unmet financial needs of first-generation students but also a structural mismatch in time management. University expectations for coursework are typically to spend 2–3 hours per credit hour in class on homework, reading assignments, or preparing for exams.<sup>76</sup> Therefore, if a first-generation student enrolls in an average full-time credit load (of 12 hours), studies the expected 24–36 hours a week, and works over 20 hours a week, they dedicate approximately 56–68 hours a week to their education and funding education. Considering the average American work week is approximately 34.6 hours, first-generation students have a clear disadvantage in finding a work-life-school

balance that supports college completion. The last facet of first-generation student life that affects time and financial security is the number of dependents in their families. Approximately one-third of first-generation students have dependents<sup>77</sup> and 49% of student parents are first-generation students,<sup>78</sup> meaning it is probable that first-generation are supporting a family member while also supporting themselves through school. This combination of an initial economic disadvantage coupled with later financial stresses through inaccessible federal aid and an increased workload leads to an increased dropout rate of first-generation college students.

### ***Lack of Academic Preparation***

The likelihood of collegiate first-generation attrition begins before this demographic of students can enroll at an institution of higher education due to inadequate preparation in high school. Despite the United States' Common Core objective to “provide clear and consistent learning goals to help prepare students for college, career, and life,” many first-generation students leave high school unprepared for the rigors of college courses.<sup>79</sup> This lack of preparation often stems from a deficiency of high school funding that provides students with essentials in education, such as well-trained

teachers, support services, and safe classroom spaces.<sup>80</sup> The repercussions are apparent through lower test scores and increased rates of remedial course enrollment.<sup>81,82</sup>

Standardized tests such as the American College Test (ACT) and the SAT have traditionally been indicators of college readiness. These exams test high school students preparing for postsecondary education on the Common Core Standards they learned throughout high school; their scores are then used in the college admission process and for merit-based scholarships.<sup>83</sup> However, in recent years, there has been a deemphasizing of standardized test scores. This change is a lingering effect of the 2020 COVID-19 pandemic in which many universities and colleges became 'test-optional' as high schools and testing centers were closed nationwide.<sup>84</sup> Many institutions maintained optional or test-free admission after the pandemic shutdowns, with approximately 2,000 accredited universities and colleges employing these policies in preparation for the Fall 2024 academic year.<sup>85</sup> Despite this recent reprioritization of the ACT and SAT, their historical precedence in determining college admissions maintains their influence as a marker of college readiness.



In 2015, the ACT and the Council for Opportunity in Education (COE) co-published a report entitled *The Condition of College & Career Readiness: First-Generation Students*, which points to unequal and inadequate secondary schooling preparation.<sup>86</sup> Within the 2015 ACT cohort, 350,455 test-takers were first-generation students;<sup>87</sup> of these, only 35,045 students, approximately 10%, met ACT College Readiness Benchmarks in all subjects.<sup>88</sup> In other words, 9 out of 10 first-generation students will not be ready for the rigors of college courses.<sup>89</sup> Comparatively, only 3 out of 10 of all ACT-test takers did not meet these benchmark standards.<sup>90</sup> This study also found that the point difference in test scores in English, reading, mathematics, and science between first-generation students and all ACT test-takers was 20% higher than first-generation students.<sup>91</sup> Whether these discrepancies exist because the high school courses offered to first-

generation students are not sufficiently rigorous, or first-generation students are not provided with appropriate preparation measures (test preparation classes and academic counselors), the inadequacy of high school curriculum to prepare first-generation students for college is apparent.

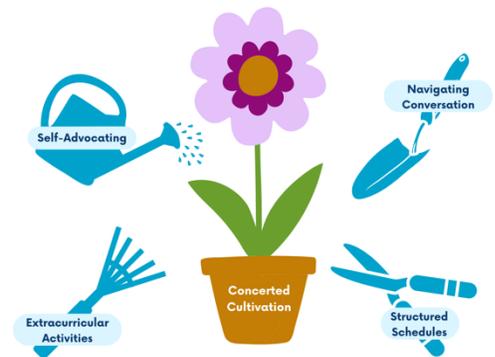
More evidence of the inadequacy of high school preparation for first-generation students is the remediation rate among first-generation students. Remedial or developmental courses are noncredit classes designed to provide students with the basic skills necessary for higher education coursework.<sup>92</sup> Enrollment in remedial classes comes at the cost of the students as they are required to pay tuition for classes that do not count toward graduation.<sup>93</sup> Often, educational institutions place students into these courses based on their ACT or SAT scores to review competencies they should have learned in high school.<sup>94</sup> Since it has previously been established in this brief that first-generation students score below benchmark averages on standardized tests, with only 10% of first-generation students meeting the ACT benchmarks, it can be expected that first-generation students are more likely to be enrolled in remedial courses.<sup>95</sup> One study found increased rates of remediation among first-generation students at public four-year

institutions, where 54% of first-generation students enrolled in remedial courses compared to 31% of their continuing-generation peers.<sup>96</sup> These high rates of remediation are significant as students are likely to drop out while in remedial courses before ever enrolling in a credit-bearing class.<sup>97</sup> This pattern of not persisting past remedial coursework occurs for around 50% of students in remedial education, signifying that half of students who begin their college careers in a remedial course will never complete their credentials.<sup>98</sup>

## ***Hidden Curriculum and Cultural Mismatch***

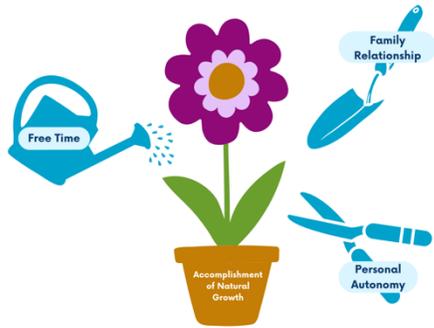
Unofficial rules and social norms within higher education create a 'hidden curriculum,' in which unexplained expectations are necessary for an individual to succeed at the collegiate level.<sup>99</sup> The formation of a hidden curriculum begins with differences in child-rearing practices between first-generation and continuing-generation households, which can lead to a conflict between the cultural values of first-generation students and institutions of higher education.<sup>100</sup> Annette Lareau's groundbreaking study on social class and parenting provided concrete examples of how formative family values can later clash with the unstated

expectations of institutions. In her research, Lareau distinguished the parenting styles of working-class and low-income families as distinctly different from those of middle and upper-class Americans.<sup>101</sup>



Rather than having their child follow a course of natural growth and achievement, families from high economic backgrounds pursue what is known as "concerted cultivation."<sup>102</sup> Characteristics of concerted (meaning focused or purposeful) cultivation include adults organizing activities (such as extracurricular clubs, sports, and musical groups) to develop the talents and abilities of their children.<sup>103</sup> This structuring of childhood also includes implicit instruction on navigating interactions with adults and individuals in positions of power, as shown in the example of Alexander Williams.<sup>104</sup> On the way to a doctor's appointment, Alexander's mother practices with

her son how to interact with the doctor; below is an excerpt of their exchange:



*Ms. Williams: "Alexander, you should be thinking of questions you might want to ask the doctor. You can ask him anything you want. Don't be shy. You can ask anything."*

*Alex: "I have some bumps under my arms from my deodorant."*

*Ms. Williams: "Really? You mean from your new deodorant?"*

*Alex: "Yes."*

*Ms. Williams: "Well, you should ask the doctor."<sup>105</sup>*

This preparatory exchange between mother and child conditions Alex Williams, from a middle-class family, to be confident and assertive in his interactions with the doctor.<sup>106</sup> This approach to

communication is practiced throughout childhood, which builds a sense of entitlement where middle-class children grow accustomed to viewing adults as equals with whom they are allowed to negotiate to customize situations to their preferences.<sup>107</sup>

In contrast, low-income and working-class families view the development of their children as something that occurs naturally and spontaneously.<sup>108</sup> Rather than organizing formal activities or rehearsing conversations, these families allow their children more autonomy over their free time and prioritize relationships with extended family and community members.<sup>109</sup> While the accomplishments afforded by natural growth are significant, institutions do not value them.<sup>110</sup> For example, in a strikingly dissimilar exchange at a doctor's appointment, Harold McAllister's mother modeled an attitude of deference and mistrust, as shown below:

*Doctor: Does he eat something each day—either fish, meat, or egg?*

*Jane (her response low and muffled): Yes.*

*Doctor (attempting to make eye contact but failing as mom stares intently at paper): A yellow*

*vegetable?*

*Jane: (still no eye contact, looking down): Yeah.*

*Doctor: A green vegetable?*

*Jane (looking at the doctor): Not all the time.*

*Doctor: No. Fruit or juice?*

*Jane (low voice, little or no eye contact, looks at the doctor's scribbles on the paper he is filling out): Ummh humn.<sup>111</sup>*

Despite both parenting styles having their merits and shortcomings, in the context of navigating institutions, middle and upper-class students are consistently taught a hidden curriculum that affords opportunities unavailable to low-income and working-class students.

Specifically within the realm of higher education, the phenomenon of hidden curriculum is researched and well-documented, mainly manifested in discrepancies between faculty and first-generation students' expectations.<sup>112,113</sup> Researchers of first-generation students acknowledge the familial differences in child-rearing that exist in first-generation and continuing-generation families;

however, they use the terms independent and interdependent norms rather than concerted cultivation and the accomplishment of natural growth.<sup>114</sup>

Studies find that first-generation students experience a cultural 'mismatch' as the skills and abilities that allowed them to succeed in their home environment no longer apply to their current situation.<sup>115</sup> One study found a disconnect between faculty and first-generation students' expectations in the following areas: expectations about the workload of the course, clarity of assignment instructions, means to communicate, and problem-solving between professors and undergraduates.<sup>116</sup> A different study found that in addition to a decreased rate of interactions between faculty and first-generation students, first-generation students were less likely to ask a question in class or contribute to a class discussion.<sup>117</sup>

Continuing-generation students enrolling in college often do not face the problem of a hidden curriculum because they arrive on campus having learned the hidden rules vicariously through the collegiate experiences of their parents.<sup>118</sup> The inverse is true for first-generation students who, unaware of unstated rules, do not know how to utilize the structure

of higher education institutions to their advantage.<sup>119</sup> Additionally, continuing-generation students are generally raised in more customizable contexts that foster independence, as middle-class families are more able to cater to the interests of these students.<sup>120</sup> While the ability to work independently or interdependently are both valuable traits, the structuring of higher education is preferential toward independence.<sup>121</sup>

This cultural mismatch affects first-generation dropout rates in two distinct ways: familial achievement guilt and a lack of institutional engagement. Originally identified as “breakaway guilt,”<sup>122</sup> familial achievement guilt is a phenomenon that describes the sensation first-generation students experience as they leave their families to study at an institution of higher education.<sup>123</sup> This guilt stems from a realization that as the first to attend college, first-generation students will be afforded opportunities and experiences unavailable to their family members.<sup>124</sup> In addition to this recognition of having more privileges, one study identified three other causes of guilt associated with first-generation students, namely, leaving family

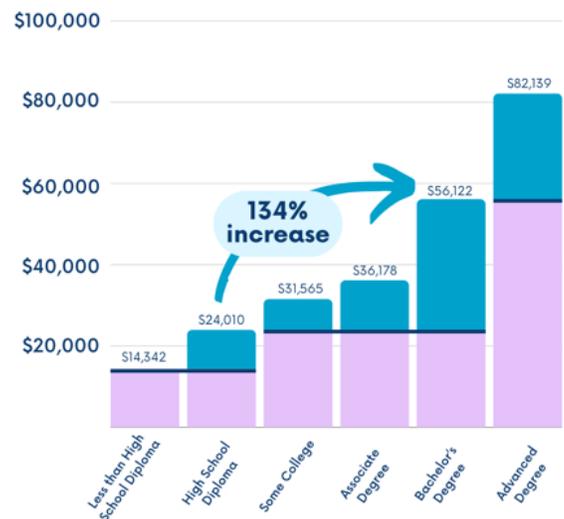
behind, becoming different, and an increased pressure to succeed.<sup>125</sup> These concerns often create a divide that pushes first-generation students to abandon the progress they have made. Another study found that familial achievement guilt among first-generation students increased cortisol levels when operating within an independent versus interdependent institution.<sup>126</sup> Cortisol is a hormone that has been associated with stress and negative emotions and affects first-generation students' ability to perform well in classes.<sup>127</sup> This tension simulated by the cultural mismatch between independent and interdependent standards can contribute to a higher dropout rate among first-generation students. Regarding institutional engagement, some studies have found first-generation students are less likely to participate in on-campus clubs and organizations.<sup>128</sup> This lack of institutional engagement has been linked to lower persistence rates.<sup>129</sup> A combination of familial achievement guilt and less on-campus involvement constitutes part of the hidden curriculum facing first-generation students and contributes to the higher dropout rates for first-generation students.

# Consequences

## *Earnings and Employment*

A long-standing and studied correlation between education and social mobility can be found in the employment opportunities and earning potential between those who have and those who do not have a bachelor's degree. Differences in earnings begin with differences in employment opportunities, typically caused by a changing job market. Historically, low-skill and middle-skill occupations were the positions most readily available for individuals who have a high school diploma.<sup>130</sup> However, recent trends suggest that high-skill jobs are steadily making up a substantial portion of the labor force, with 73% of new jobs added since 1989 classified as high-skill.<sup>131</sup> This addition is significant as 83% of these new jobs are offered to individuals with a bachelor's degree or higher.<sup>132</sup> For **first-generation students** who have dropped out of college, this data reveals a shrinking job pool, diminished earning potential, and increased unemployment.<sup>133,134</sup>

## Average Annual Earnings



There is a noticeable difference in income between college graduates and their peers without bachelor's degrees. One study found a gradient in income based on educational attainment for the following categories: those who dropped out of high school, high school graduates, individuals who attended college but did not receive a degree, recipients of associate's degrees, and holders of bachelor's degrees.<sup>135</sup> With each level of educational attainment, income increases.<sup>136</sup> Notably, those who attended some college earned approximately \$8,000 more annually, and recipients of associate's degrees earned \$12,000 more than high school graduates.<sup>137</sup> These statistics bode well for **first-generation students** who, despite their early departure from college, will still receive a financial benefit from their efforts in college. However, the most significant marker of income is a bachelor's degree, with a 134% increase in income (\$32,000

per year or higher) existing between high school graduates and holders of bachelor's degrees.<sup>138</sup> Though this statistic is specific to high school graduates who have not attended college, one can expect similar discrepancies in income between first-generation students who dropout of college and undergraduates who ultimately receive their bachelor's degrees. This assumption would be correct given the Bureau of Labor Statistics reports full-time workers (aged 22–27 who held a bachelor's degree) made a median annual salary of \$52,000, compared with \$30,000 for full-time workers of the same age who had not received a degree in 2021.<sup>139</sup> A conservative estimate for the earnings of a bachelor's degree over a lifetime is \$625,000 to \$735,000, with the potential for earnings to be \$1.383 million.<sup>140</sup> There are clear economic advantages for first-generation or **continuing-generation students** who graduate compared to first-generation students who had to drop out of college.

This advantage persists when one evaluates unemployment rates in the United States among adults who received or did not receive a bachelor's degree. American adults who held bachelor's degrees (but not graduate degrees) were 2.2 times less likely to be unemployed and 74% less likely to be out of the labor force than their high school graduate counterparts who never attended college.<sup>141</sup> **First-generation students** who dropped out of college fare only marginally better than high school graduates who never attended college.

According to one study, the unemployment rate in February 2020 was 3.1% for individuals who had dropped <sup>142</sup> Inversely, only 1.9% of those who held a bachelor's degree were unemployed.<sup>143</sup> This difference in unemployment highlights the role a bachelor's degree has on increased employability. If one does not obtain the educational benchmark of a bachelor's degree, it does not matter if an individual attended some college or no college after high school; they are essentially just as likely to face unemployment. Economic crises such as the Great Recession of 2008 and the 2020 COVID-19 pandemic exacerbate the problem, disproportionality affecting those who did not graduate from college.<sup>144,145</sup> "During the pandemic, unemployment rates increased for both college graduates and individuals with some college experience; however, the latter demographic experienced a more significant rise—6.8% and 10.8%."<sup>146</sup> For first-generation students, the cost of dropping out of college means an increased risk of unemployment and diminished job security, in addition to a decrease in job type opportunities and overall earning potential.

### ***Quality of Life***

In addition to momentary consequences, being a first-generation student who drops out of college can impact the overall quality of life. Many of these repercussions are connected to employment opportunities but are not directly

related to salary, such as access to health care or retirement savings. In terms of health care, the benefit of having a bachelor's degree is visible through employment-provided health insurance and employer contribution to said insurance.<sup>147</sup>



Approximately 61% of individuals who attended college but did not graduate received healthcare through their place of employment. In comparison, those who received bachelor's degrees qualify for work-provided healthcare at a higher rate of 76.8%.<sup>148</sup> Additionally, 17.7% of individuals who started but did not complete college did not have insurance.<sup>149</sup> These findings are significant as a lack of health insurance has been linked to individuals refusing to receive treatment or forgoing preventive services to avoid unexpected medical expenses.<sup>150</sup> Even among the 61% of college non-completers who have health insurance through their work, on average, their employers contribute less to their health insurance by \$959 in comparison to those

with bachelor's degrees.<sup>151</sup> For context, the average cost for a basic life support ambulance ride is \$940, with advanced life support services costing upwards of \$1,277, meaning that the additional employer-provided contribution could essentially pay for the cost of an ambulance ride.<sup>152</sup> Similar trends exist in retirement plans, with 45.7% of individuals with bachelor's degrees receiving retirement benefits through their work compared to only 33.1% of individuals who have attended some college.<sup>153</sup>

Educational attainment greatly influences the quality of life, which correlates with homeownership. Homeownership has historically been a driver of upward social mobility in the United States.<sup>154</sup> Building wealth through home equity is an asset-building means to achieve economic security and stability for many American families.<sup>155</sup> Additional advantages of homeownership include imputed rent and tax benefits.<sup>156</sup> However, rates of homeownership are closely connected to educational attainment. In 2019, there was a 14-point percentage gap between those with a college degree versus those who had completed some college (75% and 61%, respectively).<sup>157</sup> For first-generation students who do not complete college, it can thus be assumed that they are less likely to own a

home. Other negative consequences associated with quality of life include a decrease in job safety and prestige.<sup>158</sup> The effects of earning or not earning a bachelor's degree are monumental, potentially affecting a first-generation student's ability to own a home, secure retirement, and receive adequate medical care.<sup>159</sup>

## *Student Debt*



For first-generation students who do not graduate, student loans are a double regressive negative consequence as they obtain the debt but not the economic earnings and employment opportunities a bachelor's degree offers.<sup>160</sup> This relationship between student loans and student debt is particularly complicated for first-generation students as loans increase college accessibility for first-generation students who are more likely than their continuing-generation peers to rely on them to finance higher education.<sup>161</sup> However, the

threshold effect complicates this seemingly beneficial resource for first-generation undergraduates. In the case of student loans and dropout rates, one study found that loans have a positive correlation to both college access and enrollment.<sup>162</sup> Loans may even promote college completion at a given momentary threshold; however, additional loans may have adverse effects if a student exceeds this borrowing threshold.<sup>163</sup> This detrimental effect heightens when the borrowed money does not meet the entirety of a student's financial needs.<sup>164</sup> Given this context, student loans may be considered a contributing factor to increased dropout rates; however, this brief will focus on the effect of debt on first-generation students after they have dropped out.

Research on the debt patterns of first-generation dropouts also poses a problem as, currently, few studies focus specifically on the debt habits of first-generation students who did not complete college. Data on student debt focuses on the general population of college dropouts or first-generation students who graduated college. One of the first studies to research this often overlooked category of borrowers (students who drop out with debt) found that 20% do not complete college.<sup>165</sup> This study also found no notable differences in unemployment rates or salary between individuals who dropped out

who had used and those who did not use student loans.<sup>166</sup> However, borrowers did have less disposable income due to their student debt; additionally, about 1 in 4 had defaulted on at least one loan.<sup>167</sup> Another recent study confirmed this trend, finding that students who drop out of college are more likely to default on their loans.<sup>168</sup> The sample size of a different study found that 49% of defaulted individuals never received a credential from their program.<sup>169</sup> In this particular study, 47% of first-generation students defaulted on their loans, though it is unclear if these first-generation students graduated or dropped out of higher education.<sup>170</sup> Among first-generation graduates, educational debt is also more likely.<sup>171</sup> Sixty-five percent of first-generation college graduates have a debt of at least \$25,000, while only 57% of continuing-generation graduates do.<sup>172</sup> In comparing the debt trends of a general population of college dropouts and the debt of first-generation college graduates, it can be assumed that first-generation students who dropped out face a greater student debt burden than their peers who either graduated or those who withdrew from college without debt. One study found that nearly half (46%) of first-generation borrowers were in default rate measurements.<sup>173</sup> Most notably, first-generation students may fare worse than continuing-

generation students who dropped out of college with debt, though more research is needed to confirm this proposition.

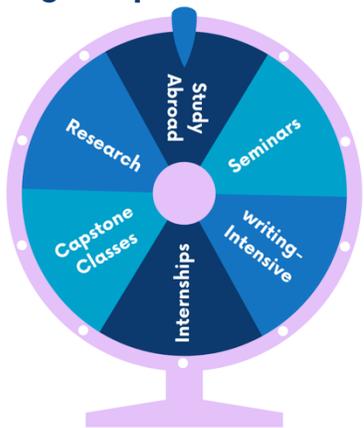
Increased rates of student debt among first-generation who have dropped out of college negatively impact credit scores. When borrowers miss a payment, the system classifies them as 'delinquent,' and 90 days of delinquency has a negative impact on an individual's credit score.<sup>174</sup> After 270 days of delinquency, borrowers default on their loans.<sup>175</sup> Once in default, borrowers are faced with a plethora of financial hardships, starting with their entire unpaid balance and accumulated interest becoming due.<sup>176</sup> The federal government then employs a variety of methods to collect on the overdue debt, which include withholding tax refunds and wage garnishments.<sup>177</sup> There are also collection fees that can increase a borrower's balance upwards of 40% and may consist of 20% of their payment.<sup>178</sup> Delinquency and default have also been associated with lower credit scores.<sup>179</sup> Individuals who never defaulted on their student loans had a credit score of around 744, while those who had defaulted were around 549.<sup>180</sup> For context, scores that range from 740–799 are considered very good, while credit scores that fall below 580 are considered poor.<sup>181</sup> Individuals with poor credit scores are less likely to receive credit or qualify for better

loan terms.<sup>182</sup> Among first-generation students who drop out with debt, these findings reveal a financial strain due to a decrease in

## Practices

### *High Impact Practices*

#### High-Impact Practices



High-impact practices, or HIPs, are an educational approach that provides students with collaborative learning experiences that create a sense of community on campus and expand individual skill sets.<sup>183</sup> They include activities such as service-based learning, internships, undergraduate research, first-year seminars, capstone classes, writing-intensive courses, and study abroad programs.<sup>184,185</sup> Learning communities are a specific form of HIP where students either attend classes together in a cohort or live in an organized residence hall.<sup>186</sup> What HIPs have in

disposable income and increased risk for loan defaults and poor credit scores.

common is their potential to connect students with faculty, academic advisors, their peers, and campus resources.<sup>187</sup> These benefits are practical for all undergraduate students but especially for first-generation students, as high-impact practices can reveal hidden curricula, foster a sense of belonging, and connect students to financial resources. In recent years, implementing HIPs specifically for first-generation students has been favored by institutions of higher education attempting to address the needs of their students. Higher education typically incorporates high-impact practices on an institution-by-institution basis. However, the Center for First-Generation Student Success, one of the leading organizations advocating for and supporting first-generation students, has developed a network to distinguish and recognize universities and colleges that excel at assisting first-generation students.<sup>188</sup> As such, identifying successful high-impact practices can best be done by evaluating universities and colleges that are members of the center's FirstScholar Network.<sup>189</sup> For institutions not yet part of the FirstScholar Network, nonprofit organizations, such as the Gantry Group, work within higher education to support

first-generation students. While high-impact practices vary across campus colleges, this brief will explore the programs of three First Scholar students and one nonprofit to illustrate how HIPs support first-generation students. At Northern Arizona University, their comprehensive high-impact programs include free tutoring services, peer and faculty mentoring, and volunteer opportunities.<sup>190</sup> Most notably, the University offers a \$2,000 scholarship per academic school year for qualifying first-generation students.<sup>191</sup> At Georgia Institute of Technology, there is the First-Gen Jackets Peer Mentoring Program, where students can receive one-on-one tutoring services.<sup>192</sup> Additionally, there is a First-Generation College Celebration Week that raises awareness about the experiences of first-generation students and builds a sense of community.<sup>193</sup> The University of Texas at Austin offers a living-learning community that assists in bridging the ‘two worlds’ of school life and home through a cohort-based resident hall.<sup>194</sup> The resident hall connects first-generation students to their fellow first-generation students and also gives access to training on academic success strategies and cultural learning experiences.<sup>195</sup> The Gantry Group is a 501(c)3 nonprofit group that assists first-generation students from New York and other eastern states

accumulate at Brigham Young University.<sup>196</sup> Their efforts for first-generation students center on increasing the financial capacity of their students, one-on-one tutoring, and college-to-career advisement.<sup>197</sup> The Gantry Group places a strong emphasis on accompaniment programs that reveal a hidden curriculum by bringing campus resources to first-generation students.

### *Impact*

First Scholars are first-generation students attending a university endorsed by the Center for First-Generation Student Success, and they outperform other first-generation and continuing-generation students in three key markers.<sup>198</sup> In academic performance, the GPAs of first-year First Scholars was 3.1 compared to 2.7 for a general population of first-time students and 2.6 for first-generation students.<sup>199</sup> Retention rates improved drastically between the first and second years of school for First Scholar students, with a 92% re-enrollment.<sup>200</sup> For context, only 68% of first-generation students return for their second year of schooling at other institutions.<sup>201</sup> The last marker of success most directly relates to a decrease in dropout rates among first-generation undergraduates. The six-year graduation rate of First Scholar students was 73%, and the four-year graduation marker was

51%.<sup>202</sup> Compared to the earlier data of 50.2% six-year and 27.4% four-year graduation rates for first-generation students, this is over a 20-point percentage difference in graduation.<sup>203</sup> Nonprofits working outside of the institutions of higher education also have success in increasing first-generation retention. For undergraduates participating in the Gantry Group, there is a 90% persistence rate, and 90% of their students are debt-free.<sup>204</sup>

### ***Gaps***

While the current standard for assisting first-generation students through college is high-impact practices, there is uncertainty in the specific execution of program implementation.<sup>205</sup> Often, the need to quickly implement a high-impact practice leads institutions of higher education to reactively

modify an existing HIP for the needs of first-generation students or arbitrarily select new HIP programs.<sup>206</sup> These hasty and reactive responses may cause institutions to implement a program before fully assessing the benefits of a HIP for their specific population of first-generation students. Lack of resources or research can also heighten institutional uncertainty toward first-generation-centered HIPs.<sup>207</sup> To address this shortcoming, experts suggest that institutions purposefully choose HIPs that would best serve their specific population of first-generation students.<sup>208</sup> Then, these institutions must be willing to assess their decision and adjust as needed.<sup>209</sup> Through this cyclical process of continual change, high-impact practices can become a more effective means to support first-generation students.

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