

First-generation students bring vital, unrecognized assets to college. The authors apply a strengths-based approach to reshape classroom and institutional practices, creating a welcoming and effective campus experience. This book delivers a transformative, useful framework and a critical road map for fostering student success.

—**Amy Ballin, PhD, MSW, MST**, Managing Director, Amy Ballin Consulting (ABC),
Gloucester, MA

Helping First-Generation Students Succeed: Psychology-Backed Strategies for Campus and Classroom is an informative text for higher education faculty, staff, and administrators. The authors provide a comprehensive overview of a strengths-based model for first-generation (FG) students and the utility of applying this model to pedagogical approaches, programming, and services for FG students. The strategies and recommendations for supporting FG students are grounded in psychological theories and are clearly described, with useful implementation suggestions for a variety of higher education institutions.

—**Jenna Silverman, PhD**, Licensed Psychologist, Executive Director of Student Counseling and Educational Support, Student Counseling Center, University of Maryland, Baltimore

This book is full of creative, research-based ideas for how to engage and retain first-generation students. It takes a strengths-based approach to developing programming and policies, and everyone from new faculty to experienced administrators can benefit from reading it.

—**Judith Danovitch, PhD**, Professor and Director of Undergraduate Studies, Department of Psychological and Brain Sciences, University of Louisville, Louisville, KY

This manuscript is an exceptional resource for faculty members, student affairs practitioners, and college administrators. Each chapter offers clear, accessible guidance on effectively engaging first-generation college students with the aim of enhancing their collegiate experience and overall success, irrespective of race, ethnicity, or socioeconomic background. The practical strategies presented are grounded in research and reinforced by demonstrated outcomes that attest to the effectiveness of the interventions. I highly recommend this book to any college professional whose work centers on direct engagement with students. The authors are to be commended for their dedication to and advocacy for the first-generation college student population in our country.

—**Zebulun R. Davenport, EdD**, Vice President for University Advancement and External Affairs, West Chester University, Chester, PA

Contents

<i>Contributors</i>	<i>ix</i>
<i>Acknowledgments</i>	<i>xiii</i>
Introduction: Leveraging First-Generation Strengths in the Classroom and on Campus	3
H. Russell Searight, Ranjana Dutta, Sasha N. Cervantes, Aurora I. Ramos Núñez, Neda Moinolmolki, and Jerry L. Mize	
I. STRATEGIES FOR USE IN THE CLASSROOM	29
1. Using Photovoice to Engage and Empower First-Generation Students	31
Lucy E. Napper, Margaret Munley Stone, Princess O. Neely, Laura C. Wolter, and Anthony J. Di Santo	
2. Creating Need-Supportive Online Classrooms: Motivational Approaches to First-Generation Student Engagement and Learning	49
Kathryn E. Frazier, Colleen J. Sullivan, Nicole M. Rosa, and Jacquelyn N. Raftery-Helmer	
3. Using Transformative Experience to Facilitate Perceived Usefulness and Personal Relevance Among First-Generation College Students	65
Jacqueline A. Goldman, Benjamin H. Heddy, and Alison C. Koenka	

4. First-Generation Student Success Starts With <i>CARING</i>: A Compassionate, Approachable, Relational, Invested, and iNviting Approach That Fosters a Growth Mindset	77
Michelle M. Robbins and Han M. Tran	
5. Supporting First-Generation Student Success Through a Food Justice Service Learning Project	95
Bonnie I. Pepper and Joshua Abreu	
6. Learning as a Shared Responsibility: Using Ungrading to Leverage First-Generation Graduate Students' Funds of Knowledge and Promote Self-Efficacy	107
Sonja Ardoin	
II. STRATEGIES FOR USE BEYOND THE CLASSROOM	123
7. Using Culturally Responsive Approaches in Faculty Advising for First-Generation, Master's-Level Graduate Students	125
Avery B. Olson and Lindsay Sterk	
8. Institutionalizing First-Generation Student Feedback to Strengthen University Support	141
Giselle Laiduc, Ibetle Valle-Luján, and Rebecca Covarrubias	
9. Changing the Narrative of "First-Gen" Through the Institutional Lens: Examples From a First-Generation Student Success Program	153
Jennifer Stripe Portillo, Breeda McGrath, and Felice Mayes	
10. Building Cultural Wealth for First-Generation College Students in STEM Using a Cohort Model	167
Amanda Ruiz, Jane Friedman, Carla Penha-Vasconcelos, Drew Talley, Odesma Dalrymple, Paula Krist, and Perla Myers	
11. Cultivating Spaces for First-Generation Communication Sciences and Disorders Students: Coordinated Engagement Opportunities	183
Erica Ellis and Gabriela Simon-Cerejido	
12. Increasing Retention and Fostering a Sense of Belonging in First-Year First-Generation College Students Through Peer Mentorship	199
Christine Smith and Myah Henderson	

13. Learning the Unwritten Rules: A Culturally Tailored Difference-Education Intervention for First-Generation College Students	211
Gerardo Ramirez, Leslie J. Remache, Giselle Laiduc, Matthew Jackson, Rebecca Covarrubias, and Ji Y. Son	
14. Coffee With a Professor: Building Relationships for First-Generation Student Success	225
Matt Daily and Randy Hetherington	
15. Inspiring and Empowering Students Through First-Generation Panelists	239
Ryan M. Pickering	
Conclusion: Institutional Transformation to Support First-Generation College Students	251
Neda Moinolmolki, Ranjana Dutta, Sasha N. Cervantes, H. Russell Searight, Aurora I. Ramos Núñez, and Jerry L. Mize	
<i>Index</i>	<i>255</i>
<i>About the Editors</i>	<i>261</i>

INTRODUCTION

Leveraging First-Generation Strengths in the Classroom and on Campus

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First-generation (FG) college students are commonly recognized as the first in their families to pursue a 4-year degree. In this pursuit, they are often obliged to navigate unfamiliar academic, social, and institutional landscapes on their own, without familial guidance or understanding of these contexts. Figures for the numbers, trends, and proportions of FG students vary, depending on the definition of *first generation*, the type of institution (e.g., community college, 4-year college, large state university, or for-profit), and the year that data were collected. FG college students comprise more than 54% of undergraduates and are applying to college at twice the rate of continuing-generation (CG) students (FirstGen Forward, 2022). Institutions must be ready to adapt to support FG students' academic achievement and economic mobility. According to professionals at RTI International (2023), investing in the success of FG students strengthens not only their individual lives and outcomes but also those of our nation.

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Helping First Generation College Students Succeed: Psychology-Backed Strategies for Campus and Classroom, N. Moinolmolki, R. Dutta, J. L. Mize, A. I. Ramos Núñez, S. N. Cervantes, and H. R. Searight (Editors)

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This edited volume is intended to serve as an evidence-based, psychology-informed toolkit of strategies and activities for faculty and administrators across varied institutions and disciplines to better foster the successful integration of FG students. We reimagine a higher education landscape where institutions move beyond deficit-based assumptions of engagement with FG students, which often cast them as largely “underprepared” and in need of remediation (Ives & Castillo-Montoya, 2020). Too often, FG students are depicted only in terms of their challenges, such as lacking financial resources, social capital, or familiarity with academic norms (LeBouef & Dworkin, 2021). Such narratives risk reinforcing inequities while overlooking the assets that many FG students bring with them, such as drive, motivation, resilience, autonomy, adaptability, practical knowledge, and community-orientedness (Strayhorn, 2006). Instead, this volume envisions a landscape that acknowledges disadvantages and inequities for FG students, while at the same time promoting strengths-based and institutionally responsive approaches.

Now more than ever, it is critical to shift the focus from *college readiness*, which places the burden of adaptation on students, to *student readiness* (McNair et al., 2022), which challenges institutions to align practices, policies, and pedagogies with the identities, strengths, and cultural wealth of the students they serve. This book underscores the strengths of FG students and explores how structural barriers and institutional practices could be redefined or made more explicit to facilitate FG student engagement and foster more equitable outcomes. This vision was what motivated this project, shaped by the collective work of colleagues committed to translating values of equity and inclusion into concrete action.

This project started to take shape in February 2022, when three of the editors of this book (Mize, Dutta, and Moinolmolki) served on the Presidential Task Force on the Integration of Diversity, Equity, and Inclusion (DEI) and International Initiatives Across STP (Society for the Teaching of Psychology; American Psychological Association [APA] Division 2) and were charged with advancing accessibility in psychology. In line with this mission, the STP DEI Task Force identified FG students as a critical group to highlight. These students come from diverse racial, ethnic, linguistic, socioeconomic, and cultural backgrounds and face shared challenges in navigating unfamiliar educational systems. Often without clear roadmaps, mentors, or generational guidance, they must navigate higher education largely on their own. They demonstrate remarkable determination, persistence, and resilience in pursuing opportunities for themselves, their families, and their communities.

Members of the STP DEI Task Force grew from three of this volume’s editors to include others, and we decided to pursue a twofold strategic mission

in 2022. First, we designed and disseminated (via snowball sampling) an online survey to assess higher educators' perceptions of and experiences with teaching and mentoring FG college students. In total, we recruited 102 participants, with approximately 62% serving at teaching institutions and 83% employed full-time (Herrmann et al., 2022). Concurrently, we invited proposals for chapters that showcased activities or programs for FG students on campuses for which the authors could provide qualitative or quantitative evidence that they had made a successful impact. The response to our call was encouraging, with countless contributors providing impactful evidence, candid reflections on barriers, and practical takeaways. As briefly summarized later in this Introduction, the chapters in this book reflect these efforts, offering a compendium of best practices designed to guide faculty, advisors, and administrators across diverse institutions. This work was made possible through the leadership of STP, the support of APA Division 2, and the encouragement of colleagues at APA Publishing who helped bring this vision to fruition.

In this Introduction, we will first provide an overview of the state of FG students today and then discuss definitional issues related to FG status, highlight FG students' strengths as well as intersectional diversity, and present data from our 2022 survey (Herrmann et al., 2022) on the awareness and perceptions of instructors in higher education. As psychologists, we frame our Introduction through an ecological lens, drawing on social, developmental, organizational, and cognitive psychology perspectives as well as constructs such as social integration, identity development, and cultural and social capital frameworks.

THE CHANGING LANDSCAPE OF FIRST-GENERATION STUDENT ENROLLMENT

Higher education in the United States is under increasing scrutiny on multiple fronts: affordability, public trust, curricular and academic freedom, DEI initiatives, the return on investment (ROI) of tuition, the sustainability of current models amid demographic declines in the college-age population (termed the *demographic storm/cliff*; Grawe, 2018, 2021), and the uncertain impact of artificial intelligence. Each of these macrocultural influences affects individuals of lower socioeconomic status differently. For example, the oncoming demographic cliff has prompted universities to compete for underrecruited youths, typically FG students; and while debates on ROI continue, the need for technological skills and college education is dictated by business economics. Against this tumultuous backdrop, the number of FG student applicants

(variably defined, depending on the source) has continued to rise, particularly in access-oriented institutions like 2-year and 4-year colleges and regional universities (FirstGen Forward, 2022). Applications from this group increased by 67% in 2023—nearly twice the rate of CG peers (Heseung Kim et al., 2023). More recent Common App data (Hughes et al., 2025) indicated that as of August 1, 2025, FG applications rose an additional 14% compared with the previous year, versus a 1% increase for CG students. Most of this college application surge from 2024 to 2025 was among underrepresented applicants (Hudson, 2025).

This demographic shift presents both a significant opportunity and a profound challenge for higher education. Although access has expanded, stark inequities persist in retention, graduation, and long-term outcomes (Redford & Hoyer, 2017). FG students continue to succeed at significantly lower rates than their CG peers and often report lower educational aspirations, academic achievement, and social capital (Kim & Park, 2025). These disparities are often not rooted in individual deficits but in systemic barriers, including financial precarity, institutional cultures that privilege middle-class norms, and academic structures that fail to respond to diverse identities and lived experiences (Jaschik, 2014; Stephens et al., 2012). In response to these inequities and the looming demographic cliff (Grawe, 2018, 2021), states have widened recruitment pipelines and are trying different ways to support student success. The Carnegie Classification of Institutions of Higher Education introduced a new “Opportunity Colleges and Universities” category in April 2025 to recognize campuses that provide higher-than-expected levels of access and postgraduation earnings for largely FG populations compared to their counterparts (Palmer, 2025).

Many FG students bring highly desirable skills like time management honed through early work experiences, interdependent values rooted in their communities that support team building and conflict management, and high levels of motivation and purpose. Postsecondary education can potentially amplify these strengths by fostering problem-solving, critical thinking, and a growth-oriented mindset. While a *fixed mindset* holds that academic skills are largely innate, a *growth mindset* holds that skills and talents can be developed through hard work, openness to feedback, and reflection on learning strategies (Dweck, 2016). All of these factors are essential for civic engagement, effective participation in the workforce, and culturally driven innovation (i.e., collective diversity-driven critical thinking with the end goal of benefiting communities and society as a whole; Pozzo et al., 2020). Indeed, educational attainment is strongly correlated with socioeconomic mobility, health, longevity, and overall well-being (Barakat & Konstantinidis, 2023).

By implementing evidence-informed practices that recognize the strengths of FG students and by creating clear and navigable pathways to their success, institutions can meaningfully reduce disparities between those with more advantage and those with less advantage. In doing so, they can support the success and flourishing of FG students while advancing equity and contributing to a healthier, more democratic, and socially resilient society.

Before we get into how institutions can promote mobility and equity with supportive policies, let us examine how the term *first-generation status* is defined. The definition of first-generation varies widely across federal agencies, institutions, and researchers, and these differences affect not only population estimates reported previously but also how programs are designed and which students are reached.

DEFINING FIRST-GENERATION STATUS: WHY IT MATTERS

The most widely accepted definition of *first-generation student* comes from the Higher Education Amendments Act of 1998: a student whose parents (or parent, if they live with only one caregiver) have not earned a bachelor's degree in the United States. This definition leaves important gaps. It does not differentiate between students whose parents had partial college education, whose parents earned diplomas or degrees abroad, or whose siblings or grandparents attended college. These subgroups often face different challenges and experience different outcomes, such as in persistence and completion, when compared with CG peers (Mowreader, 2024).

Other definitions of FG vary considerably. Depending on how they are defined, the number of FG students can vary by nearly 400,000 (Mowreader, 2024). The broadest definition includes students with at least one parent who has not earned or completed a bachelor's degree, whereas the narrowest includes those whose parents never attended college. The differences in definitions produce population estimates that range from 22% to 72% of enrolled students (Gable, 2021; Mowreader, 2024; Spiegler & Bednarek, 2013; Toutkoushian et al., 2018). The definition of the Higher Education Amendments Act of 1998 also exposes the income disparities in these subpopulations and changes who gets represented and their needs. When FG is defined as lacking two parents with bachelor's degrees, approximately half of these students fall into the low-income¹ category; when defined more strictly

¹The U.S. Bureau of Labor Statistics (2026) provided a median income equivalent to just under \$69,000 in 2025 (although with some missing data from the 2025 government shutdown), which would classify *low income* as earning less than \$46,000 a year.

(i.e., as having parents with no college attendance), nearly two-thirds of these students are from low-income households (Mowreader, 2024). These variations have major implications for institutional research and programming. Using the most common federal definition, 54% of undergraduates were classified as FG in 2020 (Common App, 2020). By contrast, Common App data for 2023 to 2024 identified 25.2% of first-year applicants as having parents with no college attendance, highlighting how parental degree-level criteria produce very different results (Heseung Kim et al., 2023, 2024).

Although FG students are a diverse group, more come from racial and ethnic backgrounds (54% non-White), are from low-income households (median income of \$49,500), identify as female (60% vs. 40% male), and have dependents (Hamilton, 2023; U.S. Department of Education, 2026). Twenty-eight percent of FG students are older than 30 years and may be parents, caregivers, or veterans, with limited time to study or engage with important cocurricular and extracurricular opportunities offered on campuses (FirstGen Forward, 2022; U.S. Department of Education, 2015). Each student brings distinct styles of processing information that interact in complex and multiplicative ways, shaping their experiences and influencing their success in college.

Definitional differences correspond with varying academic behaviors. For instance, students in stricter FG categories pass fewer Advanced Placement exams and submit fewer college applications (Mowreader, 2024). In a study by Dixon-Román et al. (2013) of SAT scores and family income, African American students from lower-income backgrounds scored 30% lower than White students of comparable economic status. In short, how FG status is defined not only changes which students are counted but also shapes our understanding of their preparation, resources, and needs.

Educators themselves often remain uncertain about how FG status is determined. In our 2022 survey, 51% of faculty were unaware of whether their institution had a formal definition of FG status, 60% had a general sense of the percentage of FG students on their campus as reported by their institution, 31% knew of programs or services available for FG students, and only 17% reported asking students directly about their FG status (Herrmann et al., 2022).

THEORETICAL FRAMEWORKS AND INTERSECTIONAL PERSPECTIVES

This book situates FG students within a broader psychological and ecological framework. We recognize the immense diversity of FG students and that their experiences are shaped by intersecting dimensions of race, ethnicity, gender,

sexual diversity, socioeconomic status, immigration background, and caregiving responsibilities (Crenshaw, 1991; Gonzales, 2019; Museus, 2014). In our 2022 survey (Herrmann et al., 2022) conducted with faculty and administrators at different institutions, we found widely varying definitions of FG students.

Thus, we examine the impact of family and community contexts, alongside the interplay of wider sociocultural forces influencing personal identity, based on Ryan and Deci's (2017) self-determination theory and Bronfenbrenner's (1977) ecological systems theory. An intersectional lens highlights how multiple marginalized identities can compound barriers but also foster unique forms of resilience and resourcefulness. A one-size-fits-all approach to FG support risks erasing these complexities. Therefore, the chapters in this book explore shared experiences alongside the differentiated realities that shape FG populations.

Self-Determination Theory

Self-determination theory emphasizes three fundamental psychological needs—that is, autonomy, competence, and relatedness—that are essential for persistence and well-being (Deci et al., 1991). The term *relatedness* incorporates the synergy between autonomy and connectedness that often gets overlooked by those who misperceive autonomy as synonymous with independence. A person can feel autonomous even while receiving support from others, so long as they freely choose to do so (Ryan & Deci, 2017). Diverging from the historical path of their families, FG students pursuing higher education often need to reconcile autonomy with their interdependent cultural values, especially those coming from lower-income and minoritized backgrounds (Cornell & Searight, 2023). Students with these interdependent values may deemphasize personal identity with an alternative focus on the individual as inextricably embedded in a social network. This value perspective is in contrast with the independent self in which identity is based on individual attributes with a firm boundary around the individual (Harb & Smith, 2008).

FG students recognize the extrinsic rewards of education, such as upward mobility and economic advancement, an outcome expected by their families and defined as success by their communities. Focused on those, FG students may undervalue the importance of engaging in other growth-promoting activities, such as participating in student organizations and attending events on campus, with no direct outcomes but which promote scholarship and a sense of belonging. By helping students reflect on the internal motivations that led them to pursue goals for themselves as well as their relations, educators can

strengthen their intrinsic motivation while affirming the cultural ties and relationships they continue to value. Emphasizing this internal drive can also support FG students' identity as learners, a characteristic that can both shape their self-efficacy and sense of belonging on campus.

Because of their intersectional identities, many FG students come from collectivist cultures that value community relationships. Studies show that supporting the interdependence of FG students increases their information-seeking behaviors, resilience, and motivation (Chirkov et al., 2003). Rather than requiring FG students to distance themselves from their closest relationships, strengthening autonomy reinforces confidence in their decision making and ability to control outcomes by encouraging help-seeking behaviors and external supports (Garcia & Cuellar, 2023; Gutierrez-Serrano et al., 2023). Educators can further lean into the importance of relationships and thereby support FG students' sense of belonging, a critical factor in student persistence and academic success (Strayhorn, 2018). Cyclically and synergistically, increased autonomy and a stronger sense of belonging within the academic community leads to greater engagement (Nunn, 2021; E. C. Thomas et al., 2025). Many of the strategies highlighted in this book support the connections between students and faculty, thereby giving students meaningful choices, reinforcing self-control, and nurturing the personal goals that drive their pursuit of higher education.

Ecological Systems Theory

Bronfenbrenner's (1977, 1995) *ecological systems theory* provides a systemic lens for understanding the contexts shaping FG students. At the *microsystem* level (the innermost environmental factor influencing an individual's development), students' beliefs, resilience, and immediate relationships with family, peers, teachers, and advisors directly shape their pathways to higher education. Encouragement from high school teachers or supportive interactions with faculty and peers on campus strongly predict enrollment and retention (Lillis, 2011; Navarro & Tudge, 2023; Stephens et al., 2012; Tinto, 1999).

The communications and connections among microsystems, called the *mesosystem* (Bronfenbrenner, 1977), include collaboration between family members and academic advisors, faculty members inviting successful FG professionals to serve as role models in the classroom, and communication pathways across resource centers triggered to connect incoming FG students to needed supports. Such intentional and proactively thoughtful connections can integrate these students quickly into the campus community and help develop supportive relationships critical to persistence (Kitchen et al., 2018).

Per Bronfenbrenner (1977), at the *exosystem* level (environments that indirectly influence an individual's development), institutional practices such as faculty training on how to support FG students, institutional ties with local businesses to support internships or apprenticeships, and local foodbanks or programs that provide resources such as food pantries or lightly used professional clothing can effectively indirectly shape the entry, sustenance, and academic success of FG students. At the *macrosystem* level (Bronfenbrenner, 1977), supports encompass the broader political, economic, and cultural factors, including government policies and federally supported programs; examples include the Federal Trio Programs (TRIO) established under the Higher Education Act of 1965 and the Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) established in 1998, which expand opportunities for FG enrollment (U.S. Department of Education, n.d.). At the *chronosystem* level, which captures how life events, historical events, and societal experiences may influence one's development (Bronfenbrenner, 1995), technological advancements, rural–urban and cross-border migratory patterns, and other changes in the United States over the past 3 decades have led to increased access to higher education, which has contributed to greater socioeconomic mobility (Bronfenbrenner, 1995; Pike & Kuh, 2005). Given the changes that transpire in federal policies over time and have been happening more frequently in recent months, universities must establish dedicated programs and officers for FG students who can orchestrate state and federal resources to align with institutional initiatives. By critically examining their institutional supports through the lens of Bronfenbrenner's systemic framework, higher education institutions could facilitate belongingness in younger age groups (Allen et al., 2021).

Taken together, these frameworks underscore that FG student success depends not only on individual resilience but also on the alignment of institutional practices and sociocultural systems. The activities and strategies described in this book are designed to leverage ecological supports, promote self-determination, and recognize the cultural wealth FG students bring to higher education.

FIRST-GENERATION STUDENTS IN HIGHER EDUCATION: CHALLENGES AND HIDDEN HURDLES

Let us now focus on the challenges faced by FG college students so we can creatively think through and apply these theoretical perspectives to ameliorate some of them.

A Caveat

One of the central limitations of using a category such as *first-generation student* is that it is, in many respects, an artificial construct that obscures substantial variability within this population. This group involves students functioning at very high academic levels, including doctoral students who benefited from strong and academically rigorous high school preparation, as well as students who simultaneously belong to other marginalized groups defined by income level, race or ethnicity, and sexual or gender minority status. Additionally, although this chapter reviews research conducted with FG students, it is important to emphasize that observed differences between FG and CG students are probabilistic rather than deterministic. When examining dimensions such as mathematical preparation or collectivist value orientation, the range of individual variation is likely to be considerable. Accordingly, it is more accurate to state that certain characteristics are statistically more or less common among FG students rather than universally present. However, statistical means can obscure variability and range. There are numerous documented cases of FG students performing at exceptionally high levels, including at highly selective institutions (Gable, 2021). Factors associated with stronger academic performance in higher education include rigorous secondary school preparation and family support for educational attainment. At the same time, there is justifiable concern that categorizing college students as first generation may contribute to stigma, self-handicapping behaviors, and stereotype threat, which in turn are likely to be associated with lower levels of academic performance (Robinson & McKendree, 2025).

Socioeconomic Barriers and Social Integration

Although institutions have made strides in opening doors to FG students (Hudson, 2025), they need to do more to provide the sustained support necessary for academic persistence and degree completion. Currently, FG students risk attrition and lower graduation rates compared with their CG peers. For example, only 24% of FG students graduate within 6 years compared to 59% of CG students (RTI International, 2024). According to data on students who apply through the Common App, FG students are more than twice as likely to leave college after their first year of enrollment (13% vs. 5%; Nolan et al., 2025). Ten years after completing their sophomore year in high school, just 20% of FG students earned a bachelor's degree compared with 42% of CG students (Redford & Hoyer, 2017).

A major barrier to deeper engagement, particularly outside of class, is that most FG students are from lower socioeconomic households. They shoulder

the responsibility of family finances, work longer hours per week, and typically avoid residential living because it costs more or is far away, instead choosing a college within commuting distance to work and family (Soria & Roberts, 2021). This limits their social integration into the university community and the sense of belonging that is so important for student success (Stephens et al., 2014). It also explains fewer credits completed during their second and third years of study (Goldrick-Rab et al., 2016; Pascarella et al., 2004).

Previous studies have indicated that students who participate in co-curricular activities are 58% more likely to continue beyond their first year at public institutions (Burke, 2019; Ezarik, 2024; N. S. Thomas et al., 2021). FG students are less likely to develop relationships within their campus community, through communication with their faculty or peers (Pike & Kuh, 2005; Soria & Roberts, 2021; Stebleton & Soria, 2012). They also are less likely to utilize campus resources or participate in internships, research, or student organizations on campus. Parents who have never been to college are often unable to see or point out the value of cocurricular and extracurricular activities beyond good grades. Thus, parental education remains a significant factor in academic persistence and graduation, even when other factors such as income are taken into account (Choy, 2001). FG students possess less *social capital*: the knowledge, resources, skills, and attitudes relevant to upward mobility through education gained from an individual's relational network (Bourdieu, 1986/2002; McCarron & Inkelas, 2006). Early evidence indicates that targeted interventions can impact FG students' appreciation for the significance of these activities and increase their confidence in developing new networks (Horowitz, 2019; Schwartz et al., 2018). Thus, campus community engagement, inside and outside the classroom, requires targeted interventions from institutions that foster belonging and engagement.

Navigating the Hidden Curriculum

Students with greater social capital are more likely to access the university's *hidden curriculum* (Gable, 2021; White & Lowenthal, 2011), which comprises the implicit norms and values governing higher education. Surveys show that FG students report lower confidence in their academic backgrounds, anticipate greater difficulties in their educational journey, and express more uncertainty about their capacity for long-term success, yet they are less likely to proactively seek assistance from faculty and university support services (Engle & Tinto, 2008; McCarron & Inkelas, 2006; White & Canning, 2023). For example, they may hesitate to request clarifications from faculty or assume office hours are not available to them. FG students are less likely to meet with

advisors, even though advising has been demonstrated to be critical for successful retention, with persistence rates being significantly impacted by each additional meeting of FG students with an advisor (Swecker et al., 2013).

One sample value that is prevalent, but not explicitly explained or articulated, in higher educational contexts is that of independent thought. Educated individuals typically occupy positions of power, and these values gradually pervade all aspects of functioning, including the socialization of children. They inculcate the value of self-direction and encourage independence in their children, while those in subordinate positions, such as working-class parents, socialize their children to value maintaining harmony, interdependence, and conformity (Tudge et al., 2000). Thus, FG students differ from CG students as they often enter the university with distinct cultural models of the self (Phillips et al., 2020; Taylor, 2024). Cornell and Searight (2023) found that CG students more often emphasize independence, whereas FG students identify more with a communal orientation and concern for the well-being of others. Their values include interdependence, social duty, and responsibility to others, which give meaning to their identity through social relationships (Baumrind, 1971, 1978; Levy et al., 1998; Triandis, 1995). They endorse these values of interdependence on standardized measures, particularly when from lower socioeconomic backgrounds (Cornell & Searight, 2023; Stephens et al., 2012). Thus, FG students from working-class backgrounds often find university assignments that stress independent thought culturally misaligned. They feel discomfort when asked to share personal experiences or opinions without clear guidelines, making such tasks more challenging than for CG students (Stephens et al., 2012). Faculty are in a position to help clarify the distinction between self-empowerment and independence. Validating FG students' decision-making abilities and stressing the significant role of building up networks, rather than breaking free from them, can help bridge the cultural misunderstanding between independence and autonomy. In fact, research has demonstrated that integrated social class identities are linked with better health, life satisfaction, well-being, and academic performance among FG students (Herrmann et al., 2021).

Impact of the Cultural Mismatch on Performance and Well-Being

The negative impact of a cultural mismatch between an individual and their context is clearly evident when persons with interdependent values are required to perform tasks independently. In these circumstances, those high in interdependence demonstrate heightened distress and poorer performance, with the reverse pattern observed for those high in personal independence

(Dittmann et al., 2020; Stephens et al., 2012). Rockwell and Kimel (2025) noted that FG students who endorsed stronger collectivist values showed higher depression and anxiety than CG students and other FG students who did not endorse collectivist values. Similarly, Stephens et al. (2012) noted that FG students performed worse than their CG peers when academic tasks were accompanied by messages depicting and further developing their own personal independence.

In keeping with the middle-class values held by academic leaders, Stephens et al. (2012) found that university mission statements often emphasize individual achievement, fulfillment, and even personal transformation more than interdependence with their community. Success in higher education may feel like a form of “cultural suicide” to FG students, requiring them to distance themselves from their upbringing (Tierney, 1999, p. 82). Even well-intentioned advice, such as limiting family contact during the first semester, reflects the assumption that reduced ties are necessary for academic achievement (Dunn, 2018).

CHANGING THE NARRATIVE TO FOCUS ON FIRST-GENERATION STUDENTS' STRENGTHS

FG students may be disadvantaged in navigating the hidden curriculum, university systems, or unwritten rules of campus life (e.g., how to approach a faculty member to address a perceived unfair test grade or how to seek advice about academic planning and career advising, optimizing the amount of financial aid received, and the idiosyncrasies of faculty members; Albright & Simmons, 2024). However, these barriers should not overshadow the assets FG students bring. Recognizing and building on these strengths allows institutions to shift from a deficit orientation to a strengths-based approach that benefits not only FG students but also the broader university community.

The independence highly emphasized in higher education can be balanced by weaving in messages of interdependence, which can be motivating for the academic success of FG students. Rather than framing higher education solely as individual transformation, emphasizing the value of a degree for uplifting one's family and community can be a powerful motivator for FG students (Stephens et al., 2012). For many cultural groups, family is not an obstacle but a source of strength. A commitment to family often cultivates a sense of duty accompanied by perseverance (Havlik et al., 2020). In racial and ethnic communities such as Asian and Hispanic American populations, familism is a central value. Although family members may not fully understand the

stressors of college life, they often serve as supportive listeners and provide the social-emotional grounding students need to persist when academic demands feel overwhelming (Rodriguez et al., 2021). In the workplace, as in all other organizations, people thrive when relationships are valued. From the mutual obligation of the employer with employees or between members of a team unit, the same principles that bolster the family can be leveraged for greater professional success.

Because employment is often a primary motivation for pursuing higher education, emphasizing collaboration may align more closely with FG students' value systems (Stephens et al., 2012). In today's information-based economy, where multinational companies dominate an interconnected world (Rotatori et al., 2021), employers consistently highlight the importance of interpersonal skills and the ability to work across differences. An interdependent university focus may therefore better prepare students for careers after graduation. For instance, a 2020 American Association of Colleges and Universities employer survey found that teamwork and the capacity to apply knowledge in real-world contexts ranked among the top five desired outcomes of a college education (Finley, 2023). These findings underscore that FG students already bring valued collaborative strengths to both the university setting and the workplace.

Too often, research and university programs frame FG students through a deficit lens, overlooking the strengths and cultural wealth they contribute to higher education (Ives & Castillo-Montoya, 2020). Financial and family responsibilities facilitate the development of practical competencies such as financial management, child-rearing, home and automobile repair, and interpersonal conflict resolution in FG students. These can be translated into problem-solving skills in academic and professional settings (Smith & Lucena, 2016). For example, in engineering, Smith and Lucena documented how FG students excel in applied practica because of such "real-world" experience. Cognitive psychology research has repeatedly stressed the significant impact of concrete examples for more effective learning of abstract concepts (Ives & Castillo-Montoya, 2020). Micallef and Newton (2022) found that students exhibit easier transfer of learning to new situations with more real-world examples. Sharing the diverse experiences of FG students could benefit all students in the learning environment as well as validate the lived experiences of FG students. This sharing can also support connections between peers and FG students' sense of belonging.

Taken together, these examples highlight that FG students contribute practical skills, interdependent values, and collaborative strengths. These align with the qualities employers and institutions desire, and higher education could explicitly recognize and build on these assets.

CREATING PROACTIVE AND INTENTIONAL UNIVERSITY PROGRAMS FOR FIRST-GENERATION STUDENTS

In addition to pursuing students with the skills and strengths that are inherent to FG students, institutions are increasingly dependent on FG students' access and success to fill seats and maintain enrollment numbers. According to FirstGen Forward (2022), more than 70% of U.S. universities and community colleges report having a program specific to FG students, with nearly 50% having a designated FG office. The primary goal of these programs is to improve student retention, such as the assembling of FG students into cohorts from the beginning of their college experience to foster their academic success. Many cohort-based programs include summer bridge initiatives and extended orientation programs that immediately precede the first semesters. There are even a small percentage of universities developing study-abroad programs for FG student cohorts (FirstGen Forward, 2022).

Many institutions have started to embrace learning community cohorts within and across courses to link students' living and learning environments, which has been found to improve grade point averages and increase retention (Ramsey et al., 2025). Many universities have also developed first-year experiences that highlight the differences in expectations from high school to college, to help students transition successfully. While these learning communities have a positive impact for all students, FG participants report greater engagement with their academics, peers, and faculty, both in the classroom and in cocurricular activities (Markle & Stelzriede, 2020). FG students who are part of a learning community are more likely to opt into living on campus than FG students who are not involved in a learning community, giving them greater exposure to campus activities and the benefit of interaction with savvier CG peers. Although most FG programs are created by administrative staff, typically within student affairs or student life offices, the most effective programs are led by faculty members who support the connection between FG students and faculty (Ballin et al., 2025).

CREATING PARTNERSHIPS BETWEEN FACULTY AND FIRST-GENERATION STUDENTS

Tinto's (1999) model of retention emphasizes the significance of a strong relationship with at least one faculty member as a major force for student persistence. Involving faculty, particularly those who were FG students themselves, has been demonstrated to have a significant impact (Ballin et al., 2025). However, very little training is provided or available to guide faculty on instructing FG students. In our survey (Herrmann et al., 2022), approximately

56% of faculty members reported never having professional training on teaching, advising, or engaging with FG students. For those who did, 46.5% said they were not compensated for such professional development, and 69% said there were no programs, nor did they know of any programs, for FG students at their university. In encountering FG students in the classroom and during office hours, faculty may overlook the significant impact they can have on these students' academic success if they do not know that the students are the first in their families to attend college. FG identity typically remains hidden for various reasons. In our survey, 31% of students said they rarely disclose that they are the first to go to college in their family, and 65% of faculty reported that they never or rarely ask students this question (Herrmann et al., 2022).

Besides supporting FG students' understanding of university norms, when faculty focus on and explicitly connect the lived experiences of FG students with the academic content in open, nonjudgmental classroom discussions, they increase their motivation for academic learning. Additionally, this approach of valuing diverse lived experiences leads to advancement of disciplines in ways that expand traditional knowledge, self-growth of the faculty and students, and ideas that nurture community development (Ives & Castillo-Montoya, 2020). Such open discussions between FG students and faculty members and university staff would prove beneficial as they normalize lower socioeconomic standing and make faculty and staff more relatable to those with less privilege. Stephens et al. (2015) showed the lasting effects of FG students' reflecting and sharing about how their social class background shaped their college experience. In brief speeches to incoming students, FG peers described the challenges and strengths rooted in family and community circumstances. This process normalized FG experiences, fostered belonging, and reframed barriers as shared and manageable, leading to stronger academic and social adaptation.

ADVANCING UNDERSTANDING OF FG STUDENTS AND A CALL FOR INSTITUTIONAL CHANGE

By examining FG student success at the intersection of theory, research, and practice, this edited volume advances with a twofold purpose: The first is to deepen the understanding of FG students' complex identities and living realities, reframing them as agents whose cultural and psychological resources enrich higher education. The second is to offer educators, administrators, and policymakers evidence-informed strategies to design environments attending to FG students that foster belonging, engagement, and long-term flourishing.

Supporting FG students must go beyond access or remediation. Higher education culture and practices need to be more equitable, inclusive, and responsive to the needs of incoming students. This is particularly important at this historical moment, when higher education is at a crossroads of declining enrollments, financial constraints, and skepticism about investment in it; such a transformation is vital for equity and the long-term viability of higher education for public good. FG college students bring valuable strengths to higher education. Their resilience, adaptability, and typically strong ties to family and community help them succeed in unfamiliar environments (Capannola & Johnson, 2022). By providing more explicit and clear communication about expectations in class and on campus, better support systems, and inclusive practices, colleges can build on these strengths and create a more welcoming and effective learning environment for all students.

The collection of chapters in this book differs from prior scholarship in that it integrates psychological frameworks with practical classroom and institution-level strategies. We offer a nuanced interdisciplinary perspective, capitalizing on FG students' lived experiences, cultural wealth, and self-perception and identity development during formative college years, to equip educators and advisors with concrete tools for change. In doing so, we hope to provide a road map for systemic change that helps transform institutions of higher education to be more accommodative of FG students, recognizing them as central contributors whose presence drives innovation, relevance, and vitality across the academy.

CHAPTER DESCRIPTIONS AND ORGANIZATIONAL STRUCTURE

The chapters in this volume bring together innovative, evidence-informed, strengths-based strategies to enhance FG students' academic success, motivated engagement, agency, and sense of belonging. Drawing on theoretical frameworks such as self-determination theory, Schlossberg's (1981) transition theory, and Yosso's (2005) community cultural wealth model, the chapters offer both theoretically broad and more narrowly targeted practical tools, reflective insights, and actionable approaches to empower educators, administrators, and policymakers. Collectively, they create an interdisciplinary mosaic of relational and humanizing strategies, empowered and grounded in honoring the complexity of FG students' lived experiences.

This book is organized into two complementary parts: "Strategies for Use in the Classroom" (Part I) and "Strategies for Use Beyond the Classroom" (Part II). The chapters in Part I embrace practices that create transformational

learning experiences, foster student agency, and reduce the perceived costs of higher education. For example, in Chapter 1, Napper et al. introduce a photovoice participatory action methodology intended to empower students to share their stories and become agents of change in their institutions. Chapters 2 through 6 explore strategies for nurturing autonomy, competence, relatedness, self-efficacy, and campus engagement. In Chapter 2, Frazier et al. present the Need-Supportive Classroom Checklist for online instructors to help cultivate a learning environment that fosters a sense of independence, aptitude, motivation, and ownership of learning. In Chapter 3, Goldman et al. introduce a use-change-value journal exercise to help students connect course content to their everyday lives. In Chapter 4, Robbins and Tran present CARING (Compassionate, Approachable, Relational, Invested, iNviting, and Growth-oriented), a pedagogical approach designed to foster a sense of self-efficacy and belonging in students. In Chapter 5, Pepper and Abreu demonstrate how a food justice service-learning project can foster student agency, critical consciousness, and community connection. In Chapter 6, Ardoin details ungrading strategies that leverage graduate students' funds of knowledge—including their identity, culture, and geography—to support ownership of learning.

The chapters in Part II examine ecological and institutional strategies that affirm FG students' identities and more holistically foster their sense of belonging. In Chapter 7, Olson and Sterk present the Culturally Responsive Faculty Advising Tool to help faculty advisors guide FG students through the college environment. In Chapter 8, Laiduc et al. present theme-based institutional strategies to affirm FG identities (e.g., advisory groups, targeted evidence). In Chapter 9, Stripe Portillo et al. offer 10 institutional interventions inspired by Schlossberg's (1981) transition theory to help FG students. In Chapter 10, Ruiz et al. present a cohort-based, Yosso-driven STEM community cultural wealth initiative model (Yosso, 2005) targeting the enhancement of FG student inclusion, sense of belonging, and academic success.

Additional interventions intended to foster belonging, community, and identity affirmation are presented in Chapters 11 through 15. In Chapter 11, Ellis and Simon-Cerejido present graduate program safe spaces that provide students the opportunity to use their cultural knowledge and lived experiences to successfully develop academically and prepare for graduate school. In Chapter 12, Smith and Henderson showcase the success of peer mentorship programs that pair first-year FG students of color with upper-level students to serve as sources of support throughout their first year of college. In Chapter 13, Ramirez et al. use targeted strategies to demystify the hidden curriculum (e.g., expectations that are not always apparent, such as finding professors'

office hours and making use of campus resources like tutoring) and help FG students navigate all the minutiae of college life. In Chapter 14, Daily and Hetherington showcase the implementation of an informal networking event, Coffee With a Professor, with the goal of helping FG students connect with both peers and faculty, staff, and administrators. Last, in Chapter 15, Pickering presents an FG-centered alumni panel series offering FG students the opportunity to hear and learn from role models. Together, these chapters illustrate how humanizing, culturally responsive, and holistic strategies can create meaningful support structures for FG students.

This edited volume provides online supplemental materials at the Resources tab of the book's website (<https://www.apa.org/pubs/books/helping-first-generation-college-students-succeed>) offering additional support for instructors, advisors, and campus-wide administrative personnel in carrying out the various activities described by the authors. Such activities include instructions for specific assignments, steps on how to set up and deliver courses and engage with students, suggestions for advisors on helping FG students navigate their college journey, and campus-wide recommendations such as family conferences, workshops, inspiring videos, and websites with FG faculty profiles. In addition, the authors describe general take-home messages in sections titled "Takeaways" at the end of each chapter, and they make suggestions on how to apply the tools, strategies, interventions, and supporting materials under the "Implementation Recommendations" sections to facilitate readers' quick search of content.

Spanning classroom practices, campus programming, and institutional interventions, this volume offers a comprehensive roadmap for supporting FG students' academic, social, and personal growth. Whether adopted partially, completely, or sequentially or selectively, the strategies empower educators, administrators, and institutions to transform higher education into a space where FG students not only access opportunities but also thrive academically, socially, and personally.

REFERENCES

- Albright, K., & Simmons, D., Jr. (2024). Unmasking the hidden curriculum: How it negatively impacts the one-shot model and first-generation lower-income students. *LOEX Conference Proceedings*, 44, 241–245. <https://commons.emich.edu/loexconf2024/44>
- Allen, K.-A., Fortune, K. C., & Arslan, G. (2021). Testing the social-ecological factors of school belonging in native-born, first-generation, and second-generation Australian students: A comparison study. *Social Psychology of Education*, 24(3), 835–856. <https://doi.org/10.1007/s11218-021-09634-x>

- Ballin, A., Gao, L., Diamond, M. R., & Costello, M. (2025). First gen mentoring first gen: How first-gen faculty and staff promote first-gen success. *Journal of College Student Retention: Research, Theory & Practice*. Advance online publication. <https://doi.org/10.1177/15210251251328343>
- Barakat, C., & Konstantinidis, T. (2023). A review of the relationship between socioeconomic status change and health. *International Journal of Environmental Research and Public Health*, 20(13), 6249. <https://doi.org/10.3390/ijerph20136249>
- Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology*, 4(1, Pt. 2), 1–103. <https://doi.org/10.1037/h0030372>
- Baumrind, D. (1978). Reciprocal rights and responsibilities in parent–child relations. *Journal of Social Issues*, 34(2), 179–196. <https://doi.org/10.1111/j.1540-4560.1978.tb01038.x>
- Bourdieu, P. (2002). The forms of capital. In N. W. Biggart (Ed.), *Readings in Economic Sociology* (pp. 280–291). Wiley. <https://doi.org/10.1002/9780470755679.ch15> (Original work published 1986)
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32(7), 513–531. <https://doi.org/10.1037/0003-066x.32.7.513>
- Bronfenbrenner, U. (1995). Developmental ecology through space and time: A future perspective. In P. Moen, G. H. Elder, Jr., & K. Lüscher (Eds.), *Examining lives in context: Perspectives on the ecology of human development* (pp. 619–664). American Psychological Association. <https://doi.org/10.1037/10176-018>
- Burke, A. (2019). Student retention models in higher education: A literature review. *College and University*, 94(2), 12–21. <https://www.proquest.com/scholarly-journals/student-retention-models-higher-education/docview/2232610556/se-2>
- Capannola, A. L., & Johnson, E. I. (2022). On being the first: The role of family in the experiences of first-generation college students. *Journal of Adolescent Research*, 37(1), 29–58. <https://doi.org/10.1177/0743558420979144>
- Chirkov, V., Ryan, R. M., Kim, Y., & Kaplan, U. (2003). Differentiating autonomy from individualism and independence: A self-determination theory perspective on internalization of cultural orientations and well-being. *Journal of Personality and Social Psychology*, 84(1), 97–110. <https://doi.org/10.1037/0022-3514.84.1.97>
- Choy, S. P. (2001). *Students whose parents did not go to college: Postsecondary access, persistence, and attainment* (NCES 2001-126). U.S. Department of Education, National Center for Education Statistics. <https://nces.ed.gov/pubs2001/2001126.pdf>
- Common App (Common Application). (2020). *End-of-year report 2020*. <https://www.commonapp.org/about/reports-and-insights>
- Cornell, A., & Searight, H. R. (2023). The challenges behind living a double life among first-generation university students: The clash between interdependent and independent identities. In P. Aloka & K. R. Mukuna (Eds.), *Handbook of research on coping mechanisms for first-year students transitioning to higher education* (pp. 142–159). IGI Global. <https://doi.org/10.4018/978-1-6684-6961-3.ch009>
- Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review*, 43(6), 1241–1299. <https://doi.org/10.2307/1229039>
- Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. M. (1991). Motivation and education: The self-determination perspective. *Educational psychologist*, 26(3–4), 325–346.

- Dittmann, A. G., Stephens, N. M., & Townsend, S. S. M. (2020). Achievement is not class-neutral: Working together benefits people from working-class contexts. *Journal of Personality and Social Psychology*, 119(3), 517–539. <https://doi.org/10.1037/pspa0000194>
- Dixon-Román, E. J., Everson, H. T., & McArdle, J. J. (2013). Race, poverty and SAT scores: Modeling the influences of family income on Black and White high school students' SAT performance. *Teachers College Record: The Voice of Scholarship in Education*, 115(4), 1–33. <https://doi.org/10.1177/016146811311500406>
- Dunn, C. (2018). The necessity of letting go: Encouraging independence in first-year college students. In J. Smith (Ed.), *Parenting emerging adults in higher education* (pp. 55–72). Routledge.
- Dweck, C. (2016). What having a “growth mindset” actually means. *Harvard Business Review*, 13(2), 2. <https://hbr.org/2016/01/what-having-a-growth-mindset-actually-means>
- Engle, J., & Tinto, V. (2008). *Moving beyond access: College success for low-income, first-generation students*. Pell Institute for the Study of Opportunity in Higher Education. <https://eric.ed.gov/?id=ED504448>
- Ezarik, M. (2024, December 10). Could campus activity involvement keep students enrolled? *Inside Higher Ed*. <https://www.insidehighered.com/news/student-success/college-experience/2024/12/10/could-campus-activity-involvement-keep-students>
- Finley, A. (2023). *The career-ready graduate: What employers say about the difference college makes*. Association of American Colleges and Universities. <https://www.aacu.org/research/the-career-ready-graduate-what-employers-say-about-the-difference-college-makes>
- FirstGen Forward. (2022). *FirstGen Forward: Identifying first-generation college students—Definitions, data, and data use* [Research brief]. <https://www.firstgenforward.org/landscape-analysis-identifying-first-generation-college-students-firstgen-forward>
- Gable, R. (2021). *The hidden curriculum: First generation students at legacy universities*. Princeton University Press.
- Garcia, G. A., & Cuellar, M. G. (2023). Advancing “intersectional servingness” in research, practice, and policy with Hispanic-serving institutions. *Aera Open*, 9. <https://doi.org/10.1177/23328584221148421>
- Goldrick-Rab, S., Kelchen, R., Harris, D. N., & Benson, J. (2016). Reducing income inequality in educational attainment: Experimental evidence on the impact of financial aid on college completion. *American Journal of Sociology*, 121(6), 1762–1817. <https://doi.org/10.1086/685442>
- Gonzales, S. M. (2019). *Applying an intersectional framework to the experiences of low-income, first-generation, sexual minority college students* [Doctoral dissertation, Bowling Green State University]. OhioLINK Electronic Theses and Dissertations Center. https://etd.ohiolink.edu/acprod/odb_etd/etd/r/1501/10?clear=10&p10_accession_num=bgsu1567442669851448
- Grawe, N. D. (2018). *Demographics and the demand for higher education*. Johns Hopkins University Press.
- Grawe, N. D. (2021). *The agile college: How institutions successfully navigate demographic changes*. Johns Hopkins University Press.
- Gutierrez-Serrano, G., Romo, L. F., & Chagolla, D. (2023). Latina first-generation college students' motivation to persist: An attribution theory and self-determination

- theory perspective. *Journal of Latinos and Education*, 22(5), 2164–2177. <https://doi.org/10.1080/15348431.2022.2096611>
- Hamilton, I. (2023, June 13). 56% of all undergraduates are first-generation college students. *Forbes Advisor*. <https://www.forbes.com/advisor/education/online-colleges/first-generation-college-students-by-state/>
- Harb, C., & Smith, P. B. (2008). Self-construals across cultures: Beyond independence—interdependence. *Journal of Cross-Cultural Psychology*, 39(2), 178–197. <https://doi.org/10.1177/0022022107313861>
- Havlik, S., Pulliam, N., Malott, K., & Steen, S. (2020). Strengths and struggles: First-generation college-goers persisting at one predominantly White institution. *Journal of College Student Retention: Research, Theory & Practice*, 22(1), 118–140. <https://doi.org/10.1177/1521025117724551>
- Herrmann, S. D., Hansen-Brown, A., Dutta, R., Searight, H. R., Cervantes, S. N., Moinolmolki, N., Ramos-Núñez, A. I., & Mize, J. L. (2022). *Higher education instructors' perceptions of and practices with first-generation college students* [Unpublished raw data]. Albertus Magnus College Department of Psychology.
- Herrmann, S. D., Varnum, M. E. W., Straka, B. C., & Gaither, S. E. (2021). Social class identity integration and success for first-generation college students: Antecedents, mechanisms, and generalizability. *Self and Identity*, 21(5), 553–587. <https://doi.org/10.1080/15298868.2021.1924251>
- Heseung Kim, B., Armstrong, E., Freeman, M., Hughes, R., Kajikawa, T., & Nolan, S. (2024, April 4). *First-generation status in context. Part 3: Exploring the complexities of detailed parental education*. Common App. https://www.commonapp.org/files/23-24_Common-App-Brief-First-Generation-Part-3.pdf
- Heseung Kim, B., Armstrong, E., Freeman, M., & Kajikawa, T. (2023, November 15). *Deadline updates, 2023–2024: First-year application trends through November 1*. Common App. <https://www.commonapp.org/files/Common-App-Deadline-Updates-2023.11.01.pdf>
- Higher Education Act of 1965, Pub. L. No. 89-329, 79 Stat. 1219 (1965).
- Higher Education Amendments Act of 1998, Pub. L. No. 105-244, 112 Stat. 1581 (1998).
- Horowitz, G. (2019). *Teaching STEM to first generation college students: A guidebook for faculty & future faculty*. Information Age Publishing.
- Hudson, W. (2025, March 13). College application surge: Underrepresented students lead growth in 2024–25 admissions cycle. *Diverse: Issues in Higher Education*. <https://www.diverseeducation.com/students/article/15739839/college-application-surge-underrepresented-students-lead-growth-in-202425-admissions-cycle>
- Hughes, R., Armstrong, E., Freeman, M., Herring, W., Kajikawa, T., Heseung Kim, B., Nolan, S., & Park, Song. (2025, August 13). *First-year application trends: End-of-season report, 2024–2025*. Common App. https://www.commonapp.org/files/DAR/deadline-updates/Common-App-End-of-Season-Report_24-25.pdf
- Ives, J., & Castillo-Montoya, M. (2020). First-generation college students as academic learners: A systematic review. *Review of Educational Research*, 90(2), 139–178. <https://doi.org/10.3102/0034654319899707>
- Jaschik, S. (2014, January 26). The relationship between high school quality and student success in college. *Inside Higher Ed*. <https://www.insidehighered.com/news/2014/01/27/study-finds-impact-attending-poor-high-school-follows-one-college>

- Kim, A.-S., & Park, S. (2025). Bridging the gaps: Supporting first-generation college students' multifaceted needs. *International Journal of Educational Reform*, 34(1), 1–21. <https://doi.org/10.1177/10567879251355569>
- Kitchen, J. A., Sonnert, G., & Sadler, P. M. (2018). The impact of college- and university-run high school summer programs on students' end of high school STEM career aspirations. *Science Education*, 102(3), 529–547. <https://doi.org/10.1002/sce.21332>
- LeBouef, S., & Dworkin, J. (2021). First-generation college students and family support: A critical review of empirical research literature. *Education Sciences*, 11(6), 294. <https://doi.org/10.3390/educsci11060294>
- Levy, S. R., Stroessner, S. J., & Dweck, C. S. (1998). Stereotype formation and endorsement: The role of implicit theories. *Journal of Personality and Social Psychology*, 74(6), 1421–1436. <https://doi.org/10.1037/0022-3514.74.6.1421>
- Lillis, M. P. (2011). Faculty emotional intelligence and student–faculty interactions: Implications for student retention. *Journal of College Student Retention: Research, Theory & Practice*, 13(2), 155–178. <https://doi.org/10.2190/CS.13.2.b>
- Markle, G., & Stelzriede, D. D. (2020). Comparing first-generation students to continuing-generation students and the impact of a first-generation learning community. *Innovative Higher Education*, 45(4), 285–298. <https://doi.org/10.1007/s10755-020-09502-0>
- McCarron, G. P., & Inkelas, K. K. (2006). The gap between educational aspirations and attainment for first-generation college students and the role of parental involvement. *Journal of College Student Development*, 47(5), 534–549. <https://doi.org/10.1353/csd.2006.0059>
- McNair, T. B., Albertine, S., Cooper, M. A., McDonald, N., & Major, T. (2022). *Becoming a student-ready college: A new culture of leadership for student success* (2nd ed.). Jossey-Bass.
- Micallef, A., & Newton, P. M. (2022). The use of concrete examples enhances the learning of abstract concepts: A replication study. *Teaching of Psychology*, 51(1), 22–29. <https://doi.org/10.1177/00986283211058069>
- Mowreader, A. (2024, April 8). Common App analysis contrasts first-gen college applicants. *Inside Higher Ed*. <https://www.insidehighered.com/news/student-success/college-experience/2024/04/08/common-app-analysis-contrasts-first-gen-college>
- Museum, S. D. (2014). The culturally engaging campus environments (CECE) model: A new theory of success among racially diverse college student populations. In M. Paulsen (Ed.), *Higher education: Handbook of theory and research* (Vol. 29, pp. 189–227). Springer. https://doi.org/10.1007/978-94-017-8005-6_5
- Navarro, J. L., & Tudge, J. R. H. (2023). Technologizing Bronfenbrenner: Neo-ecological theory. *Current Psychology*, 42(22), 19338–19354. <https://doi.org/10.1007/s12144-022-02738-3>
- Nolan, S., Armstrong, E., Freeman, M., Herring, W., Hughes, R., Kajikawa, T., Heseung Kim, B., & Park, S. (2025, October 2). *First-generation status in context. Part 4: Enrollment, persistence, and completion by first-generation status* [Research Brief]. <https://www.commonapp.org/about/reports-and-insights/first-generation-status-part-four>

- Nunn, L. M. (2021). *College belonging: How first-year and first-generation students navigate campus life*. Rutgers University Press.
- Palmer, K. (2025, April 24). New Carnegie Classification focuses on student success. *Inside Higher Ed*. <https://www.insidehighered.com/news/students/careers/2025/04/24/new-carnegie-classification-focuses-student-success>
- Pascarella, E. T., Pierson, C. T., Wolniak, G. C., & Terenzini, P. T. (2004). First-generation college students: Additional evidence on college experiences and outcomes. *Journal of Higher Education*, 75(3), 249–284. <https://doi.org/10.1080/00221546.2004.11772256>
- Phillips, L. T., Stephens, N. M., Townsend, S. S. M., & Goudeau, S. (2020). Access is not enough: Cultural mismatch persists to limit first-generation students' opportunities for achievement throughout college. *Journal of Personality and Social Psychology*, 119(5), 1112–1131. <https://doi.org/10.1037/pspi0000234>
- Pike, G. R., & Kuh, G. D. (2005). First- and second-generation college students: A comparison of their engagement and intellectual development. *Journal of Higher Education*, 76(3), 276–300. <https://doi.org/10.1080/00221546.2005.11772283>
- Pozzo, R., Filippetti, A., Paolucci, M., & Virgili, V. (2020). What does cultural innovation stand for? Dimensions, processes, outcomes of a new innovation category. *Science and Public Policy*, 47(3), 425–433. <https://doi.org/10.1093/scipol/scaa023>
- Ramsey, L. R., Kling, T., & Yu, W. (2025). STEM linked-course communities can increase student success: Results from a randomized controlled trial. *Research in Higher Education*, 66, 28. <https://doi.org/10.1007/s11162-025-09846-6>
- Redford, J., & Hoyer, K. M. (2017). *First-generation and continuing-generation college students: A comparison of high school and postsecondary experiences*. Stats in Brief. NCES 2018-009. U.S. Department of Education, National Center for Education Statistics. <https://nces.ed.gov/pubs2018/2018009.pdf>
- Robinson, A., & McKendree, C. (2025). First-generation college students: Challenges and opportunities. In S. C. Malka & R. H. Tiell (Eds.), *One size doesn't fit all: Serving special populations, workforce challenges, service delivery and policy implications—Insight from practitioners and academics*. Emerald Publishing. <https://doi.org/10.1108/978-1-80592-333-620251002>
- Rockwell, D. M., & Kimel, S. Y. (2025). A systematic review of first-generation college students' mental health. *Journal of American College Health*, 73(2), 519–531. <https://doi.org/10.1080/07448481.2023.2225633>
- Rodriguez, S. L., Garbee, K., & Martínez-Podolsky, E. (2021). Coping with college obstacles: The complicated role of *familia* for first-generation Mexican American college students. *Journal of Hispanic Higher Education*, 20(1), 75–90. <https://doi.org/10.1177/1538192719835683>
- Rotatori, D., Lee, E. J., & Sleeva, S. (2021). The evolution of the workforce during the fourth industrial revolution. *Human Resource Development International*, 24(1), 92–103. <https://doi.org/10.1080/13678868.2020.1767453>
- RTI International. (2023). *First-generation college students in 2020: Demographic characteristics and postsecondary enrollment*. FirstGen Forward. <https://www.firstgenforward.org/our-insights/fact-sheets>
- RTI International. (2024). *First-generation college students' achievement and federal student loan repayment* [Fact sheet]. FirstGen Forward. <https://www.firstgenforward.org/our-insights/fact-sheets#fact-sheet-2024>

- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Press.
- Schlossberg, N. K. (1981). A model for analyzing human adaptation to transition. *The Counseling Psychologist*, 9(2), 2–18. <https://doi.org/10.1177/001100008100900202>
- Schwartz, S. E. O., Kanchewa, S. S., Rhodes, J. E., Gowdy, G., Stark, A. M., Horn, J. P., Parnes, M., & Spencer, R. (2018). “I’m having a little struggle with this, can you help me out?”: Examining impacts and processes of a social capital intervention for first-generation college students. *American Journal of Community Psychology*, 61(1–2), 166–178. <https://doi.org/10.1002/ajcp.12206>
- Smith, J. M., & Lucena, J. C. (2016). Invisible innovators: How low-income, first-generation students use their funds of knowledge to belong in engineering. *Engineering Studies*, 8(1), 1–26. <https://doi.org/10.1080/19378629.2016.1155593>
- Soria, K. M., & Roberts, B. J. (2021). The benefits of living on campus for low-income, first-generation students’ belonging, perceptions of campus climate, and resilience. *Journal of First-Generation Student Success*, 1(2), 111–126. <https://doi.org/10.1080/26906015.2021.1926373>
- Spiegler, T., & Bednarek, A. (2013). First-generation students: What we ask, what we know and what it means: An international review of the state of research. *International Studies in Sociology of Education*, 23(4), 318–337. <https://doi.org/10.1080/09620214.2013.815441>
- Stebbleton, M. J., & Soria, K. M. (2012). *Breaking down barriers: Academic obstacles of first-generation students at research universities*. *The Learning Assistance Review*, 17(2), 7–19. <https://hdl.handle.net/11299/150031>
- Stephens, N. M., Fryberg, S. A., Markus, H. R., Johnson, C. S., & Covarrubias, R. (2012). Unseen disadvantage: How American universities’ focus on independence undermines the academic performance of first-generation college students. *Journal of Personality and Social Psychology*, 102(6), 1178–1197. <https://doi.org/10.1037/a0027143>
- Stephens, N. M., Markus, H. R., & Phillips, L. T. (2014). Social class culture cycles: How three gateway contexts shape selves and fuel inequality. *Annual Review of Psychology*, 65, 611–634. <https://doi.org/10.1146/annurev-psych-010213-115143>
- Stephens, N. M., Townsend, S. S. M., Hamedani, M. G., Destin, M., & Manzo, V. (2015). A difference-education intervention equips first-generation college students to thrive in the face of stressful college situations. *Psychological Science*, 26(10), 1556–1566. <https://doi.org/10.1177/0956797615593501>
- Strayhorn, T. L. (2006). Factors influencing the academic achievement of first-generation college students. *NASPA Journal*, 43(4), 82–111. <https://doi.org/10.2202/1949-6605.1724>
- Strayhorn, T. L. (2018). *College students’ sense of belonging: A key to educational success for all students*. Routledge.
- Swecker, H. K., Fifolt, M., & Searby, L. (2013). Academic advising and first-generation college students: A quantitative study on student retention. *NACADA Journal*, 33(1), 46–53. <https://doi.org/10.12930/NACADA-13-192>
- Taylor, I. C. (2024). *Self-authorship among first-generation learners: A qualitative study* [Doctoral dissertation, Georgia Southern University]. Georgia Southern Commons. <https://digitalcommons.georgiasouthern.edu/etd/2730>
- Thomas, E. C., Brusilovskiy, E., O’Shea, A., & Salzer, M. S. (2025). Self-determination and self-efficacy as predictors of campus engagement among college students

- with serious mental illnesses. *Psychiatric Rehabilitation Journal*, 48(2), 99–105. <https://doi.org/10.1037/prj0000600>
- Thomas, N. S., Barr, P. B., Hottell, D. L., Adkins, A. E., & Dick, D. M. (2021). Longitudinal influence of behavioral health, emotional health, and student involvement on college student retention. *Journal of College Student Development*, 62(1), 2–18. <https://doi.org/10.1353/csd.2021.0001>
- Tierney, W. G. (1999). Models of minority college-going and retention: Cultural integrity versus cultural suicide. *Journal of Negro Education*, 68(1), 80–91. <https://doi.org/10.2307/2668211>
- Tinto, V. (1999). Taking retention seriously: Rethinking the first year of college. *NACADA Journal*, 19(2), 5–9. <https://doi.org/10.12930/0271-9517-19.2.5>
- Toutkoushian, R. K., Stollberg, R. A., & Slaton, K. A. (2018). Talking 'bout my generation: Defining “first-generation college students” in higher education research. *Teachers College Record*, 120(4), 1–38. <https://doi.org/10.1177/016146811812000407>
- Triandis, H. C. (1995). *Individualism & collectivism*. Westview Press.
- Tudge, J. R. H., Hogan, D. M., Snezhkova, I. A., Kulakova, N. N., & Etz, K. E. (2000). Parents' child-rearing values and beliefs in the United States and Russia: The impact of culture and social class. *Infant and Child Development*, 9(2), 105–121. [https://doi.org/10.1002/1522-7219\(200006\)9:2<105::AID-ICD222>3.0.CO;2-Y](https://doi.org/10.1002/1522-7219(200006)9:2<105::AID-ICD222>3.0.CO;2-Y)
- U.S. Bureau of Labor Statistics. (2026, February 20). *Labor force statistics from the current population survey* [Data set]. <https://www.bls.gov/cps/cpsaat39.htm>
- U.S. Department of Education. (n.d.). *An introduction to student service*. https://acf.gov/sites/default/files/documents/fysb/student_service_fact_sheet_20161003_508.pdf
- U.S. Department of Education. (2015). *Federal TRIO programs: Purpose, eligibility, and benefits*. <https://www2.ed.gov/about/offices/list/ope/trio/index.html>
- U.S. Department of Education. (2026). *Federal TRIO programs current-year low-income levels*. <https://www.ed.gov/grants-and-programs/grants-higher-education/federal-trio-programs/federal-trio-programs-current-year-low-income-levels>
- White, M., & Canning, E. A. (2023). Examining active help-seeking behavior in first-generation college students. *Social Psychology of Education: An International Journal*, 26, 1369–1390. <https://doi.org/10.1007/s11218-023-09794-y>
- White, M., & Lowenthal, P. R. (2011). Minority college students and the “hidden curriculum”: Implications for academic success. *College Teaching*, 59(4), 141–147. <https://doi.org/10.1080/87567555.2011.589165>
- Yosso, T. J. (2005). Whose culture has capital? A critical race theory discussion of community cultural wealth. *Race Ethnicity and Education*, 8(1), 69–91. <https://doi.org/10.1080/1361332052000341006>