

Major Influence:

Where Students Get Valued Advice
on What to Study in College

September 2017



Education Consumer Pulse

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Foreword

Maya Angelou told us:

“Do the best you can until you know better. Then when you know better, do better.”

We, at the Thurgood Marshall College Fund (TMCf), which supports the 300,000 students attending America's *publicly supported* historically black colleges and universities, believe Ms. Angelou's words are more important than ever because of the vastly different higher education landscape new students and their families now face. Many of us went to school with the best advice, albeit limited, our parents provided us, but things have changed. In today's world, college costs are significantly outpacing inflation (\$100,000 for a four-year public college degree and \$200,000 at private schools), student loan debt has surpassed \$1.3 trillion and fewer Americans believe a college degree is worth it. And for those who do graduate — sadly, just half ever complete the degree — a large number have serious regrets about their college experience. All of this is why Gallup and Strada's reports based on the Education Consumer Pulse, like this one, are such important and timely reports for all Americans, particularly those from fragile communities where poor education choices have lasting and negative generational impact.

In my work as the president and CEO of the TMCf, I've personally witnessed how first-generation families, many of whom are financially challenged, make poor college-related decisions due to being unfamiliar with the factors they should take into consideration. While the casual observer could simply dismiss the results of these poor decisions as “collateral damage,” the reality is that all Americans have a vested interest in ensuring that students and their families make well-informed, consumer-driven decisions about what is likely the most significant investment of time and money that they will have ever made.

I recently read a [story](#) from a high school counselor in Los Angeles who shared the experience of a star student, one who was eager to cure cancer, who told her that he planned to major in physics. While it is true that he could major in physics and go on to medical school, the far better route would probably be for him to major in one of the natural sciences (chemistry or biology) to prepare him to study medicine. Because this young man did not have exposure to mentors in the medical profession, he chose a major that he *thought* would put him on a path to a career in cancer research. Absent the counselor's intervention, the student might have wasted precious time — and money — in a field of study misaligned with his aspirations. Sadly, this is an all-too-familiar story.

But thanks to the Education Consumer Pulse, we now have unprecedented data — and practical insights — that validate both concerns and intuition. Students from affluent households receive consistent advice from informal social networks on what courses to take and majors to pursue. Unfortunately, for too many first-generation black and brown college enrollees, this critical resource is largely nonexistent; the report finds that these students are, not surprisingly, less likely to receive advice from family and friends. Compounding this “information divide” is the fact that this same group also reports receiving less guidance from school staff (like teachers and coaches) compared with their peers with higher levels of parental education. As it turns out, the very students who need — and *want* — this advice may be the least likely to have access to it.

From the moment a student begins considering higher education, they need support in decision-making — choosing the type of campus (large or small), understanding the true costs of attendance (tuition, fees, books, housing, travel and personal care costs), selecting a major (one for which the student is fully prepared and that will lead to a good job) and deciding how many courses to take in the first year to prevent academic overload and poor performance. All of these considerations and more require critical, in-depth research so we can help all students, particularly the most vulnerable, achieve their fullest potential.

Our communities will do better when they know better. With knowledge comes power. Strada Education Network and Gallup have advanced the understanding of the field with this report's findings. When parents, educators, policymakers, employers and community members understand where gaps exist, we improve the odds of creating tools, support and opportunities to develop both formal and informal systems to support the type of information-sharing these students need, want and deserve.

A handwritten signature in black ink, appearing to read "J.C. Taylor, Jr.", with a stylized, cursive script.

Johnny C. Taylor, Jr.
President and CEO
Thurgood Marshall College Fund

Preface

I was fortunate to have trusted people in my life who advised me on what to study in college based on my strengths and dreams. This report affirms just how critical these connections are and the gaps that exist for too many students today.

Choosing a college major is one of the most important decisions we make. It can influence everything from our employment and earning potential to our overall health and happiness. It is also the lifeblood of our economy, fueling the talent pipeline with the skills and knowledge employers need from the 21st-century workforce.

So how well does our current system support students in making this critical decision?

Earlier this year, we partnered with Gallup to launch the Education Consumer Pulse — a groundbreaking three-year survey that aims to create the largest-ever set of education consumer insights in the nation. Our initial findings, released in June, revealed that more than half of U.S. adults would change at least one of their educational decisions if they could do it again, including 36% who said they would change their major.

Our second report examines why so many people have second thoughts about their major by exploring where students get advice on what to study in college — and what guidance they find most valuable.

The results confirm an urgent need to improve how students are supported in this decision — in particular, how to elevate work-based sources of advice, which are the most valued but least used. This can be from direct experiences with employers and colleagues or exposure to trusted people working in different fields. The findings show this is especially true for first-generation, low-income and minority students who depend the most on sources of advice beyond their informal social network, but have the least access to these resources.

Strada Education Network is dedicated to improving lives by strengthening the pathways between education and employment. Everything we do is focused on helping students achieve what we call Completion With a Purpose® — not only completing their postsecondary education, but doing so with intention and purpose at every step along the path leading to a rewarding career and fulfilling life.

For us, Completion With a Purpose® starts here — with the advice students receive about what to study in college or in their postsecondary education and training. We view this report as a mandate to reinvent the way our system delivers valued guidance to all students, especially to those who depend on it the most.

At Strada Education Network, we are investing in innovative organizations and solutions that are working to address these gaps, including many that leverage technology as an equalizer in providing access to advising information. But we also know technology alone is not enough. These findings confirm it is the combination of technology and trusted people that will make the biggest difference for students.

We hope these consumer insights help inform and accelerate the growing efforts across education and workforce development to improve how we prepare students to make this critical decision. We all have a major influence — as parents, mentors, policymakers, employers, educators and innovators — on how well we perform this essential step on the path to ensure a thriving future for students, employers and our country.



William D. Hansen
President and CEO
Strada Education Network

Executive Summary

Students' chosen fields of study have important implications for their livelihoods, but little is known about how and why students choose their majors. Prior research suggests that personal interests, personality, career prospects, academic preparation and parental influence are important factors that shape what people choose to study. However, limited research exists on how exposure to social networks, advice and different work experiences affect a person's decision to pursue a given field of study, and how this exposure differs across groups of people.

This report explores one aspect of how individuals choose their field to study — which sources provide advice to students and how helpful students perceive that advice to be. The data are from Gallup and Strada's Education Consumer Pulse — a nationally representative, daily survey of 350 U.S. adults about their education experiences and perceptions.

The results demonstrate that education consumers received advice from a variety of people and places. The results also show that consumers view some sources — particularly sources encountered through work experiences or from experts — as more helpful than others. Consumers are also less likely to regret their choices if these work-based sources played a part in their decision-making.

The findings are based on 22,087 responses from U.S. residents who were asked to identify where they received advice about which major to pursue and then asked to rate the helpfulness of that advice. Responses were classified into 13 detailed categories and then combined into four broad categories:

Formal sources: Counselors (high school and college) and the media (internet and print). This group represents sources that are intentionally designed to provide guidance to students about their education choices.

Informal social network: Family, friends and community leaders. These sources represent an informal network of advice and information for students, but are not sources specifically designed to provide guidance to students about their education decisions.

Informal school-based: High school teachers, high school coaches, college faculty or miscellaneous staff. The preponderance of responses classified in this category include professors, faculty or other types of instructors not primarily in an advising role.

Informal work-based: Employers, coworkers, people with experience in the field and military. Informal work-based sources include experiences gained while working *and* advice from people who work in particular fields.

Key findings include:

- 1. Most people receive advice about their major from informal social network sources like family members and friends.** Fifty-five percent of adults name a friend, a family member or — in fewer cases — a community leader as a source of advice about their major.
- 2. Informal social networks have consistently been the most common source of advice for individuals, regardless of the decade during which they were enrolled.** Compared with older cohorts, recent cohorts have more frequently sought advice from work-based sources as well as college faculty and staff (nonadvisers) and are less likely to rely on formal sources of advice like college and high school counselors. Recent attendees have been increasingly likely to consult internet media for advice about their chosen field of study.
- 3. First-generation college students and students who are pursuing a two-year degree are less likely than others to get advice about their major from their informal social network.** A majority of education consumers with a parent who earned a bachelor's degree (60%) or graduate degree (65%) sought advice about their major through their informal social network. By comparison, those whose parents completed a high school diploma or less are far less likely to have received advice about their major from their informal social network (47%).
- 4. Older enrollees are more likely than younger enrollees to consult work-based sources of advice about their major.** Younger attendees, however, are more likely to have received advice about their chosen field of study from their informal social network.
- 5. Informal work-based sources of advice were rated most helpful, and those consumers mentioning them would be less likely to choose another major if they had to start again.** When asked to rate the helpfulness of each source of advice about their major, people rate informal work-based sources of advice as most helpful, whereas formal sources of advice are rated as the least helpful. Moreover, those who cite work-based sources of advice are also less likely to have second thoughts about their choice of major.
- 6. First-generation students are especially likely to rate advice about their major as helpful and rate advice from work-based sources as most helpful of all.** First-generation students, blacks and Hispanics rate all sources of advice highly, and most regard formal sources of advice as helpful. But, like other groups, they give the highest ratings to informal work-based sources.

These results have a number of implications:

- 1** The most commonly sought forms of advice about choosing a major are not always the most helpful. Put simply, the *most* valued sources of advice are the *least* used. As a result, this report offers insights to education leaders, career counselors and employers about ways traditional models of advice and support can be retooled to help students make better-informed decisions when choosing a field of study.
- 2** Work-based sources include advice from experts in a field (10%) and workplace experiences (9%). Thus, expanding students' exposure to these types of sources through a variety of experiential learning opportunities — vocational coursework, summer jobs programs, internships, apprenticeships or other workplace learning opportunities — could broaden students' exposure to careers. In turn, students with an expanded awareness of career opportunities — and who are cognizant of the skills required to succeed in them — can make more knowledgeable decisions about their chosen course of study.
- 3** Increasing access to work-based experiences could be particularly beneficial for first-generation, black and Hispanic students, who may have less access to professional guidance and expertise in their social networks, but regard advice from work-based sources as especially helpful.

Introduction

What people choose to study in the pursuit of postsecondary credentials shapes their employment opportunities and earning potential over the course of a lifetime. It is the basis for determining which career paths will be viable options for students upon graduation. And it is the basis by which the steepness of a career ladder is defined.

Despite its importance as the cornerstone of economic opportunity for each individual, what drives the decision to pursue one area of study over another is not well-understood. From personal interests and ambitions to academic preparation and perceptions about what careers actually entail, researchers believe all play a role to some extent.¹ To complicate matters further, people's perceptions about whether they made the "right" choice often hinge on matters as simple as the employment opportunities available at graduation or even the economic region a graduate inhabits.

Research on the topic is fuzzy and highly fragmented. Some suggest the decision-making process starts as early as middle school; others claim it is as spontaneous as seeing the right television commercial at the right time.² Everyone from parents and friends to coworkers, community leaders and third-party data providers can influence education consumers' decisions.³ Many studies only focus on the choices made behind a single academic discipline,⁴ and a good deal of research examines students in other countries' systems.⁵

Even where researchers and policymakers agree — such as the notion that good decision-making is driven by access to good data — the findings that do exist suggest that important factors in choice of study like expected salaries and beliefs about one's academic ability are sensitive to small adjustments.⁶ Minor adjustments to people's perceptions can potentially have an outsized impact on the choices they make about what to study.

These issues are not the only factors important to researchers and policymakers looking to help consumers make better choices. For example, many of the nation's postsecondary education institutions are selective in who they admit, which means that how people view their choices in hindsight is partially tied to where they were

1 Cabrera, A., & La Nasa, S. (Eds.). (2000). Understanding the college choice of disadvantaged students: New directions for institutional research, number 107, 27(3), 5-22. Retrieved from <http://www.wiley.com/WileyCDA/WileyTitle/productCd-078795439X.html>

2 Ibid.

3 Killam, W. K., & Degges-White, S. (Eds.). (2017). College student development: Applying theory to practice on the diverse campus. Retrieved from <http://www.springerpub.com/college-student-development.html>; Leppel, K., Williams, M. L., & Waldauer, C. (2001). The impact of parental occupation and socioeconomic status on choice of college major. *Journal of Family and Economic Issues*, 22(4), 373-394. Retrieved from <https://link.springer.com/article/10.1023%2FA%3A1012716828901?LI=true>

4 Calkins, L. N., & Welki, A. (2006). Factors that influence choice of major: Why some students never consider economics. *International Journal of Social Economics*, 33(8), 547-564. Retrieved from <https://doi.org/10.1108/03068290610678707>; Carnasciali, M., Thompson, A. E., & Thomas, T. J. (2013). Factors influencing students' choice of engineering major. Retrieved from <https://peer.asee.org/factors-influencing-students-choice-of-engineering-major>

5 Humburg, M. (2012). The effect of the big five personality traits on college major choice: Evidence from a Dutch longitudinal youth cohort study. Retrieved from <https://www.semanticscholar.org/paper/The-Effect-of-the-Big-Five-Personality-Traits-on-C-Humburg/01b9250d3e7a11c05def28cd6a63ad7d2cde0e99>; Hastings, J. S., Neilson, C., Ramirez, A., & Zimmerman, S. D. (2016). (Un)informed college and major choice: Evidence from linked survey and administrative data. *Economics of Education Review*, 51(C), 136-151. Retrieved from http://econpapers.repec.org/article/eeeecoedu/v_3a51_3ay_3a2016_3ai_3ac_3ap_3a136-151.htm; Bartolj, T., & Polanec, S. (2012). College major choice and ability: Why is general ability not enough? *Economics of Education Review*, 31(6), 996-1016. Retrieved from http://econpapers.repec.org/article/eeeecoedu/v_3a31_3ay_3a2012_3ai_3a6_3ap_3a996-1016.htm

6 Arcidiacono, P., Hotz, V. J., & Songman, K. (2010). Modeling college major choices using elicited measures of expectations and counterfactuals. The National Bureau of Economic Research. Retrieved from <http://www.nber.org/papers/w15729>; Wiswall, M., & Zafar, B. (2014). Determinants of college major choice: Identification using an information experiment. Federal Reserve Bank of New York Staff Reports. Retrieved from https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr500.pdf

able to study. More importantly, not every prospective student is afforded equal access to critical resources. Counselor-to-student ratios vary dramatically, and not every family has ready internet access.⁷

While many prospective students' family and friend networks have valuable experience with postsecondary training, many others do not.⁸

At the end of the day, the process of picking an area of study is deeply personal and marked by a great deal of inefficiency. A majority of education consumers end up changing their area of study after enrolling.⁹ One-third of college-educated adults report working in jobs that do not require college-level training,¹⁰ and more than one-third of all U.S. adults report having second thoughts about the course of study they pursued.¹¹

Figures like these translate into millions of additional study hours and billions of public and private dollars spent on unnecessary coursework, along with prolonged degree completion timelines.

Empowering the Consumer Voice in Education

To date, there have been no large-scale, systematic efforts to document the types of resources prospective students use, or value, when picking a course of study, primarily due to the difficulties with identifying and surveying a representative national sample.

The absence of findings along these lines is important on a number of policy fronts. Many high-profile reports in recent years have questioned why large percentages of academically qualified but “fragile” student populations are underrepresented in highly selective programs — a concept known as “undermatching.”¹² The federal government has invested heavily in recent years in the collection and dissemination of institutional and program-level data designed to improve consumers' ability to shop for training programs. In the U.S. alone, no less than half a dozen major publications — from *U.S. News & World Report* to *Forbes* to *Money* magazine to *The Economist* — provide annual rankings of colleges that drive institutional recruitment and fundraising strategies.¹³

- 7 The American School Counselor Association. Student-to-school-counselor ratio 2013-2014. (Shows average state-level counselor-to-student ratios based on data collected by the National Center for Education Statistics.) Retrieved from <https://www.schoolcounselor.org/asca/media/asca/home/Ratios13-14.pdf>; Johnson, J., & Rochkind, J. (2010). Can I get a little advice here? How an overstretched high school guidance system is undermining student's college aspirations. Retrieved from <http://www.publicagenda.org/files/can-i-get-a-little-advice-here.pdf>; Survey data from the Pew Research Center shows that Americans with lower education attainment levels and lower family incomes, as well as those who reside in rural vs. urban areas are all less likely to utilize the internet: Perrin, A., & Duggan, M. (2015). Americans' internet access: 2000-2015. Retrieved from <http://www.pewinternet.org/2015/06/26/americans-internet-access-2000-2015/>
- 8 While there is no precise definition of a first-generation student, data collected and reported by the National Center for Education Statistics (NCES) suggests that as of 2011-2012, approximately one-third of undergraduates were the first in their families to enroll in postsecondary education: U.S. Department of Education. Profile of undergraduate students: 2011-12. Retrieved from <https://nces.ed.gov/pubs2015/2015167.pdf>
- 9 Hershbein, B., Harris, B., & Kearney, M. (2014). Major decisions: Graduates' earnings growth and debt repayment. The Hamilton Project, Brookings Institution. Retrieved from http://www.hamiltonproject.org/assets/files/major_decisions_graduates_earnings_growth_debt_repayment.pdf; Eagan, K., Stolzenberg, E. B., Zimmerman, H. B., Aragon, M. C., Whang Sayson, H., & Rios-Aguilar, C. (2017). The American freshman: National norms fall 2016. Higher Education Research Institute, UCLA. Retrieved from <https://www.heri.ucla.edu/monographs/TheAmericanFreshman2016.pdf>; Cunningham, K., & Smothers, A. (2014). The effect of career cruising on the self-efficacy of students deciding on majors. *NACADA Journal*, 34(2), 16-25. Retrieved from <http://www.nacadajournal.org/doi/abs/10.12930/NACADA-13-033?code=ncaa-site>
- 10 Census data reported by the New York Federal Reserve show that the percentage of college graduates who report working in jobs where more than half of individuals do not hold a bachelor's degree is approximately 34% and has been fairly steady since the early 1990s: Federal Reserve Bank of New York. The labor market for recent college graduates. Retrieved from https://www.newyorkfed.org/research/college-labor-market/college-labor-market_underemployment_rates.html
- 11 Gallup and Strada Education Network. (2017). On second thought: U.S. adults reflect on their education decisions. Retrieved from <http://stradaeducation.gallup.com/reports/208535/gallup-strada-education-ecp-inaugural-report-2017.aspx>
- 12 Hoxby, C., & Avery, C. (2013). The missing “one-offs”: The hidden supply of high-achieving, low-income students. Brookings Papers on Economic Activity. Retrieved from https://www.brookings.edu/wp-content/uploads/2016/07/2013a_hoxby.pdf
- 13 Proper, E., & Caboni, T. (2014). Institutional advancement: What we know. New York, Palgrave Macmillan. Retrieved from <http://www.springer.com/cn/book/9781137379306>; Institute for Higher Education Policy. (2009). Impact of college rankings on institutional decision making: Four country case studies. Retrieved from <http://www.ihep.org/sites/default/files/uploads/docs/pubs/impactofcollegerankings.pdf>

This report — the second in a three-year series based on Gallup and Strada’s Education Consumer Pulse — explores the sources and helpfulness of advice received by education consumers when choosing a field of study. The Education Consumer Pulse (ECP) is a daily survey of approximately 350 U.S. adults that explores their education experiences and how those experiences relate to their careers and life goals. Between June 2016 and August 2017, the project has conducted interviews with 136,902 U.S. adults aged 18 to 65 currently living in the 50 states and the District of Columbia.

This report draws on the interviews collected between Jan. 2 and Aug. 13, 2017, and includes 22,087 responses from U.S. adults aged 18 to 65 who have either earned an *associate degree*, had *some college education but no degree* or earned a *bachelor’s degree*. The findings included in this report focus on the following questions:

From what resources or people did you get advice about the major or field you were going to study during your [degree program]?

How helpful was the advice you received from each source?

People’s responses about their sources of advice were organized into four broad categories:

Formal sources: Counselors (high school and college) and the media (internet and print). This group represents sources that are intentionally designed to provide guidance to students about their education choices.

Informal social network: Family, friends and community leaders. These sources represent an informal network of advice and information for students, but are not sources specifically designed to provide guidance to students about their education decisions.

Informal school-based: High school teachers, high school coaches, college faculty or miscellaneous staff. The preponderance of responses classified in this category include professors, faculty or other types of instructors not primarily in an advising role.

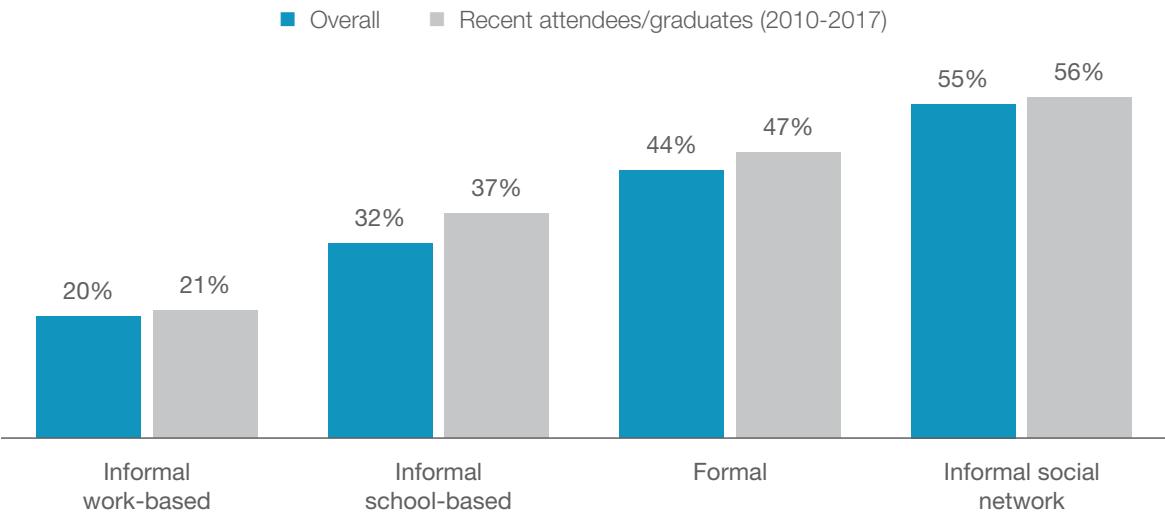
Informal work-based: Employers, coworkers, people with experience in the field and military. The informal work-based category includes experiences gained while working *and* advice from people who work in particular fields.

While the report uses these categories to streamline analysis, in many cases, the more detailed responses are reported to illuminate some insights.

The results highlight how education consumers seek advice from a wide variety of people and places, though the perceived helpfulness of that advice differs by its source and people’s experiences. The insights offered in this report suggest ways postsecondary leaders, policymakers, educators and employers can equip students to be better-informed when choosing a field of study by widening their exposure to different types of information and advice. Moreover, as this report demonstrates, restructuring existing models of support and advice could be particularly beneficial to the students who need it most.

Most people received advice about their major from their informal social network.

Percentage mentioning source of advice about major



When choosing a major field of study, individuals most commonly sought advice from their informal social network. In fact, more than half of adults (55%) with an associate degree, some college or a bachelor’s degree looked to their informal social network for advice about choosing a major field of study — most frequently from their friends (23%) and family (42%).

By comparison, 44% of individuals consulted *formal* sources of advice when selecting their major. These formal sources are those intentionally designed to provide guidance about majors, including college (28%) and high school (11%) counselors, as well as media-based information.

About a third of individuals (32%) also sought advice from other informal networks, including from within their school (32%) and their work-based network (20%). Guidance from these sources comes from individuals — such as college faculty and staff (18%) and people with experience in a field (10%) — who are not in roles specifically designed to provide advice about fields of study, but whose insight can provide valuable context about the prospects of particular courses of study.

Recent attendees are, generally speaking, no more or less likely to have received advice about choosing a field of study from these sources.

Percentage mentioning source of advice about major — disaggregated

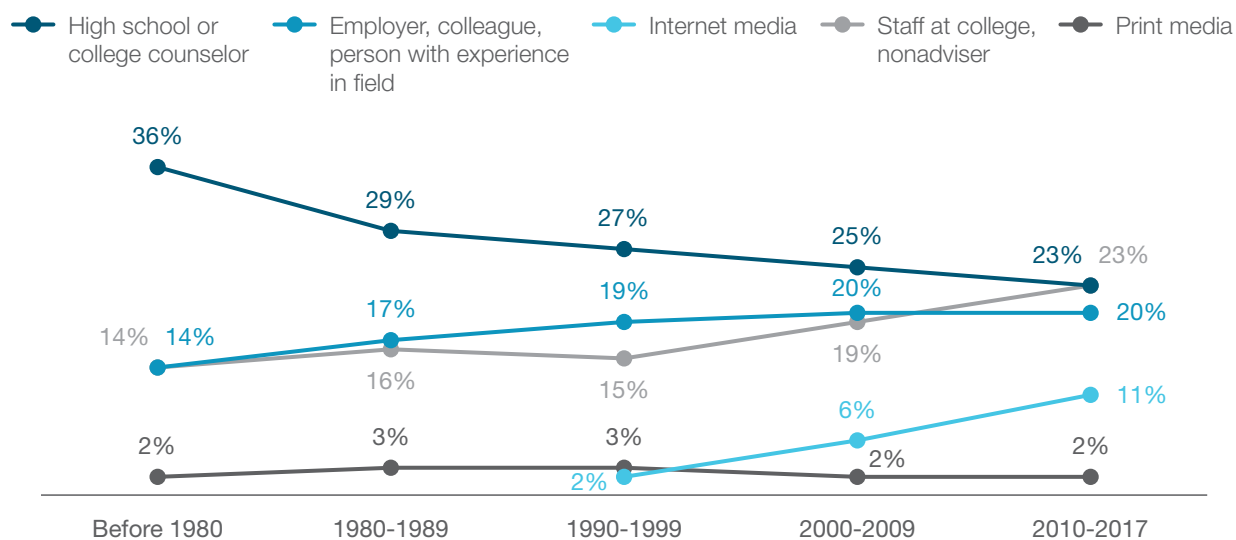
Informal social network	Formal	Informal school-based	Informal work-based
Family (42%)	College counselor (28%)	Staff at college, nonadviser (18%)	Person with experience in field (10%)
Friend (23%)	HS counselor (11%)	HS teacher (15%)	Employer or coworker (9%)
Community leader (1%)	Internet media (6%)	HS coach (1%)	Military (1%)
	Print media (2%)		

Though informal social networks have been the most common source across cohorts, the frequency of advice received from other sources has changed over time.

Informal social networks have consistently been the most common source of advice for individuals, regardless of the decade during which they were enrolled.

Other sources of advice, however, vary by when individuals received their education.¹⁴ Compared with older cohorts, recent cohorts have more frequently sought advice from work-based sources and college faculty and staff (nonadvisers), while also being less likely to rely on formal sources of advice like college and high school counselors. Though print media has not been a common source of advice for any cohort, more recent attendees have been increasingly likely to consult internet media for advice about selecting a field of study.

Source of advice, by decade of completion



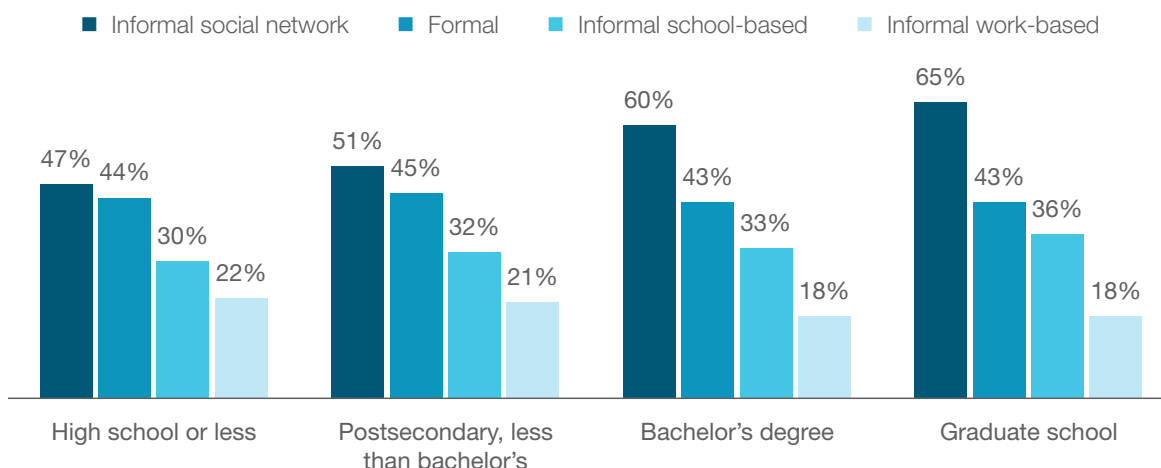
First-generation¹⁵ college students and students who are pursuing a two-year degree are much less likely to seek advice about their major from their informal social network.

Individuals whose parents have gone to college have the advantage of leveraging their parents' education experiences and are more likely to be exposed to other people who have gone to college. Not surprisingly, the majority of people with a parent holding a bachelor's degree (60%) or graduate degree (65%) sought advice about their major through their informal social network. By comparison, those whose parents completed a high school diploma or less are far less likely to have received advice about their major from their informal social network (47%).

¹⁴ The Great Recession does not appear to have directly influenced people's sources of advice about major — no source of advice saw a noticeable dip or spike during 2007-2009.

¹⁵ First-generation students are defined as individuals whose parents do not have a bachelor's degree.

Percentage mentioning source of advice, by parental education



Sources of Advice by Demographics

With respect to race, ethnicity and gender, there are a few small but notable differences in where people received advice about their major.

Blacks and whites are similarly likely to have sought advice about their major from their informal social network.

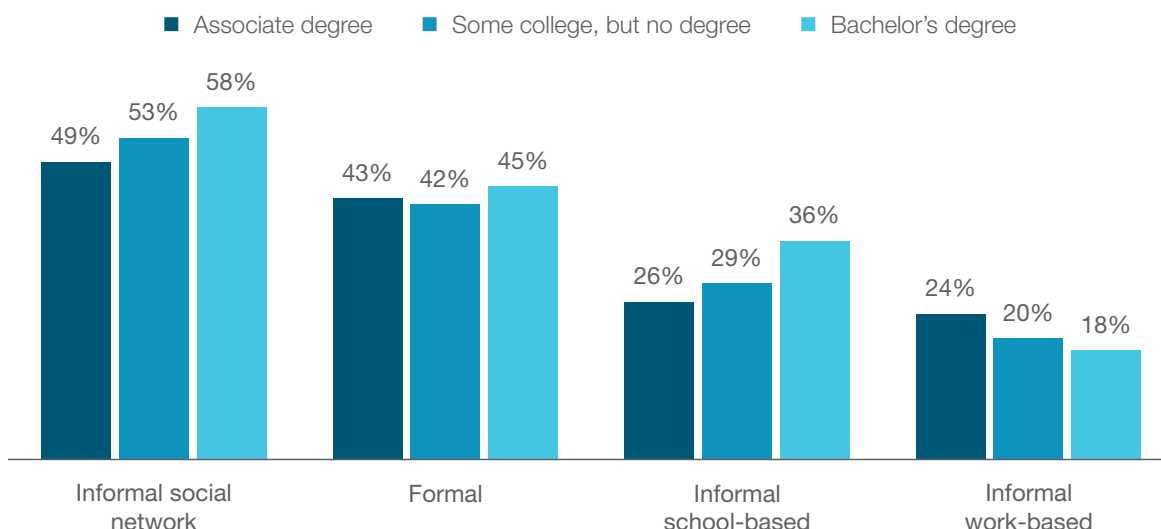
Asians are the most likely to mention their informal social network as a source of advice (65%), and Hispanics are the least likely (51%).

Black and Hispanic adults are the most likely to have received advice from formal sources (47% and 49%, respectively), and white adults are the least likely to have consulted formal sources (43%).

Women are more likely than men to consult formal sources of advice (47% vs. 41%, respectively) but slightly less likely to confer with their social network (53% vs. 56%).

Consistent with the findings on parental education, adults with a two-year degree less frequently received advice about their major from their informal social network than did adults with a four-year degree (49% vs. 58%, respectively). Associate degree holders are also less likely than bachelor's degree holders to have consulted their informal school network when selecting a field of study (26% vs. 36%, respectively). However, nearly a quarter of two-year degree completers consulted work-based sources of advice, compared with 18% of four-year degree holders.

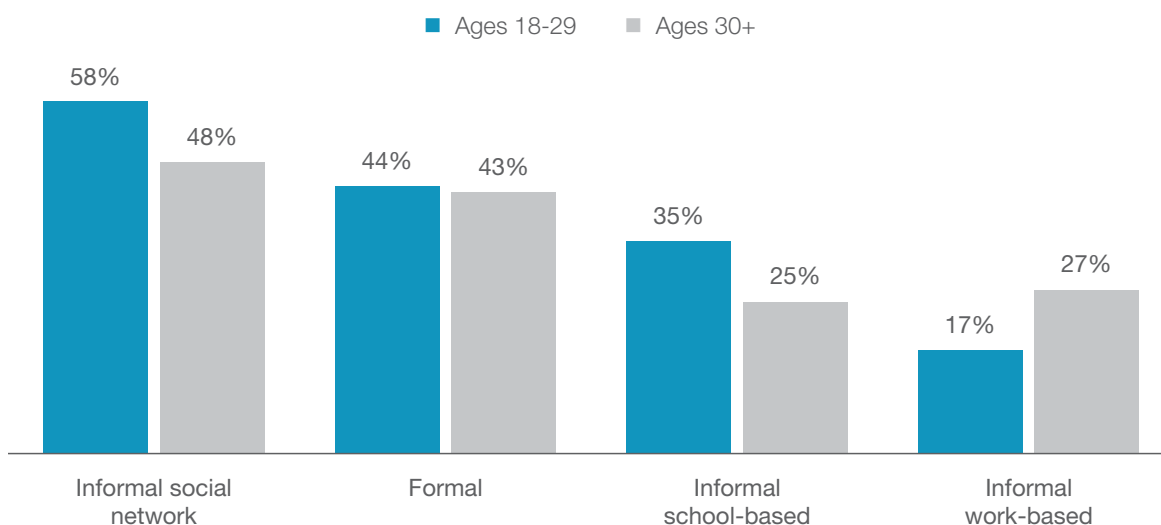
Percentage mentioning source of advice, by level of education



Older enrollees are more likely than younger enrollees to consult work-based sources of advice about their major and are less likely to have received advice from their social network.

Many returning adults — those aged 30 or older at the time of their attendance — consulted different sources of advice about choosing a field of study, compared with younger enrollees. Nearly three in 10 older attendees say they received advice about choosing a field of study from informal work-based sources compared with 17% of younger enrollees who say the same. These older attendees may be more likely than their younger counterparts to have returned to school to advance in their career. As such, they likely have more work experiences to draw from and know more experts in their field with whom they can consult about the best field of study to pursue.

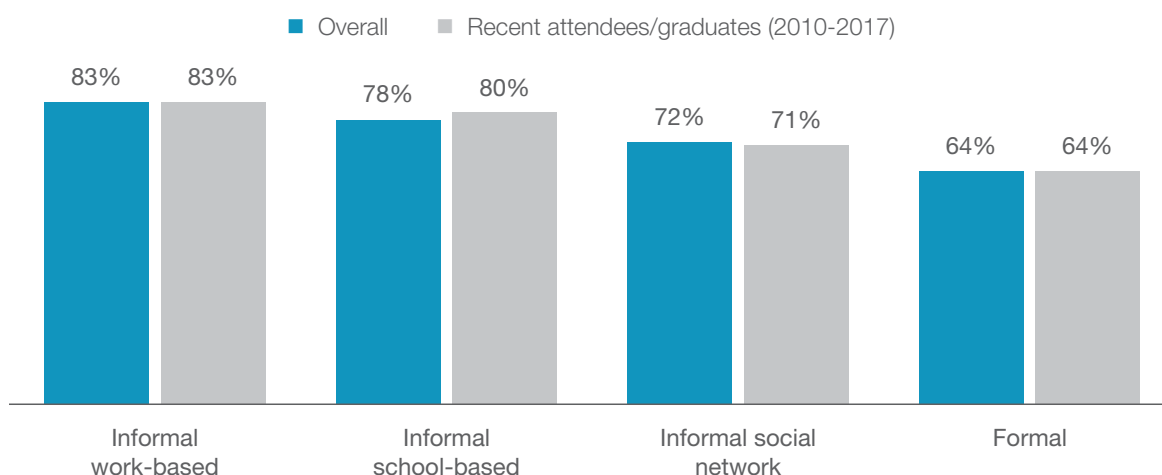
Percentage mentioning source of advice, by age of attendance



By comparison, younger attendees are more likely to have received advice about fields of study from their informal social network. Nearly six in 10 people who were under the age of 30 when they attended their program (58%) consulted their informal social network for advice about their major, compared with just under half of older enrollees (48%).

Informal work-based sources of advice are rated most helpful, and those mentioning them would be less likely to choose another major if they had to start again.

Percentage of adults rating source of advice about major as helpful or very helpful, by category



When it comes to choosing a field of study, the most helpful advice comes from work-based sources. Eighty-four percent of people rate advice they received from persons with experience in a field as helpful, and 82% rate advice from an employer or coworker as helpful. Advice from the military, though mentioned less frequently overall, is also rated as helpful by 81% of adults.

By comparison, people consider advice they received from formal sources about selecting a field of study to be relatively less helpful. While nearly two-thirds of individuals still rated advice from formal sources as helpful, the perceived value of advice from formal sources (64%) trails work-based sources (83%), informal school-based advice (78%) and guidance from an informal social network (72%).

The perceived quality of advice among the different formal sources is largely consistent. About two in three people rate the guidance they received from internet media (68%), print media (69%) and a college counselor (66%) to be helpful. Sixty-one percent of adults rated advice from a high school counselor — whose training is likely more focused on guidance other than helping students select majors — to be helpful. Compared with adults overall, recent attendees and graduates are similarly likely to perceive advice from each source as helpful.

Percentage saying source of advice about major helpful/very helpful — disaggregated

Informal social network	Formal	Informal school-based	Informal work-based
Community leader (84%)	Print media (69%)	Staff at college, nonadviser (79%)	Person with experience in field (84%)
Family (75%)	Internet media (68%)	HS coach (79%)	Employer or coworker (82%)
Friend (71%)	College counselor (66%)	HS teacher (78%)	Military (81%)
	HS counselor (61%)		

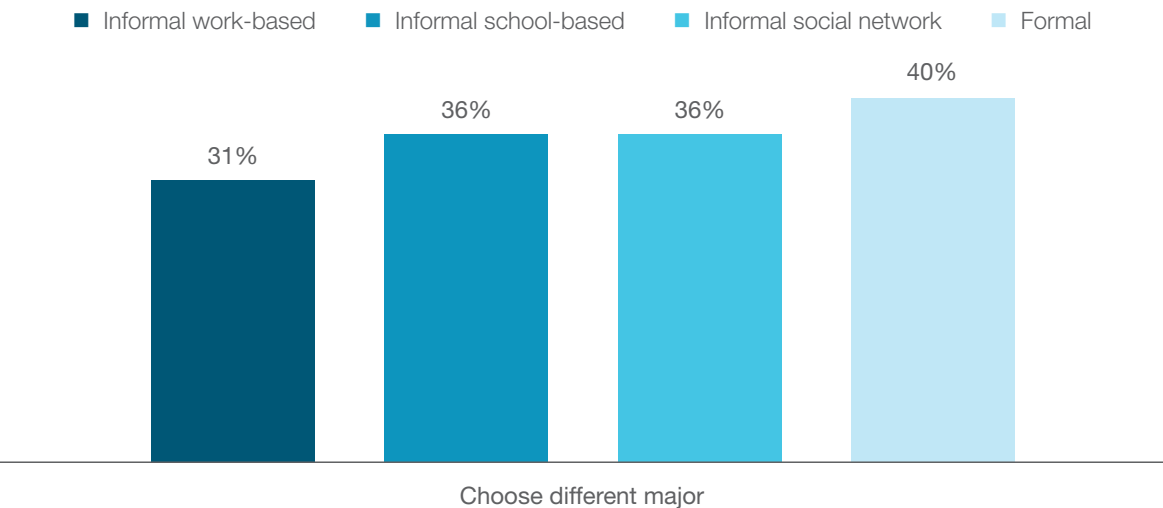
These patterns hold across levels of education. Among those with an associate degree, some college or a bachelor's degree, work-based sources are often rated as some of the most helpful. Meanwhile, for each level of education, counselors or media — two common sources of advice — are rated in the bottom three out of 16 categories of advice.

Most and least helpful sources of advice, by highest level of education

Highest level of education	Top three most helpful sources	Bottom three most helpful sources
Associate degree	• Community leader (92%) • HS coach (89%) • Employer or coworker/HS teacher/Person with experience in field (85%)	• Print media (71%) • Internet media (68%) • HS counselor (65%)
Some college, no degree	• Military (81%) • Person with experience in the field (80%) • Staff at college, nonadviser (77%)	• Friend (63%) • HS counselor (61%) • College counselor (59%)
Bachelor's degree	• Person with experience in field (85%) • Community leader (83%) • Military (81%)	• Internet/Print media (67%) • College counselor (65%) • HS counselor (59%)

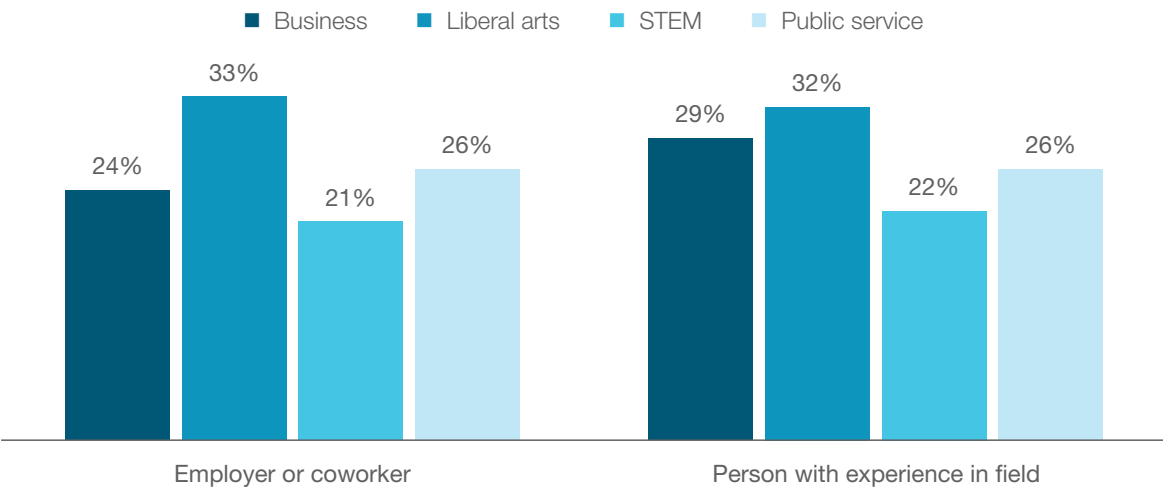
Compared with all other sources of advice, people who say they consulted work-based sources for advice about a field of study are less likely to have second thoughts about their choice of major (31%) than those relying on formal advice (40%), guidance from their informal social network (36%) or directions from informal school-based sources (36%).

Second thoughts about major, by source of advice about major



This is particularly true for STEM majors who received advice about selecting a field of study from employers, coworkers or someone with expertise in the field. Only about two in 10 STEM majors who received advice from these sources say they would choose another field of study if they had to do it all over again. Among people who studied other fields, however, those who consulted these sources are far more likely to say they would select a different field of study if they could begin again.

Second thoughts about major, by field of study



First-generation college students are especially likely to consider advice as helpful and rate advice from work-based sources as most helpful of all.

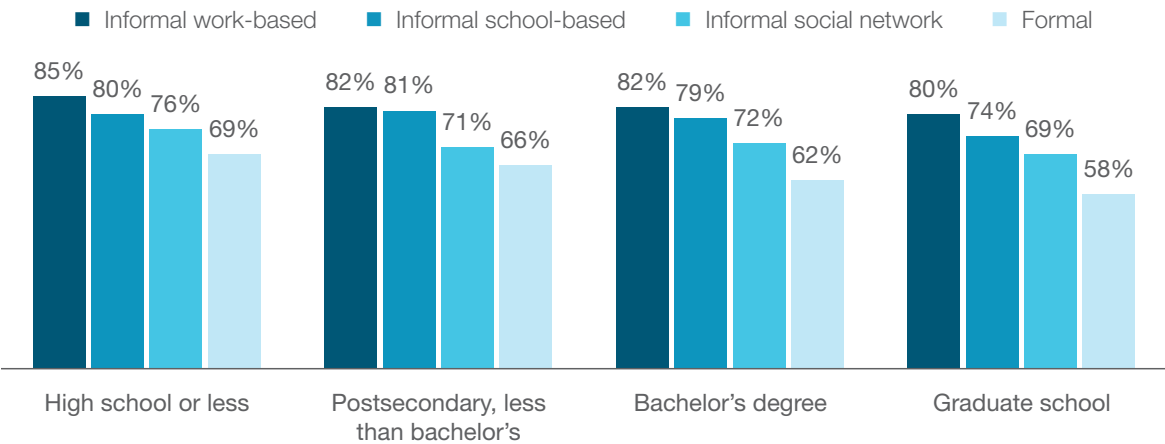
First-generation students are more likely than those with a parent who has a college degree to regard advice about their major from any source as helpful. This perhaps reflects the fact that their informal social networks may have less exposure or experience with postsecondary education. Regardless, first-generation students rate advice from work-based sources as particularly helpful. Slightly more than eight in 10 consider advice from

employers, coworkers or people with experience in a field as helpful — slightly higher than those with a parent who has a four-year degree.

First-generation students also rate advice from other sources more highly than do individuals with a parent who has at least a bachelor’s degree. In fact, about seven in 10 first-generation students consider the advice they received from formal sources as helpful — seven percentage points higher than people with a parent who holds a four-year degree.

Black and Hispanic students are more likely than white and Asian students to regard advice about their major as helpful. The gap is especially large for formal advice. Seventy-four percent of blacks and 69% of Hispanics rate guidance from formal sources as helpful, compared with just 62% of whites and 65% of Asians. All groups, except Hispanics, consider informal work-based sources of advice as most helpful.

Percentage of adults rating advice as helpful or very helpful, by parental education



Source of advice	White	Black	Asian	Hispanic
Informal work-based	83%	83%	82%	83%
Informal school-based	77%	81%	77%	83%
Informal social network	70%	77%	68%	77%
Formal	62%	74%	65%	69%

Helpfulness of Advice by Demographics

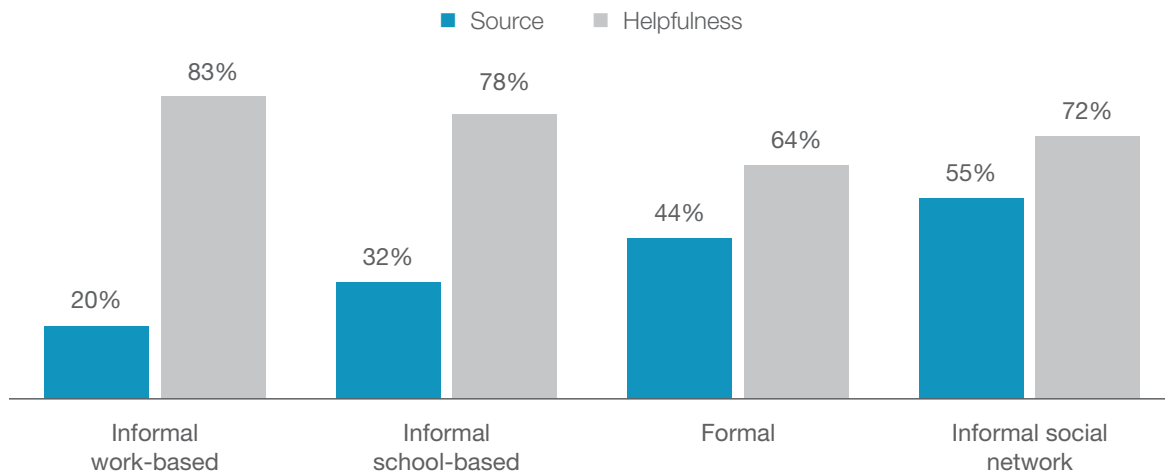
Though older attendees were more likely to have received advice about their major from work-based sources, they are no more likely than younger enrollees to rate that advice as helpful. In fact, younger and older attendees are about as likely to rate advice from each source as helpful.

The differences between men and women are muted. Women are six percentage points more likely than men to rate advice from formal sources as helpful, but the ratings for other sources of advice are within three points, with women being more likely than men to rate the sources as favorable.

Implications

A disconnect exists between the sources students most commonly consult for advice about selecting a field of study and the helpfulness of the advice they receive. In short, the *most* valued sources of advice — work-based — are the *least* used.

Advice about major: source and helpfulness



This misalignment suggests a need to improve the effectiveness of the current advising model. College and high school counselors are overburdened¹⁶ and underfunded,¹⁷ and their roles at institutions can vary widely.¹⁸ Additionally, as this report demonstrates, today's students are accessing information about their education in ways the traditional model of advising was not designed to support — including a stark rise in reliance on internet media for advice. Taken together, the challenges facing the formal channels of student guidance suggest that retooling the traditional model of advising to fit the changing needs of students could bolster its effectiveness.

Refining the traditional model of advising is particularly important to vulnerable student populations, like first-generation, black and Hispanic students. For example, compared with their peers from more educated families, first-generation students are less likely to be able to rely on their informal social networks for guidance in navigating postsecondary education, making an effective formal system of advising more critical to their success.

The findings of this report suggest that one possible improvement to the traditional advising model is increasing students' exposure to informal work-related experiences. Though only sought by a small number of individuals, those who consulted work-based sources rated the helpfulness of the advice they received among the highest from any source.

¹⁶ Johnson, J., & Rockkind, J. (2010). Can I get a little advice here? How an overstretched high school guidance system is undermining student's college aspirations. Retrieved from <http://www.publicagenda.org/files/can-i-get-a-little-advice-here.pdf>

¹⁷ CollegeBoard Advocacy & Policy Center. (2012). 2012 national survey of school counselors: True north: Charting the course to college and career readiness. Retrieved from http://www.civicerprises.net/MediaLibrary/Docs/2012_NOSCA_Report.pdf

¹⁸ Colbert, R. (2009). Teacher perceptions of the professional school counselor role: A national study. *Professional School Counseling*, 12(5), 324-332. Retrieved from <http://professionalschoolcounseling.org/doi/abs/10.5330/PSC.n.2010-12.324?code=asca-site>

This insight highlights the opportunity for education institutions and employers to support work-based learning. This is particularly important for first-generation, black and Hispanic students, who rely more heavily on formal sources of advice and tend to consider formal and work-based sources of advice to be more helpful than advice from their peers.

A variety of experiential learning opportunities — vocational coursework, summer jobs programs, internships, apprenticeships or other workplace learning opportunities — could broaden students' exposure to careers. In turn, students with an expanded awareness of career opportunities — and who are cognizant of the skills required to succeed in these careers — can be better-informed when choosing their course of study.

Methodology

Study Design

Results for the Education Consumer Pulse are based on telephone surveys conducted Jan. 2-Aug. 13, 2017, with a random sample of 22,087 respondents aged 18 to 65, living in all 50 U.S. states and the District of Columbia. The 1,923 responses for those with some college but no degree come from surveys conducted June 16-Aug. 13, 2017.

The Education Consumer Pulse sample includes national adults with a minimum quota of 70% cellphone respondents and 30% landline respondents, with additional minimum quotas by time zone within region. Landline and cellular telephone numbers are selected using RDD methods. Landline respondents are chosen at random within each household on the basis of which member will have the next birthday.

Interviews are conducted in English and Spanish. Samples are weighted to correct for unequal selection probability and nonresponse. The data are weighted to match national demographics of gender, age, race, Hispanic ethnicity, education and region. Demographic weighting targets are based on the most recent current population survey figures for the population aged 18-65 years with a U.S. bachelor's degree or higher level of education.

All reported margins of sampling error include the computed design effects for weighting.

For results based on 1,926 of those with some college, no degree, the margin of sampling error is ± 3.2 percentage points at the 95% confidence level.

For results based on 5,723 associate degree holders, the margin of sampling error is ± 1.8 percentage points at the 95% confidence level.

For results based on 14,438 bachelor's degree holders, the margin of sampling error is ± 1.2 percentage points at the 95% confidence level.

In addition to sampling error, question wording and practical difficulties in conducting surveys can introduce error or bias into the findings of public opinion polls.

Appendix

The table below shows how more detailed sources of advice about major were mapped into higher-level categories, as well as their prevalence and how they were rated.

APPENDIX TABLE 1. Share mentioning source and percentage saying source was helpful or very helpful

Source of advice	% Mentioned source	% Say source helpful/ very helpful	Source category
Family	42%	75%	Informal social network
College counselor	28%	66%	Formal
Friend	23%	71%	Informal social network
Staff at college, nonadviser	18%	79%	Informal school-based
High school teacher	15%	78%	Informal school-based
High school counselor	11%	61%	Formal
Person with experience in field	10%	84%	Informal work-based
Employer or coworker	9%	82%	Informal work-based
Internet media	6%	68%	Formal
Print media	2%	69%	Formal
Other	2%	77%	-
Don't know	2%	79%	-
Did not receive advice	2%	62%	-
Military	1%	81%	Informal work-based
Community leader	1%	84%	Informal social network
High school coach	1%	79%	Informal school-based

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