



A PROFILE OF 2013 ACT-TESTED
HIGH SCHOOL GRADUATES

College Choice Report

Part 1

Preferences
and Prospects

ACT[®]

ACT is an independent, nonprofit organization that provides assessment, research, information, and program management services in the broad areas of education and workforce development. Each year, we serve millions of people in high schools, colleges, professional associations, businesses, and government agencies, nationally and internationally. Though designed to meet a wide array of needs, all ACT programs and services have one guiding purpose—helping people achieve education and workplace success.

A copy of this report can be found at
www.act.org/collegechoice



ACT has measured the academic achievement of 11th- and 12th-grade students since 1959, their career aspirations since 1969, and their academic preparation in high school since 1985. Since 1992, and every three to five years thereafter, ACT has conducted the **ACT National Curriculum Survey**[®], in which we survey thousands of high school and college educators to pinpoint the knowledge and skills needed for first-year college coursework.

ACT is the only organization with decades of empirical information showing what happens to high school graduates once they get to college or to work and how they can maximize success—based on their preparation from kindergarten through high school. This unique information is an invaluable resource as ACT works closely with states, school districts, and postsecondary institutions to transform them into better-aligned P–16 education systems.

This *College Choice Report* is part of a report series that focuses on the ACT-tested high school graduating class of 2013. Other reports in this series are *The Condition of College & Career Readiness*, which highlights the academic readiness of high school graduates to enter college or career training, and *The Reality of College Readiness*, which highlights the relationships among readiness, college enrollment, and retention.

College Choice Report—Part 1

Preferences and Prospects

The focus of this year's *College Choice Report* is students' selection of a college major or program of study among the ACT-tested high school graduating class of 2013. This is an important topic for enrollment managers and admissions officers to consider, as students' choices of major have a number of implications for postsecondary institutions. For example, colleges can use information about students' choices of planned major in both anticipating the demand for and reallocating the supply of seats within and across individual programs of study at an institution. Colleges can also use information about students' choices of planned major to help them find programs of study that are a good fit with their interests, which in turn may help to increase student persistence rates and decrease the overall time to degree.

This year's report is provided in two parts.

- *College Choice Report—Part 1: Preferences and Prospects*
- *College Choice Report—Part 2: Enrollment Patterns*

Part 1 of this report covers such topics as students' choice of planned major, certainty of planned major choice, request for assistance with educational and occupational plans, Interest-Major Fit, best-fitting major, and selection of major as the most important factor in choosing a college. To serve as context for this report, *Part 1* also includes information about test taking among the graduating class of 2013 and information about the use of major or occupation as a search criterion when students are selected through ACT's Educational Opportunity Service (EOS). Key findings for *Part 1* and a set of recommendations are located on pages 20–21. An appendix with a full listing of planned college majors grouped into the 18 college major areas as collected on the registration form for the ACT® college readiness assessment appears on page 22.

In addition to the printed national report, we are providing interactive charts and maps online that allow you to view and compare information. This interactive format gives you an opportunity to customize and expand your view of the report content to better address your information needs. To view this content, go to www.act.org/collegechoice.

Part 2 of this report, to be released at the ACT Enrollment Planners Conference in July 2014, will focus on the college enrollment of these ACT-tested high school

graduates and address topics such as the consistency of college major choice between ACT registration and the first year of college, student persistence within majors between the first and second year of college, changes in Interest-Major Fit among students who changed majors, and the relationship between Interest-Major Fit and persistence.

How to Use This Report

This report builds on a foundation of knowledge about the academic readiness of the ACT-tested high school graduating class of 2013 as presented in *The Condition of College & Career Readiness* (www.act.org/readiness/2013). An important conclusion of the *Condition* report is that far too many high school graduates are not prepared for success in college and career as defined by their attainment of the ACT College Readiness Benchmarks. We encourage you to read through the *Condition* report to have a better context for interpreting the findings of this report.

More than half (54%) of the graduating class of 2013 took the ACT during high school. Whether you are searching for prospective students locally or in other parts of the country, a better understanding of the preferences and college choice behaviors of ACT-tested students can improve your marketing and recruitment strategies. The information presented in this report and in the accompanying online charts and maps can provide insights to inform discussions on your campus about the desired characteristics and locations of prospective students and your strategies for recruiting them. For those colleges that participate in EOS, the information provided in this report can help you to establish or refine your selection criteria to create more efficient student searches. Over time, this report can also serve as a guide to help you gauge the effectiveness of your search, marketing, and recruitment strategies.

Sources

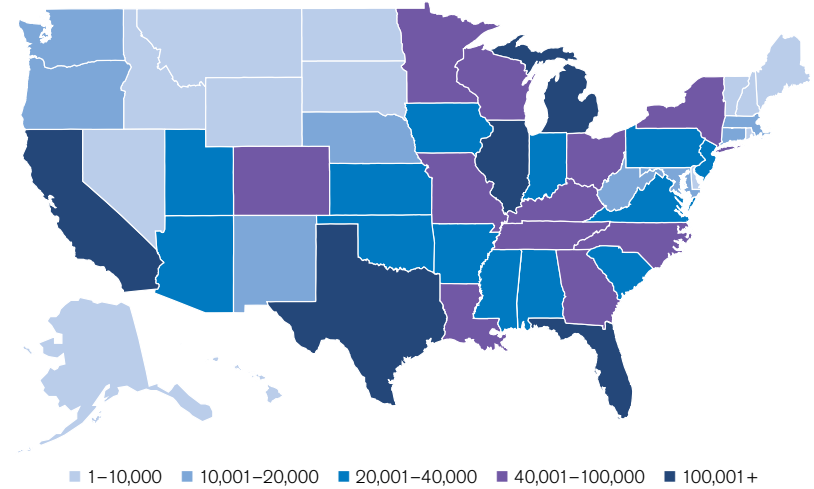
Unless otherwise noted, all information in this report comes from the ACT-tested high school graduating class of 2013. Information in this report—such as the students' background characteristics, grade level at time of testing, ACT scores, planned major, and participation in EOS—is collected when students register for and take the ACT.

Test Taking

Many high school students across the United States take the ACT in preparation for college.

- 1,799,243 students from the high school graduating class of 2013 took the ACT.
- Just over half (52%) of all ACT-tested high school graduates live in 9 states: CA, CO, FL, IL, MI, NC, OH, TN, and TX.
- Of the 9 states with the most ACT-tested high school graduates, 5 states (CO, IL, MI, NC, and TN) administered the ACT statewide to all public high school 11th graders.

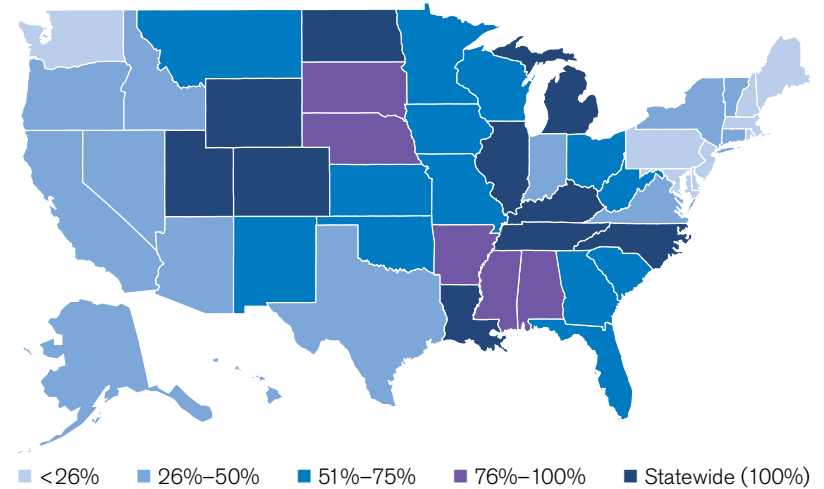
Number of ACT-Tested High School Graduates, 2013



Map reads: In Florida, more than 100,000 students from the high school graduating class of 2013 took the ACT.

- Nationally, more than half (54%) of all students from the high school graduating class of 2013 took the ACT.
- High school graduates in 10 states (CO, IL, KY, LA, MI, NC, ND, TN, UT, and WY) participated in a statewide administration of the ACT during 11th grade.
- Several states, including CA, NY, and TX, had both a sizable number of ACT-tested high school graduates and a relatively low ACT participation rate.

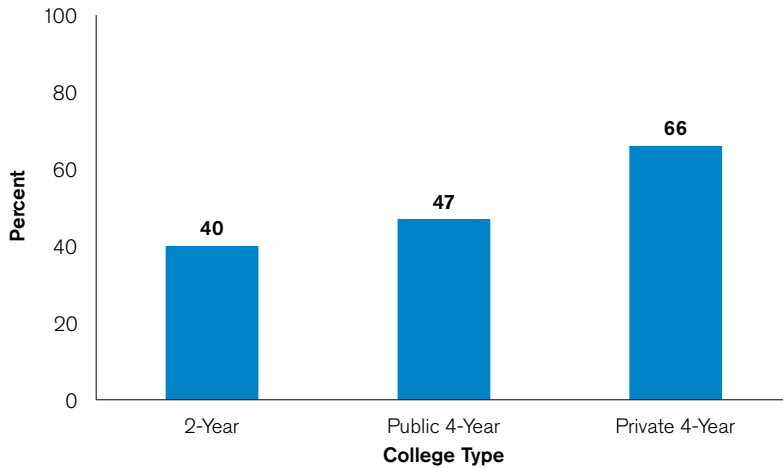
Percent of High School Graduates Who Took the ACT, 2013



Map reads: In Texas, 26%–50% of the high school graduating class of 2013 took the ACT.

EOS Context

Percent of EOS-Participating Colleges That Used Major/Occupation as a Search Criterion by College Type, 2013

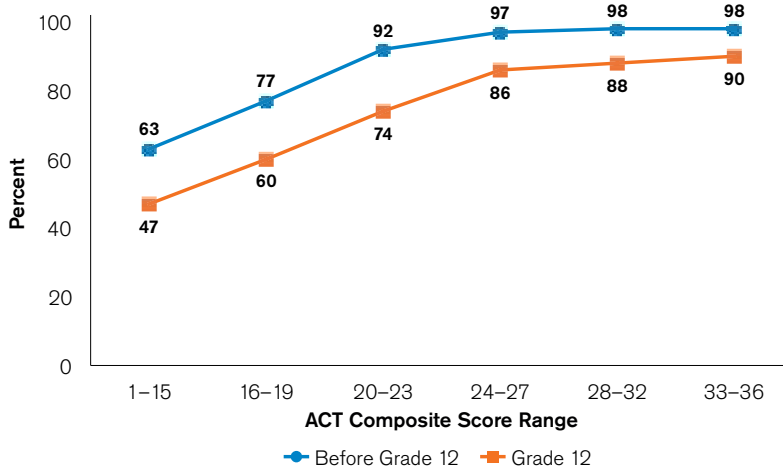


Graph reads: 47% of public 4-year colleges participating in EOS used students' choice of major or occupation as a search criterion for identifying ACT-tested students.

More than 1,000 colleges used EOS to select student names from the ACT-tested graduating class of 2013 to support their marketing and recruitment efforts. Of this group of institutions, more than half (57%) used the students' choice of major or occupation as a search criterion for identifying ACT-tested students of interest.

- The share of colleges that used major or occupation as a search criterion when selecting students through EOS differs by college type.
- Specifically, 2 out of 3 4-year private colleges that participated in EOS used major or occupation as a search criterion, compared with only 2 out of 5 2-year colleges.

Percent of EOS-Selected Students Who Were Selected by at Least One College Using Major/Occupation as a Search Criterion by ACT Composite Score and Grade Level at First Testing, 2013



Graph reads: 88% of the ACT-tested high school graduating class of 2013 who first tested during 12th grade, had an ACT Composite score in the range of 28-32, opted into EOS, and were selected by at least one college through EOS were selected using major or occupation as a search criterion.

Note: Based on 61% of the ACT-tested high school graduating class of 2013 who selected a planned major and/or a planned occupation, opted into EOS during high school, and were selected by at least one college.

More than 1.2 million students from the ACT-tested graduating class of 2013 had their names selected by at least one college through EOS.

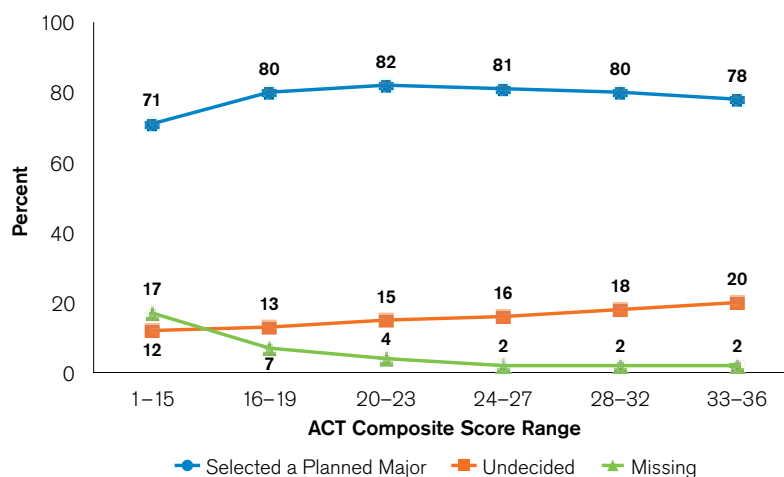
- Of those EOS-selected students with a planned major, 84% were selected by a college using major or occupation as a search criterion.
- The percentage of EOS students who were selected by a college using their major or occupation as a criterion increases as students' ACT Composite score increases.
- Within each ACT Composite score range, a smaller share of students who first tested during their 12th-grade year than first tested before their 12th-grade year were selected by a college using major or occupation as a search criterion.

Planned Major Status

When students register for the ACT, they can select a college major that they plan to enter upon enrolling in college. Among ACT-tested graduates, 79% selected a specific planned major, whereas 15% indicated that they were undecided; 6% did not provide a planned major (i.e., Missing).

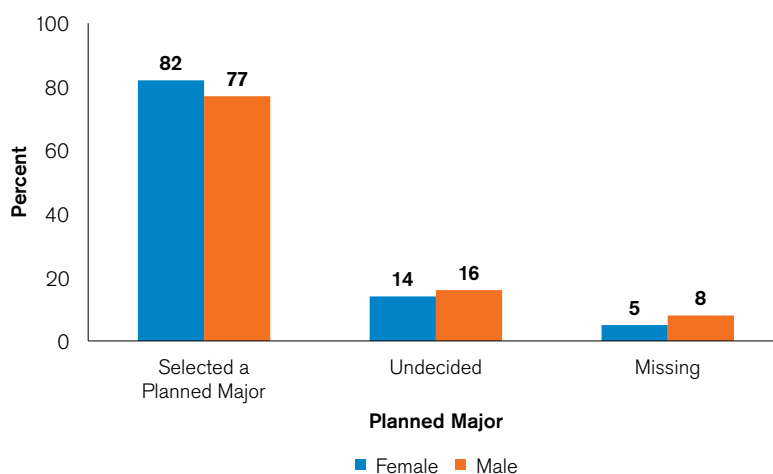
- A larger share of students with scores in the middle of the ACT Composite score scale selected a planned major relative to the share of students at either the lower or upper ranges of the score scale.
- The percentage of students who were undecided about their planned major choice increases with ACT Composite score.
- Conversely, the percentage of students who did not provide a planned major decreases with their ACT Composite score.
- A greater percentage of females than males selected a planned major when they registered for the ACT.
- Conversely, a greater percentage of males than females were either undecided about their planned major choice or did not provide a planned major at the time of ACT registration.

Percent of ACT-Tested High School Graduates with Different Planned Major Statuses by ACT Composite Score, 2013



Graph reads: 17% of the ACT-tested high school graduating class of 2013 with an ACT Composite score in the range of 1-15 did not provide a planned major at the time of ACT registration.

Percent of ACT-Tested High School Graduates with Different Planned Major Statuses by Gender, 2013

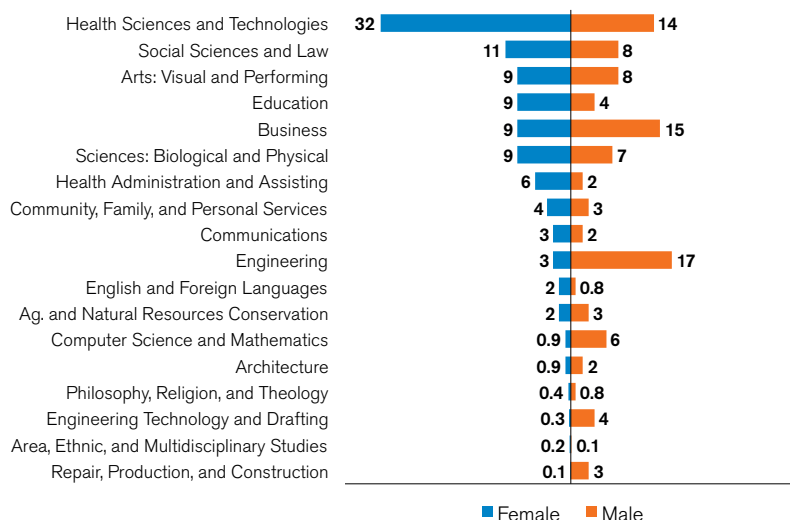


Graph reads: 82% of female students from the ACT-tested high school graduating class of 2013 selected a planned major when they registered for the ACT.

Note: Based on 99.5% of the ACT-tested high school graduating class of 2013 who reported gender.

Choice of Planned Major

Percent of ACT-Tested High School Graduates Who Selected a Planned Major Within Planned Major Areas by Gender, 2013



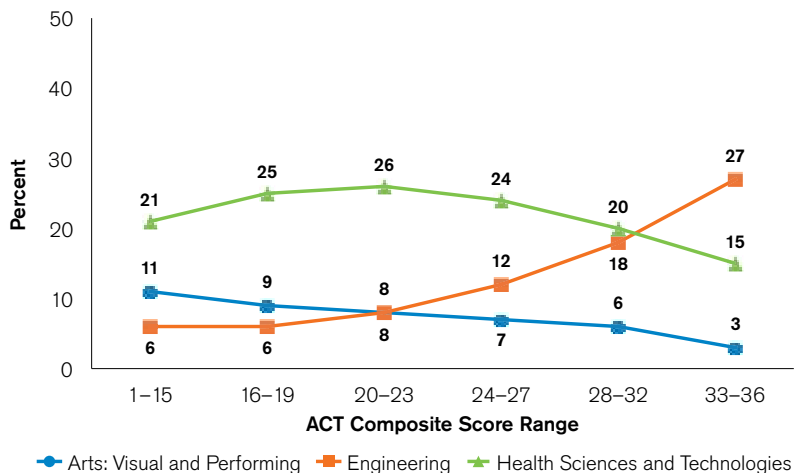
Graph reads: 9% of female students from the ACT-tested high school graduating class of 2013 selected a planned major in the area of Biological and Physical Sciences.

Note: Based on 79% of the ACT-tested high school graduating class of 2013 who reported gender and selected a planned major when they registered for the ACT.

At the time of ACT registration, students can select a specific planned major from a list of 294 alternatives. These alternatives can be grouped into 18 planned major areas (see chart at left).

- The 4 areas of Health Sciences and Technologies; Business; Social Sciences and Law; and Engineering comprise more than half (54%) of all students who selected a planned major.
- The area of Health Sciences and Technologies is very popular among females, with roughly 1 out of 3 selecting a planned major in this area.
- Just less than half (46%) of all males selected planned majors in the areas of Engineering; Business; and Health Sciences and Technologies.

Percent of ACT-Tested High School Graduates Who Selected a Planned Major Within a Subset of Planned Major Areas by ACT Composite Score, 2013



Graph reads: 27% of the ACT-tested high school graduating class of 2013 with an ACT Composite score in the range of 33-36 selected a planned major in the area of Engineering.

Note: Based on 79% of the ACT-tested high school graduating class of 2013 who selected a planned major when they registered for the ACT. To view results for planned major areas not shown, please see www.act.org/collegechoice.

- The likelihood of selecting a planned major within a particular planned major area differs by the students' academic achievement.
- For example, as ACT Composite score increases, the percentage of students who selected a major in the area of Engineering also increases.
- The percentage of students who selected a major in the area of Visual and Performing Arts decreases as ACT Composite score increases.
- Relative to the share of students at either the lower or upper ranges of the score scale, a larger share of students with scores in the middle of the ACT Composite score scale selected a planned major in the area of Health Sciences and Technologies.

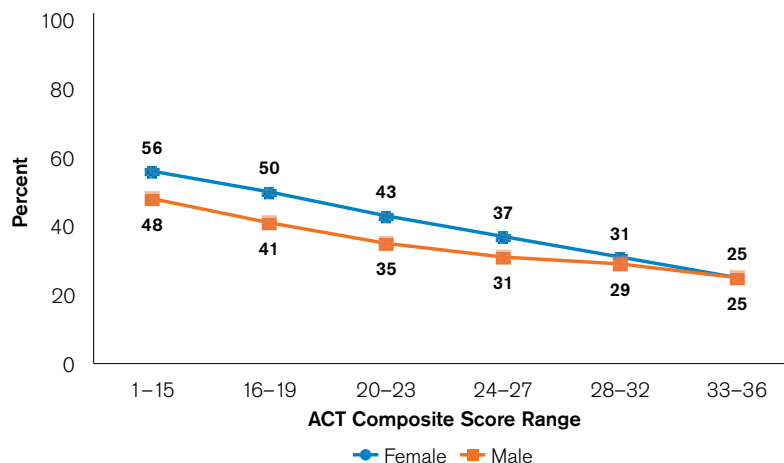
Certainty of Planned Major Choice

When students select a planned major, they can also indicate the extent to which they are sure of their choice (i.e., very sure, fairly sure, or not sure).

- Among students who selected a planned major, 41% indicated that they were very sure of their choice, whereas 45% were fairly sure, and 15% were not sure.
- For both females and males, as ACT Composite score increases, the percentage of students who were very sure of their planned major choice decreases.
- The gender gap in the percentage of students who were very sure of their planned major choice diminishes as ACT Composite score increases.

- As parent education level increases, the percentage of students who were very sure of their planned major choice decreases.
- Within each parent education level, a greater percentage of females than males were very sure of their planned major choice.

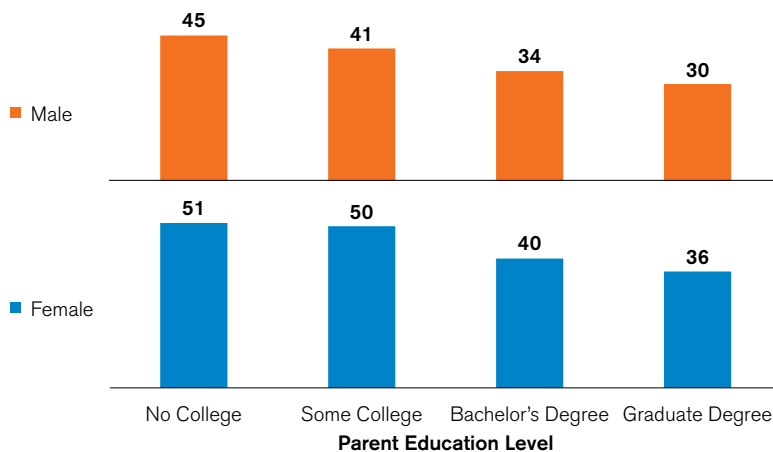
Percent of ACT-Tested High School Graduates Who Were Very Sure of Their Planned Major Choice by ACT Composite Score and Gender, 2013



Graph reads: 31% of males from the ACT-tested graduating class of 2013 with an ACT Composite score in the range of 24–27 indicated that they were very sure of their planned major choice.

Note: Based on 79% of the ACT-tested high school graduating class of 2013 who reported gender, selected a planned major when they registered for the ACT, and indicated their level of certainty of their choice of planned major.

Percent of ACT-Tested High School Graduates Who Were Very Sure of Their Planned Major Choice by Parent Education Level and Gender, 2013

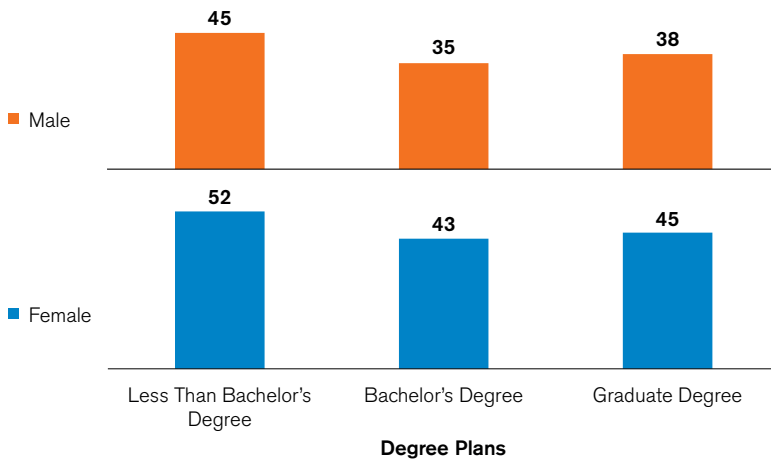


Graph reads: 36% of females from the ACT-tested graduating class of 2013 whose parents earned a graduate degree indicated that they were very sure of their planned major choice.

Note: Based on 69% of the ACT-tested high school graduating class of 2013 who reported gender and parent education level, selected a planned major when they registered for the ACT, and indicated their level of certainty of their choice of planned major.

Certainty of Planned Major Choice

Percent of ACT-Tested High School Graduates Who Were Very Sure of Their Planned Major Choice by Degree Plans and Gender, 2013

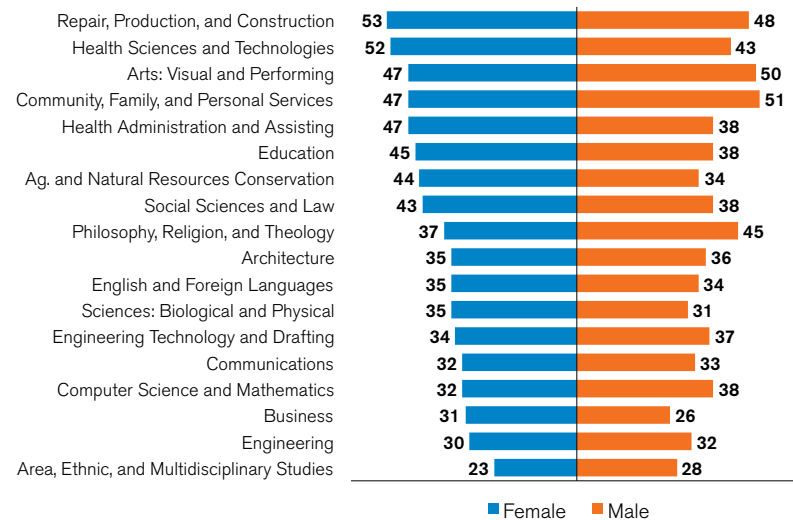


Graph reads: 35% of males from the ACT-tested graduating class of 2013 who planned to earn a bachelor's degree indicated that they were very sure of their planned major choice.

Note: Based on 73% of the ACT-tested high school graduating class of 2013 who reported gender and degree plans, selected a planned major when they registered for the ACT, and indicated their level of certainty of their planned major.

- Compared to students who planned to earn a bachelor's or graduate degree, a larger percentage of those students who planned to earn an associate's degree or undergraduate certificate were very sure of their planned major choice.
- Among students in each type of degree plan, a greater percentage of females than males were very sure of their planned major choice.

Percent of ACT-Tested High School Graduates Who Were Very Sure of Their Planned Major Choice by Planned Major Area and Gender, 2013



Graph reads: 30% of females from the ACT-tested graduating class of 2013 who selected a planned major in the area of Engineering indicated that they were very sure of their planned major choice.

Note: Based on 79% of the ACT-tested high school graduating class of 2013 who reported gender, selected a planned major when they registered for the ACT, and indicated their level of certainty of their planned major.

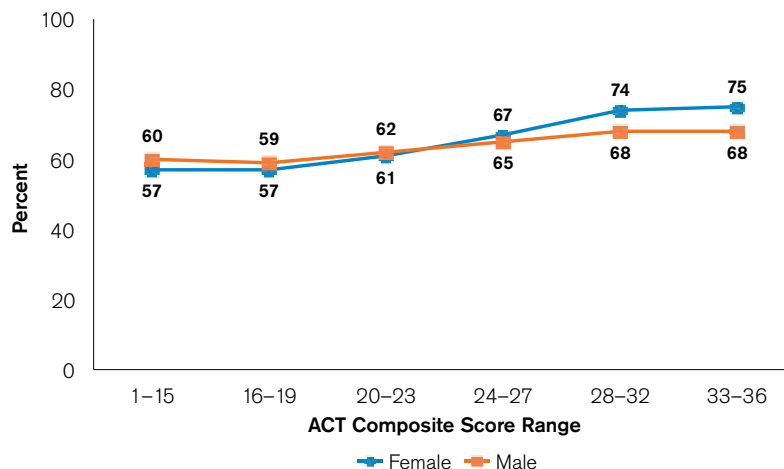
- The percentage of students who were very sure of their planned major choice varies considerably by their planned major area.
- More than half of all female students who selected a planned major in the areas of Repair, Production, and Construction; or Health Sciences and Technologies were very sure of their planned major choice.
- 50% or more of male students who selected a planned major in the areas of Visual and Performing Arts; or Community, Family, and Personal Services were very sure of their planned major.

Needing Assistance with Educational/Occupational Plans

When students register for the ACT, they can complete a brief needs assessment where they can indicate whether they need assistance with deciding their educational and occupational plans. Overall, 61% of females and 62% of males indicated that they need assistance from colleges in this area.

- As ACT Composite score increases, a greater percentage of students indicated that they need assistance with deciding their educational and occupational plans.
- At the highest ACT Composite score ranges, a greater percentage of females than males indicated that they need assistance with deciding their educational and occupational plans.
- Compared to students who either selected a planned major or left the question blank, a greater share of students who were undecided about their planned major choice indicated that they need assistance with deciding their educational and occupational plans.
- Regardless of whether the students selected a planned major, more than half of all ACT-tested high school graduates indicated that they need assistance with deciding their educational and occupational plans.

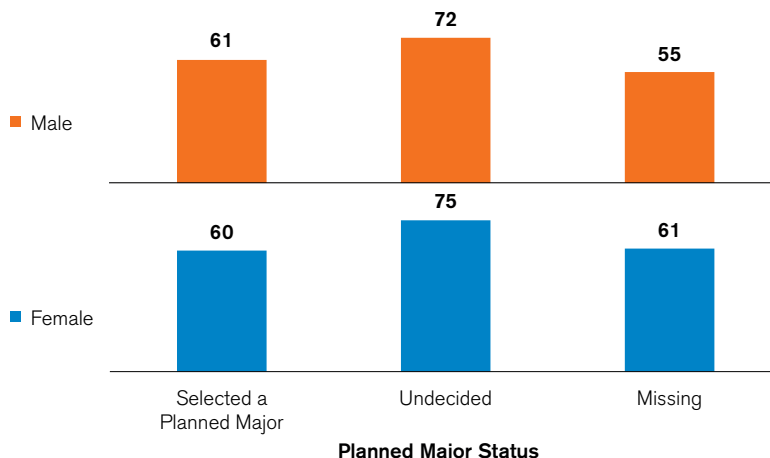
Percent of ACT-Tested High School Graduates Who Indicated Needing Assistance in Deciding Their Educational/Occupational Plans by ACT Composite Score and Gender, 2013



Graph reads: 57% of females from the ACT-tested graduating class of 2013 with an ACT Composite score in the range of 16-19 indicated that they need assistance with deciding their educational and occupational plans.

Note: Based on 70% of the ACT-tested high school graduating class of 2013 who reported gender and answered at least one item of the five-question needs assessment when they registered for the ACT.

Percent of ACT-Tested High School Graduates Who Indicated Needing Assistance in Deciding Their Educational/Occupational Plans by Planned Major Status and Gender, 2013

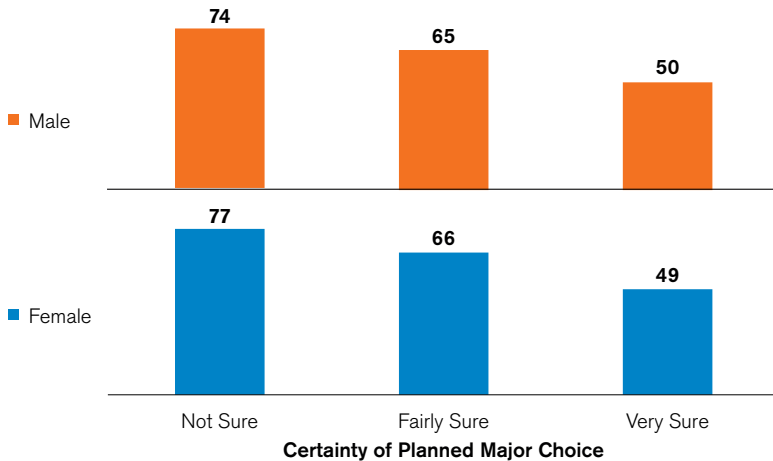


Graph reads: 72% of males from the ACT-tested graduating class of 2013 who were undecided about their choice of planned major indicated that they need assistance with deciding their educational and occupational plans.

Note: Based on 70% of the ACT-tested high school graduating class of 2013 who reported gender and answered at least one item of the five-question needs assessment when they registered for the ACT.

Needing Assistance with Educational/Occupational Plans

Percent of ACT-Tested High School Graduates Who Indicated Needing Assistance in Deciding Their Educational/Occupational Plans by Certainty of Planned Major Choice and Gender, 2013

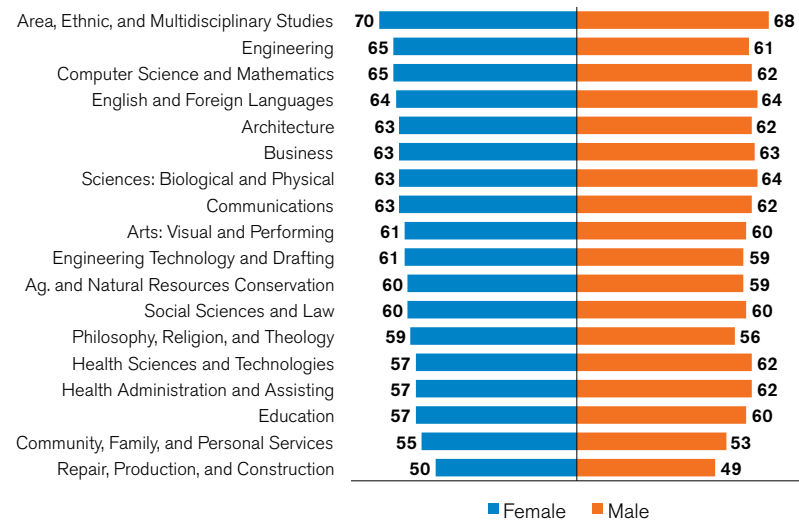


Graph reads: 49% of females from the ACT-tested graduating class of 2013 who were very sure about their choice of planned major indicated that they need assistance with deciding their educational and occupational plans.

Note: Based on 59% of the ACT-tested high school graduating class of 2013 who reported gender, selected a planned major, indicated their level of certainty of their planned major, and answered at least one item of the five-question needs assessment when they registered for the ACT.

- As certainty of planned major choice increases, the percentage of students who reported that they need assistance with deciding their educational and occupational plans decreases.
- With the exception of students who were not sure of their planned major choice, there are no appreciable gender differences in the share of students who indicated that they need assistance with deciding their educational and occupational plans.
- A greater percentage of females than males who were not sure of their planned major choice indicated that they need assistance with deciding their educational and occupational plans.

Percent of ACT-Tested High School Graduates Who Indicated Needing Assistance in Deciding Their Educational/Occupational Plans by Planned Major Area and Gender, 2013



Graph reads: 63% of males from the ACT-tested graduating class of 2013 who selected a planned major in the area of Business indicated that they need assistance with deciding their educational and occupational plans.

Note: Based on 59% of the ACT-tested high school graduating class of 2013 who reported gender, selected a planned major, and answered at least one item of the five-question needs assessment when they registered for the ACT.

- The percentage of students who indicated that they need assistance with deciding their educational and occupational plans varies considerably by planned major area.
- Areas such as Engineering; Computer Science and Mathematics; and English and Foreign Languages have both some of the largest shares of students who indicated that they need assistance with deciding their educational and occupational plans and some of the smallest shares of students who were very sure of their planned major choice.
- Across the 18 planned major areas, gender differences in the percentage of students who indicated that they need assistance deciding their educational and occupational plans are prevalent but not sizable.

Interest-Major Fit

College majors have different academic cultures. Selecting a college major that is rewarding—that provides opportunities to do preferred activities and express one's values—is an example of interest-major fit. While many students gravitate toward majors that fit their interests, many do not. This has important implications. Evidence is accumulating that the fit between students' interests and their college major is important in understanding and predicting student outcomes. Research at ACT and elsewhere suggests that if students' measured interests are similar to the interests of people in their chosen college majors, they will be more likely to:

- remain in their major
- persist in college
- complete a college degree in a timely manner

Interest-major fit clearly benefits both students and the colleges they attend: students engaged in good-fit majors are more likely to stay in college, stay in their major, and finish sooner.

ACT's Interest-Major Fit score is derived from two data

elements that are collected during ACT registration: (1) the student's ACT Interest Inventory scores and (2) the student's intended major from a list of 294 college majors.

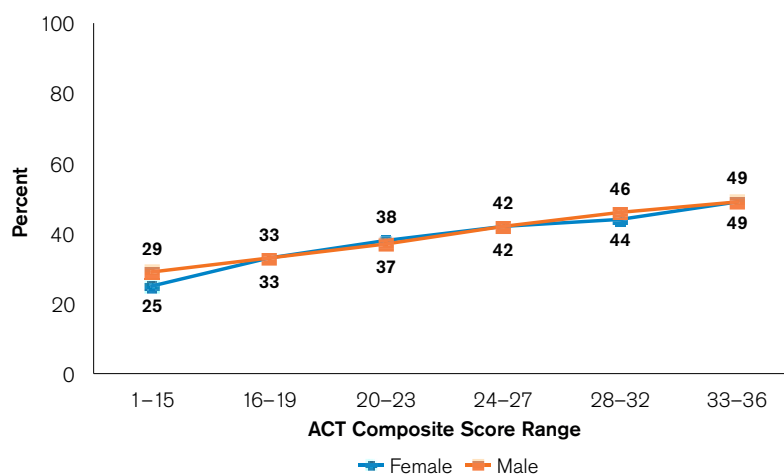
The Interest-Major Fit score used here measures the strength of the relationship between the student's profile of ACT Interest Inventory scores and the profile of interests of students in a given major. Interest profiles for majors are based on a national sample of undergraduate students with a declared major and a GPA of at least 2.0. Major was determined in the third year for students in four-year colleges and in the second year for students in two-year colleges.

The Interest-Major Fit score ranges from 0–99, with values of 80 and higher indicating good fit, values between 60 and 79 indicating moderate fit, and values less than 60 indicating poor fit.

An Interest-Major Fit score can be calculated for only 281 of the 294 planned major alternatives. Planned majors for which an Interest-Major Fit score cannot be calculated are indicated by an asterisk on page 22.

- Among the ACT-tested high school graduating class of 2013 who selected a planned major at the time of ACT registration, 36% selected a planned major that is a good fit with their interests, and 32% selected a major that is a poor fit with their interests.
- As ACT Composite score increases, so does the percentage of students who selected a major that is a good fit with their interests.
- With the exception of students scoring in the range of 1–15 on the ACT Composite score scale, there are no appreciable differences in the shares of male and female students who selected a major that is a good fit with their interests.

Percent of ACT-Tested High School Graduates Who Have Good Interest-Major Fit by ACT Composite Score and Gender, 2013

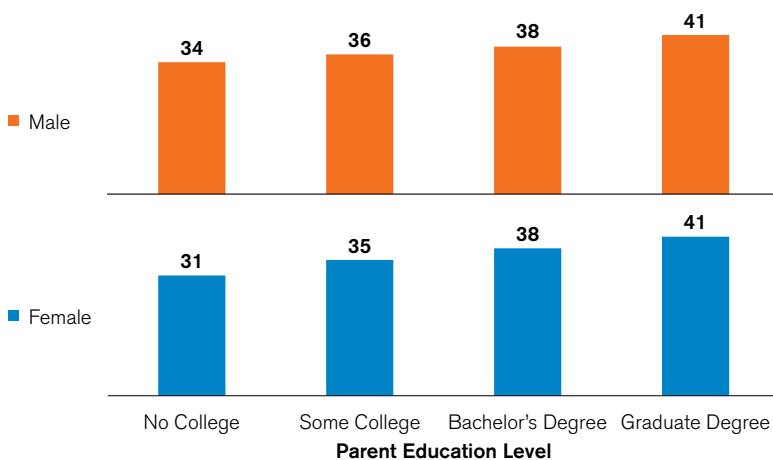


Graph reads: 25% of females from the ACT-tested high school graduating class of 2013 with an ACT Composite score in the range of 1–15 selected a planned major that is a good fit with their interests.

Note: Based on 67% of the ACT-tested high school graduating class of 2013 who reported gender, selected a planned major when they registered for the ACT, and completed the ACT Interest Inventory.

Interest-Major Fit

Percent of ACT-Tested High School Graduates Who Have Good Interest-Major Fit by Parent Education Level and Gender, 2013

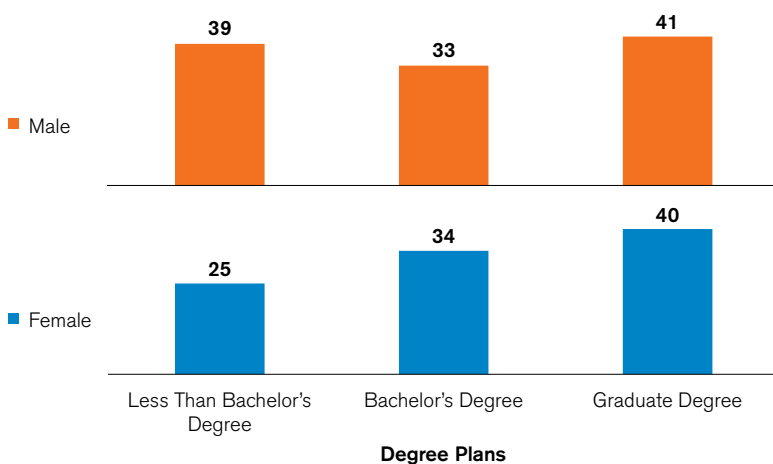


Graph reads: 38% of males from the ACT-tested high school graduating class of 2013 whose parents earned a bachelor's degree selected a planned major that is a good fit with their interests.

Note: Based on 64% of the ACT-tested high school graduating class of 2013 who reported gender and parent education level, selected a planned major when they registered for the ACT, and completed the ACT Interest Inventory.

- As parent education level increases, a greater percentage of students selected a planned major that is a good fit with their interests.
- With the exception of students whose parents did not attend college, there are no appreciable gender differences in the share of students who selected a planned major that is a good fit with their interests.
- Among those students whose parents did not attend college, a greater percentage of males than females selected a planned major that is a good fit with their interests.

Percent of ACT-Tested High School Graduates Who Have Good Interest-Major Fit by Degree Plans and Gender, 2013



Graph reads: 25% of females from the ACT-tested high school graduating class of 2013 who planned to earn less than a bachelor's degree selected a planned major that is a good fit with their interests.

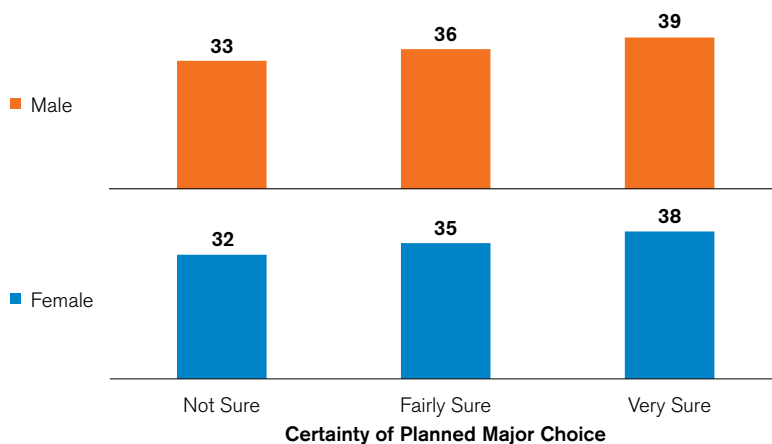
Note: Based on 65% of the ACT-tested high school graduating class of 2013 who reported gender and degree plans, selected a planned major when they registered for the ACT, and completed the ACT Interest Inventory.

- Among females, the percentage of students who have a planned major that is a good fit with their interests increases with the students' degree plans.
- Among males, students who planned to obtain a bachelor's degree have the smallest share of students with a planned major that is a good fit with their interests.
- For students planning to obtain either a bachelor's or graduate degree, the percentage of ACT-tested students with good Interest-Major Fit is very similar for both males and females.
- For students planning to obtain less than a bachelor's degree, a substantially larger share of males than females selected a planned major that is a good fit with their interests.

Interest-Major Fit

- As certainty of planned major choice increases, so does the percentage of students who selected a planned major that is a good fit with their interests.
- Regardless of students' level of certainty about their planned major choice, there are no appreciable gender differences in the share of students who selected a planned major that is a good fit with their interests.

Percent of ACT-Tested High School Graduates Who Have Good Interest-Major Fit by Certainty of Planned Major Choice and Gender, 2013

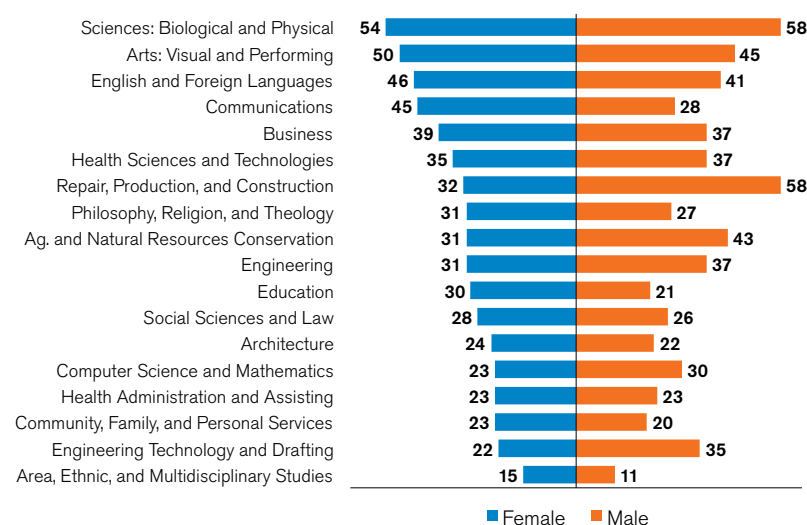


Graph reads: 39% of males from the ACT-tested high school graduating class of 2013 who were very sure of their planned major choice selected a planned major that is a good fit with their interests.

Note: Based on 67% of the ACT-tested high school graduating class of 2013 who reported gender, selected a planned major when they registered for the ACT, indicated their level of certainty of their choice of planned major, and completed the ACT Interest Inventory.

- The percentage of students who selected a planned major that is a good fit with their interests varies considerably by their planned major area.
- For both genders, large shares of students with planned majors in the areas of Biological and Physical Sciences; Visual and Performing Arts; and English and Foreign Languages have good Interest-Major Fit.
- In contrast, relatively smaller shares of males or females with planned majors in the areas of Health Administration and Assisting; Community, Family, and Personal Services; and Area, Ethnic, and Multidisciplinary Studies have good Interest-Major Fit.

Percent of ACT-Tested High School Graduates Who Have Good Interest-Major Fit by Planned Major Area and Gender, 2013

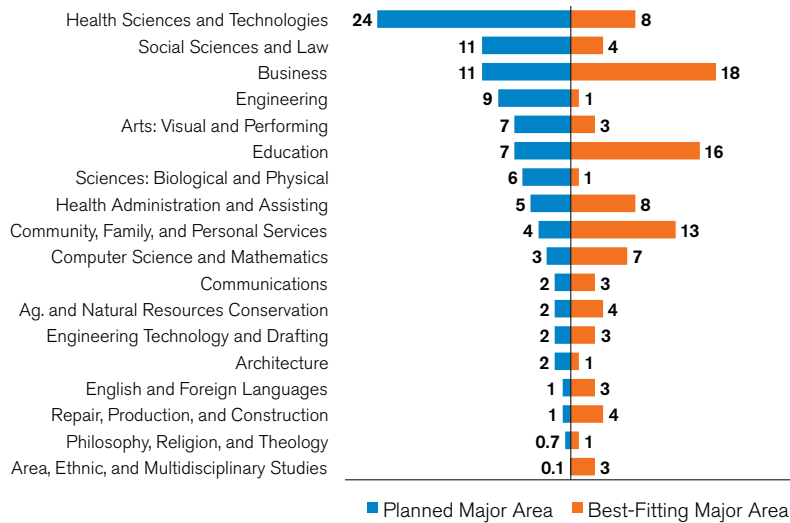


Graph reads: 30% of females from the ACT-tested high school graduating class of 2013 in the area of Education selected a planned major that is a good fit with their interests.

Note: Based on 67% of the ACT-tested high school graduating class of 2013 who reported gender, selected a planned major when they registered for the ACT, and completed the ACT Interest Inventory.

Best-Fitting Major

Percent of ACT-Tested High School Graduates by Planned Major Area and Best-Fitting Major Area Among Students with Moderate/Poor Interest-Major Fit, 2013



Graph reads: 9% of the ACT-tested high school graduating class of 2013 who had moderate or poor fit between their choice of planned major and their interests selected a planned major in the area of Engineering.

Note: Based on 43% of the ACT-tested high school graduating class of 2013 who selected a planned major when they registered for the ACT, completed the ACT Interest Inventory, and had an Interest-Major Fit Index score in the ranges of poor fit or moderate fit.

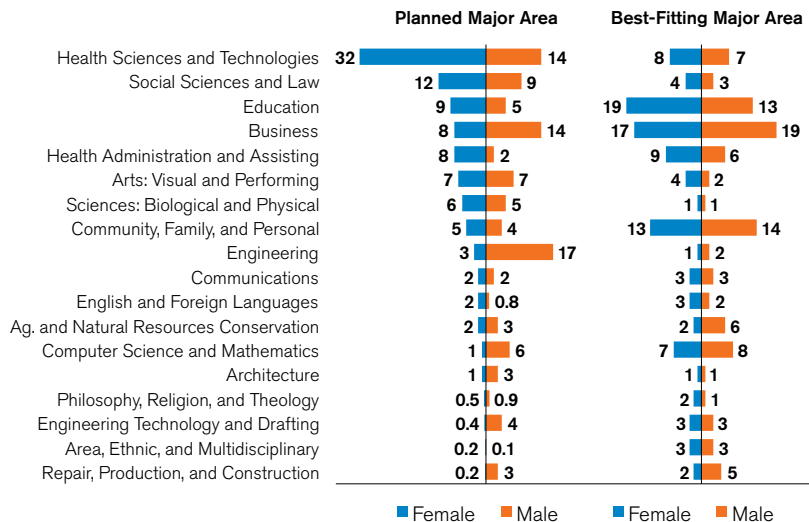
The left side of the tornado chart shows the distribution of students by their planned major area for those students who had either moderate or poor Interest-Major Fit.

- Nearly 1 out of 4 of these students selected planned major areas in the area of Health Sciences and Technologies.

The right side of the tornado chart shows the redistribution of these students into suggested major areas by assigning them to the major that offers the best fit given their interests.

- If these students entered college majors that were the best fit with their interests, the share of students in such areas as Health Sciences and Technologies would decrease, whereas the share of students in areas such as Business would increase.

Percent of ACT-Tested High School Graduates by Planned Major Area, Best-Fitting Major Area, and Gender Among Students with Moderate/Poor Interest-Major Fit, 2013



Graph reads: 17% of males from the ACT-tested high school graduating class of 2013 who had moderate or poor fit between their choice of planned major and their interests selected a planned major in the area of Engineering.

Note: Based on 42% of the ACT-tested high school graduating class of 2013 who reported gender, selected a planned major when they registered for the ACT, completed the ACT Interest Inventory, and had an Interest-Major Fit Index score in the ranges of poor fit or moderate fit.

The first tornado chart provides the distribution of females and males by their planned major area for those students who had either moderate or poor Interest-Major Fit.

The second tornado chart provides the redistribution of these same females and males into suggested major areas by assigning them to the major that offers the best fit given their interests.

- As this chart shows, if students entered college majors that were the best fit with their interests, there would be greater gender balance for these students across the 18 planned major areas.

Best-Fitting Major

As mentioned in an earlier section of this report, at the time of ACT registration, 15% of students were undecided about their planned major choice and 6% did not provide a planned major.

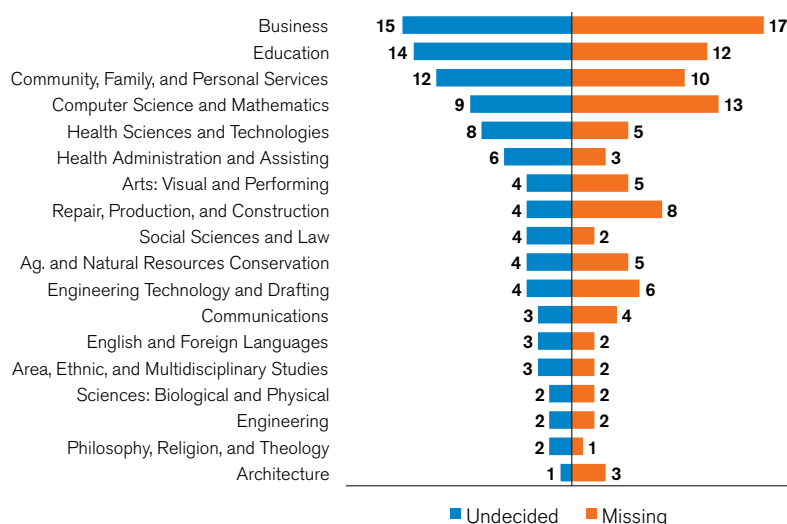
The tornado chart provides the distribution of these students into the 18 major areas by assigning them to the major that offers the best fit given their interests.

- For both groups of students, 50% or more have interests that are the best fit with a major in the areas of Business; Education; Community, Family, and Personal Services; and Computer Science and Mathematics.

For those students who either were undecided about their planned major choice or did not provide a planned major, the tornado chart provides the distribution of females and males into the 18 major areas by assigning them to the major that offers the best fit given their interests.

- A notable share of females have interests that are the best fit with a major in the areas of Education; Business; and Community, Family, and Personal Services.
- A notable share of males have interests that are the best fit with a major in the areas of Business; Community, Family, and Personal Services; and Computer Science and Mathematics.

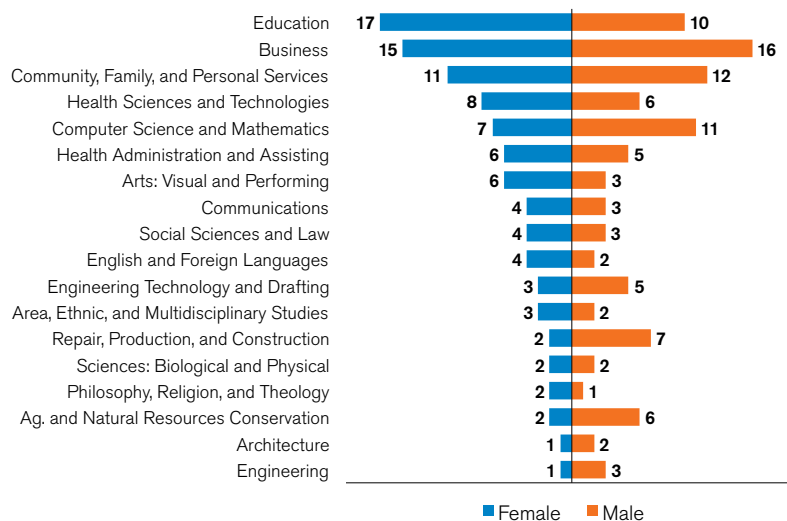
Percent of ACT-Tested High School Graduates by Best-Fitting Major Area and Undecided/Missing Planned Major Status, 2013



Graph reads: 3% of the ACT-tested high school graduating class of 2013 who were undecided about their choice of planned major have an interest profile that is the best fit with a major in the area of Communications.

Note: Based on 14% of the ACT-tested high school graduating class of 2013 who were either undecided about their choice of planned major or did not provide a planned major when they registered for the ACT and completed the ACT Interest Inventory.

Percent of ACT-Tested High School Graduates by Best-Fitting Major Area and Gender Among Students with Undecided/Missing Planned Major Status, 2013

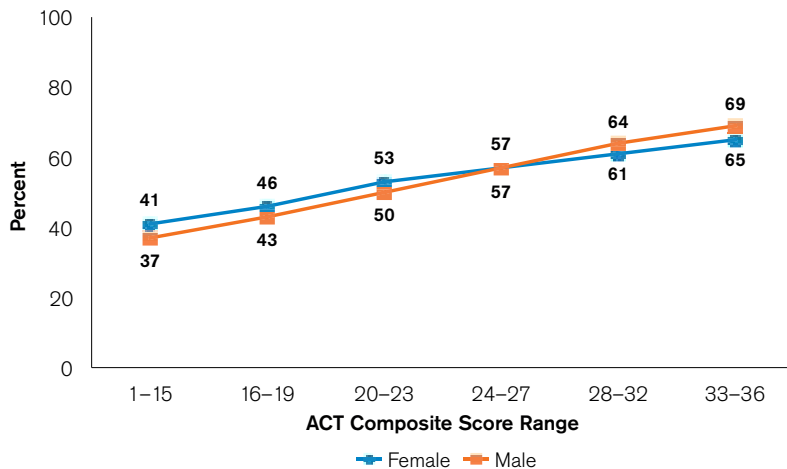


Graph reads: 10% of males from the ACT-tested high school graduating class of 2013 who were undecided about or were missing their choice of planned major have an interest profile that is the best fit with a major in the area of Education.

Note: Based on 14% of the ACT-tested high school graduating class of 2013 who reported gender, were either undecided about their choice of planned major or did not provide a planned major when they registered for the ACT, and completed the ACT Interest Inventory.

Major as Most Important College Choice Factor

Percent of ACT-Tested High School Graduates Who Indicated Availability of College Major as Most Important Factor in Choosing a College by ACT Composite Score and Gender, 2013



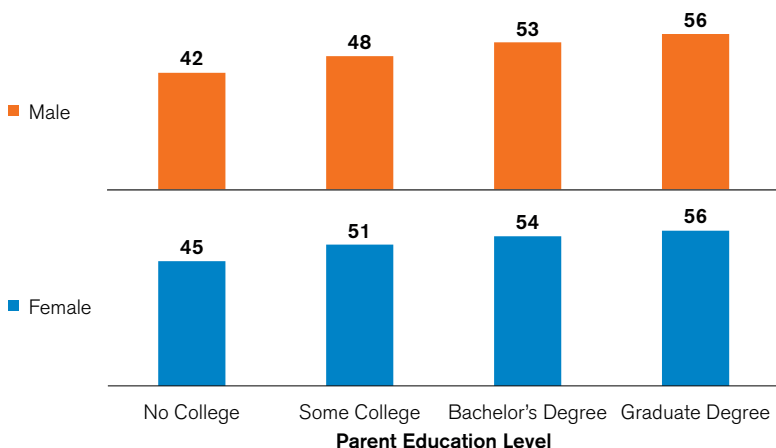
Graph reads: 53% of females from the ACT-tested high school graduating class of 2013 with an ACT Composite score in the range of 20–23 indicated that availability of college major was the most important factor in selecting a college.

Note: Based on 70% of the ACT-tested high school graduating class of 2013 who reported gender, selected a planned major when they registered for the ACT, and ranked in order of importance at least 1 of the 7 college choice factors listed on the ACT registration form.

When students register for the ACT, they can rank in order of importance up to seven factors (e.g., location, tuition, enrollment size) that were considered during their college selection process. Approximately half of all students who ranked the factors selected the availability of a college major as the most important factor in selecting a college.

- The percentage of students who indicated availability of college major as the most important factor in choosing a college increases with ACT Composite score.
- Gender differences in the share of students who indicated availability of college major as the most important factor in choosing a college are evident at the upper and lower ranges of the score scale.

Percent of ACT-Tested High School Graduates Who Indicated Availability of College Major as Most Important Factor in Choosing a College by Parent Education Level and Gender, 2013



Graph reads: 56% of males from the ACT-tested high school graduating class of 2013 whose parents earned a graduate degree indicated that availability of college major was the most important factor in selecting a college.

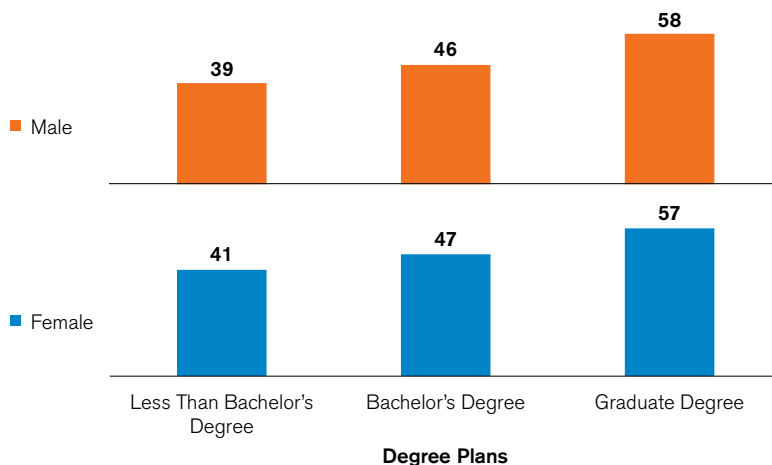
Note: Based on 67% of the ACT-tested high school graduating class of 2013 who reported gender and parent education level, selected a planned major when they registered for the ACT, and ranked in order of importance at least 1 of the 7 college choice factors listed on the ACT registration form.

- As parent education level increases, the percentage of students who indicated availability of college major as the most important factor in choosing a college increases.
- For students whose parents earned less than a bachelor's degree, a greater percentage of females than males indicated availability of college major as the most important factor in choosing a college.

Major as Most Important College Choice Factor

- As degree plans increase, the percentage of students who indicated availability of college major as the most important factor in choosing a college also increases.
- For students who plan to earn less than a bachelor's degree, a slightly greater percentage of females than males indicated availability of college major as the most important factor in choosing a college.

Percent of ACT-Tested High School Graduates Who Indicated Availability of College Major as Most Important Factor in Choosing a College by Degree Plans and Gender, 2013

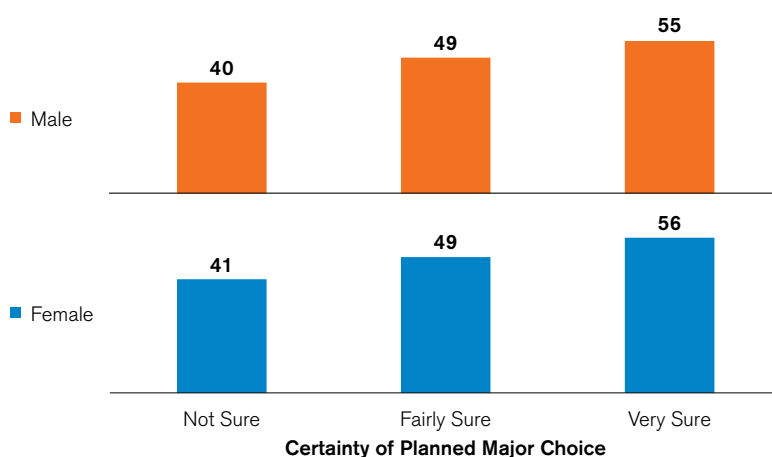


Graph reads: 41% of females from the ACT-tested high school graduating class of 2013 who planned to earn less than a bachelor's degree indicated that availability of college major was the most important factor in selecting a college.

Note: Based on 69% of the ACT-tested high school graduating class of 2013 who reported gender and degree plans, selected a planned major when they registered for the ACT, and ranked in order of importance at least 1 of the 7 college choice factors listed on the ACT registration form.

- As certainty of planned major choice increases, the percentage of students who indicated availability of college major as the most important factor in choosing a college increases.
- There was no appreciable gender gap by certainty of planned major choice. Female and male responses differed by one percentage point or less, in favor of females.

Percent of ACT-Tested High School Graduates Who Indicated Availability of College Major as Most Important Factor in Choosing a College by Certainty of Planned Major Choice and Gender, 2013

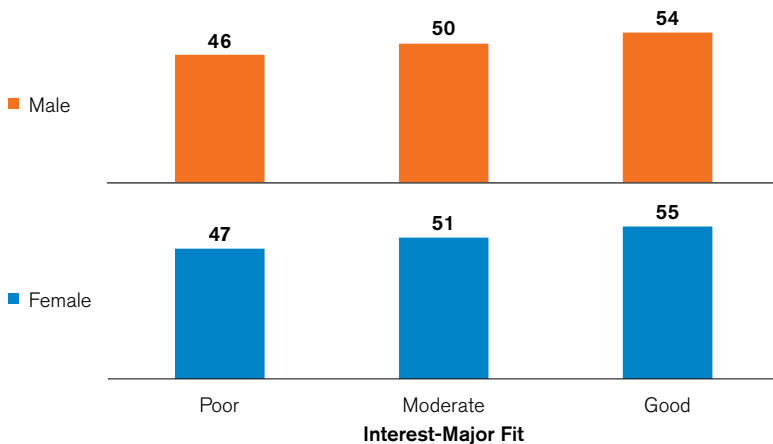


Graph reads: 49% of males from the ACT-tested high school graduating class of 2013 who were fairly sure of their choice of major indicated that availability of college major was the most important factor in selecting a college.

Note: Based on 70% of the ACT-tested high school graduating class of 2013 who reported gender, selected a planned major when they registered for the ACT, indicated their level of certainty of their choice of planned major, and ranked in order of importance at least 1 of the 7 college choice factors listed on the ACT registration form.

Major as Most Important College Choice Factor

Percent of ACT-Tested High School Graduates Who Indicated Availability of College Major as Most Important Factor in Choosing a College by Interest-Major Fit and Gender, 2013

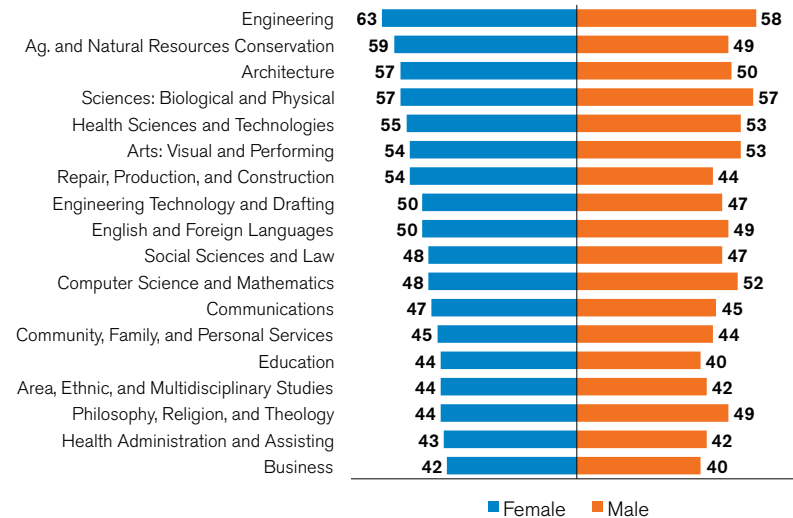


Graph reads: 55% of females from the ACT-tested high school graduating class of 2013 who selected a major that is a good fit with their interests indicated that availability of college major was the most important factor in selecting a college.

Note: Based on 64% of the ACT-tested high school graduating class of 2013 who reported gender, selected a planned major when they registered for the ACT, completed the ACT Interest Inventory, and ranked in order of importance at least 1 of the 7 college choice factors listed on the ACT registration form.

- As the level of fit between students' planned major choices and their interests increases, so does the percentage of students who indicated availability of college major as the most important factor in choosing a college.
- There was no appreciable gender gap by Interest-Major Fit in the share of students who indicated availability of college major as the most important factor. Female and male responses differed by one percentage point, in favor of females.

Percentage of ACT-Tested High School Graduates Who Indicated Availability of College Major as Most Important Factor in Choosing a College by Planned Major Area and Gender, 2013



Graph reads: 40% of males from the ACT-tested high school graduating class of 2013 who selected a planned major in the area of Business indicated that availability of college major was the most important factor in selecting a college.

Note: Based on 70% of the ACT-tested high school graduating class of 2013 who reported gender, selected a planned major when they registered for the ACT, and ranked in order of importance at least 1 of the 7 college choice factors listed on the ACT registration form.

- Students who selected a planned major in the area of Engineering were most likely to indicate availability of college major as the most important factor in choosing a college.
- Across most majors, a greater share of females than males indicated availability of college major as the most important factor in choosing a college.
- The largest gender discrepancies in favor of females are in the areas of Agriculture and National Resources Conservation; and Repair, Production, and Construction.
- The only majors showing gender discrepancies in favor of males are in the areas of Computer Science and Mathematics; and Philosophy, Religion, and Theology.

Key Findings and Recommendations

Key Finding 1: Although a Majority of ACT-Tested Students Select a Planned Major, Many Students Are Not Sure of Their Choices

Of the ACT-tested graduating class of 2013, 4 out of 5 students selected a planned major during ACT registration. Although the likelihood of selecting a planned major varies by academic achievement (as measured by ACT Composite score), it is consistently high for all achievement ranges. Despite the fact that a large majority of ACT-tested students selected a planned major, only 2 out of 5 who did so indicated that they were very sure of their planned major choice. Moreover, compared to their lower-achieving peers, students with higher academic achievement levels were far less likely to be sure of their planned major choice. A similar pattern is evident by the students' parent education level, where students from more highly educated families were less likely than their peers to be sure of their planned major choice.

In addition to this degree of uncertainty among students who selected a planned major, 15% of ACT-tested students indicated that they were undecided about their choice of major and another 6% neither selected a planned major nor indicated that they were undecided. The likelihood of a student being undecided increases as achievement level increases. Taken together, this evidence suggests that high-achieving students may also need extensive advising and help in selecting majors and careers.

Key Finding 2: Few Students Are Selecting Planned Majors that Are a Good Fit with Their Interests

Only about 1 out of 3 students (36%) who selected a planned major during ACT registration chose a major that is a good fit with their interests as measured by the ACT Interest Inventory. Moreover, students with lower levels of academic achievement (as measured by their ACT Composite score) are far less likely than their higher-achieving peers to select a planned major that is a good fit with their interests. A similar pattern is evident by the students' parent education level, with first-generation college students being less likely than their peers from more highly educated families of selecting a planned major that is a good fit with their interests. Although Interest-Major Fit increases with

the students' certainty of their planned major choice, only 2 out of 5 students who were very sure of their planned major choice selected a major that is a good fit with their interests. The likelihood of selecting a planned major that is a good fit with student interests varies considerably by their planned major area. If students who selected planned majors that were a moderate or poor fit with their interests had instead selected planned majors that had the best fit with their interests, the overall distribution of these students across major areas would be quite different.

Key Finding 3: A Majority of Students Want Assistance with Their Educational and Occupational Plans

Roughly 3 out of 5 students (62%) indicated during ACT registration that they need assistance with deciding their educational and occupational plans. Compared with students who selected a planned major, those students who were undecided about their choice of major or who left the question blank had a greater likelihood of reporting that they need assistance with educational and occupational planning. Among those who selected a planned major, students who were not as sure of their planned major choice were more likely than their peers to report that they need assistance with deciding their educational and occupational plans. However, even among those students who were very sure of their planned major choice, nearly half indicated that they need assistance, suggesting that educational and occupational guidance would be helpful for a wide variety of students.

Key Finding 4: Both Choice of Planned Major and Interest-Major Fit Vary in Meaningful Ways by Gender

In general, females were more likely than males to select a planned major and to be sure of their planned major choice. Among those students who selected a planned major, males and females tended to select different fields of study, which creates gender imbalance across planned major areas. In particular, large gender discrepancies in planned major choices in favor of females are evident in the areas of Health Sciences and Technologies; Education; and Health Administration and Assisting. Large gender discrepancies in planned major choices in favor of males are evident in the areas of Engineering; Business; and Computer Science and Mathematics.

Overall, a similar share of females and males selected majors that are a good fit with their interests. This overall similarity, however, masks some important gender differences in Interest-Major Fit that are evident within particular major areas. For example, in such areas as Repair, Production, and Construction; Agriculture and Natural Resources Conservation; Engineering; Computer Science and Mathematics; and Engineering Technology and Drafting, males are more likely than females to have selected a planned major that is a good fit with their interests. In contrast, in such areas as Communications; Education; and Visual and Performing Arts, females are more likely than males to have selected a planned major that is a good fit with their interests. If those students who selected planned majors that were a moderate or poor fit with their interests had instead selected planned majors that had the best fit with their interests, there would be a greater gender balance within the distribution of these same students across planned major areas.

Key Finding 5: For Many Students, Availability of a Particular Major Is the Most Important Factor in Choosing a College

Half of all students (50%) who selected a planned major when they registered for the ACT indicated that the availability of a particular college major or program of study was their most important factor in selecting a college. Furthermore, the students' likelihood of reporting college major as the most important factor in their college decision increases with the students' ACT Composite score, parent education level, degree aspirations, certainty of planned major choice, and Interest-Major Fit. These findings suggest that students would benefit from having greater access to information about the programs of study that are available at the colleges they are considering.

Recommendations

When recruiting students, colleges should:

- Consider looking at students' intended major together with their Interest-Major Fit score in order to better identify students who may have a stronger interest in a particular major and who may be more

likely to enroll in a particular major. This information may be especially important when trying to recruit more male students to your campus and when trying to increase the enrollment of females within particular STEM fields.

- Use student results from the ACT Interest Inventory to provide prospective students who are undecided about their planned major choice with information about particular programs of study at the college for which they may have good fit.
- Promote institutional strengths in advising and career development to those prospective students who are undecided about their major or occupation, are uncertain of their planned major or occupational choice, or indicate that they want assistance with educational and occupational planning. For example, admissions personnel could communicate information about academic advising, special programs for undecided students, internships, career counseling, and other programs and services that can help students make informed decisions about educational majors and careers.

After students enroll, colleges should:

- Use Interest-Major Fit scores as a part of institutional efforts to identify students who could benefit from advising and career planning interventions intended to guide students into better-fitting college majors.
- Use information regarding students' status as undecided, their certainty of their planned major choice, or their request for assistance with educational and career planning to help target students for additional academic advising and career counseling services as part of student orientation and first-year programming.
- Consider different advising strategies for high-achieving and low-achieving students, as high-achieving students are less likely to be very sure about their planned major choices but more likely to have good Interest-Major Fit, whereas low-achieving students are more likely to be very sure about their planned major choices but less likely to have good Interest-Major Fit.

List of College Majors and Occupational Choices

Undecided*

AGRICULTURE & NATURAL RESOURCES CONSERVATION

Agriculture, General

Agribusiness Operations
Agricultural Business & Management
Agricultural Economics
Agricultural Mechanization
Agricultural Production
Agronomy & Crop Science
Animal Sciences
Food Sciences & Technology
Horticulture Operations & Management
Horticulture Science

Natural Resources Conservation, General

Environmental Science
Forestry
Natural Resources Management
Wildlife & Wildlands Management

ARCHITECTURE

Architecture, General

Architectural Environmental Design
City/Urban/Regional Planning
Interior Architecture
Landscape Architecture

AREA, ETHNIC, & MULTIDISCIPLINARY STUDIES

Area Studies, General (e.g., African, Middle Eastern)

Asian Area Studies
European Area Studies
Latin American Area Studies
North American Area Studies

Ethnic & Minority Studies, General

African American Studies
American Indian/Native American Studies
Latino/Chicano Studies
Women's Studies

Liberal Arts & General Studies*

Library Science

Multi/Interdisciplinary Studies*

ARTS: VISUAL & PERFORMING

Art, General

Art History, Criticism & Conservation
Fine/Studio Arts

Cinema/Film

Cinematography/Film/Video

Production

Dance

Design & Visual Communications, General

Fashion/Apparel Design
Graphic Design
Industrial Design
Interior Design

Music, General

Music, Performance
Music, Theory & Composition

Photography

Theatre Arts/Drama

BUSINESS

Accounting

Accounting Technician

Business Administration & Management, General

Hotel/Motel Management
Human Resources Development/Training
Human Resources Management
International Business Management
Labor/Industrial Relations
Logistics & Materials Management
Marketing Management & Research
Office Supervision & Management
Operations Management & Supervision
Organizational Behavior
Purchasing/Procurement/Contracts Management
Restaurant/Food Services Management
Small Business Management/Operations
Travel/Tourism Management

Business/Management Quantitative Methods, General

Actuarial Science*

Business/Managerial Economics

Finance, General

Banking & Financial Support Services
Financial Planning & Services

Insurance & Risk Management

Investments & Securities

Management Information Systems

Real Estate

Sales, Merchandising, & Marketing, General

Fashion Merchandising
Tourism & Travel Marketing

Secretarial Studies & Office Administration

COMMUNICATIONS

Communications, General

Advertising
Digital Communications/Media
Journalism, Broadcast
Journalism, Print
Mass Communications
Public Relations & Organizational Communication
Radio & Television Broadcasting

Communications Technology, General

Graphic & Printing Equipment Operation*
Multimedia/Animation/Special Effects
Radio & Television Broadcasting Technology*

COMMUNITY, FAMILY, & PERSONAL SERVICES

Family & Consumer Sciences, General

Adult Development & Aging/Gerontology
Child Care Services Management
Child Development
Consumer & Family Economics
Food & Nutrition
Textile & Apparel

Parks, Recreation, & Leisure, General

Exercise Science/Physiology/Kinesiology
Health & Physical Education/Fitness
Parks/Rec/Leisure Facilities Management
Sport & Fitness Administration/Management

Personal Services, General*

Cosmetology/Hairstyling*
Culinary Arts/Chef Training
Funeral Services & Mortuary Science

Protective Services, General

Corrections
Criminal Justice
Fire Protection & Safety Technology
Law Enforcement
Military Technologies*

Public Administration & Services, General

Community Organization & Advocacy
Public Administration
Public Affairs & Public Policy Analysis
Social Work

COMPUTER SCIENCE & MATHEMATICS

Computer & Information Sciences, General

Computer Networking/
Telecommunications
Computer Science & Programming
Computer Software & Media Applications
Computer System Administration
Data Management Technology
Information Science
Webpage Design

Mathematics, General

Applied Mathematics
Statistics

EDUCATION

Counseling & Student Services

Educational Administration

Special Education

Teacher Education, General

Curriculum & Instruction
Early Childhood Education
Elementary Education
Junior High/Middle School Education
Postsecondary Education
Secondary Education
Teacher Assisting/Aide Education

Teacher Education, Subject-Specific*

Agricultural Education
Art Education
Business Education
Career & Technical Education

English-as-a-Second-Language

Education

English/Language Arts Education

Foreign Languages Education

Health Education

Mathematics Education

Music Education

Physical Education & Coaching

Science Education

Social Studies/Sciences Education

ENGINEERING

Engineering (Pre-Engineering), General

Aerospace/Aeronautical Engineering
Agricultural/Bioengineering
Architectural Engineering
Biomedical Engineering
Chemical Engineering
Civil Engineering
Computer Engineering
Construction Engineering/Management
Electrical, Electronics & Communications Engineering
Environmental Health Engineering
Industrial Engineering
Mechanical Engineering
Nuclear Engineering

ENGINEERING TECHNOLOGY & DRAFTING

Drafting/CAD Technology, General

Architectural Drafting/CAD Technology
Mechanical Drafting/CAD Technology

Engineering Technology, General

Aeronautical/Aerospace Engineering Technologies
Architectural Engineering Technology
Automotive Engineering Technology
Civil Engineering Technology
Computer Engineering Technology
Construction/Building Technology
Electrical, Electronics Engineering Technologies
Electromechanical/Biomedical Engineering Technologies
Environmental Control Technologies
Industrial Production Technologies
Mechanical Engineering Technology
Quality Control & Safety Technologies
Surveying Technology

ENGLISH & FOREIGN LANGUAGES

English Language & Literature, General

American/English Literature
Creative Writing
Public Speaking

Foreign Languages/Literatures, General

Asian Languages & Literatures
Classical/Ancient Languages & Literatures
Comparative Literature
French Language & Literature
German Language & Literature
Linguistics
Middle Eastern Languages & Literatures
Spanish Language & Literature

HEALTH ADMINISTRATION & ASSISTING

Health Services Administration, General

Hospital/Facilities Administration
Medical Office/Secretarial
Medical Records

Medical/Clinical Assisting, General

Dental Assisting
Medical Assisting
Occupational Therapy Assisting
Physical Therapy Assisting
Veterinarian Assisting/Technology

HEALTH SCIENCES & TECHNOLOGIES

Chiropractic (Pre-Chiropractic)

Dental Hygiene

Dentistry (Pre-Dentistry)

Emergency Medical Technology

Health-Related Professions & Services, General*

Athletic Training
Communication Disorder Services
(e.g., Speech Pathology)

Public Health

Health/Medical Technology, General

Medical Laboratory Technology
Medical Radiologic Technology
Nuclear Medicine Technology
Respiratory Therapy Technology
Surgical Technology

Medicine (Pre-Medicine)

Nursing, Practical/Vocational (L.P.N.)

Nursing, Registered (B.S./R.N.)

Optometry (Pre-Optometry)

Osteopathic Medicine

Pharmacy (Pre-Pharmacy)

Physician Assisting

Therapy & Rehabilitation, General

Alcohol/Drug Abuse Counseling
Massage Therapy
Mental Health Counseling
Occupational Therapy
Physical Therapy (Pre-Physical Therapy)
Psychiatric/Mental Health Technician
Rehabilitation Therapy
Vocational Rehabilitation Counseling

Veterinary Medicine (Pre-Veterinarian)

PHILOSOPHY, RELIGION, & THEOLOGY

Philosophy

Religion

Theology, General

Bible/Biblical Studies
Divinity/Ministry
Religious Education

REPAIR, PRODUCTION, & CONSTRUCTION

Aviation & Airway Science, General

Aircraft Piloting & Navigation
Aviation Management & Operations

Construction Trades (e.g., carpentry, plumbing, electrical)

Mechanics & Repairers, General

Aircraft Mechanics/Technology
Autobody Repair/Technology
Automotive Mechanics/Technology
Avionics Technology
Diesel Mechanics/Technology
Electrical/Electronics Equip Installation & Repair
Heating/Air Cond/Refrig Install/Repair

Precision Production Trades, General

Machine Tool Technology
Welding Technology

Transportation & Materials Moving (e.g., air, ground, & marine)

SCIENCES: BIOLOGICAL & PHYSICAL

Biology, General

Biochemistry & Biophysics
Cell/Cellular Biology
Ecology
Genetics
Marine/Aquatic Biology
Microbiology & Immunology
Zoology

Physical Sciences, General

Astronomy
Atmospheric Sciences & Meteorology
Chemistry
Geological & Earth Sciences
Physics

SOCIAL SCIENCES & LAW

Legal Studies, General*

Court Reporting*
Law (Pre-Law)
Legal Administrative Assisting/
Secretarial*
Paralegal/Legal Assistant

Social Sciences, General

Anthropology
Criminology
Economics
Geography
History
International Relations & Affairs
Political Science & Government
Psychology, Clinical & Counseling
Psychology, General
Sociology
Urban Studies/Urban Affairs

* Interest-Major Fit score cannot be calculated.

ACT Research

As a not-for-profit educational research organization, ACT is committed to producing research that focuses on key issues in education and workforce development. Our goal is to serve as a data resource. We strive to provide policymakers with the information they need to inform education and workforce development policy and to give educators the tools they need to lead more students toward college and career success. What follows are some of ACT's recent and most groundbreaking research studies. To review these studies, go to www.act.org/research/summary.

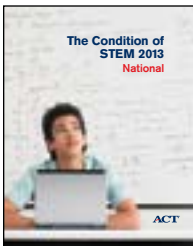
The Condition of College & Career Readiness



Using ACT scores and the ACT College Readiness Benchmarks, *The Condition of College & Career Readiness 2013* provides a series of graphics highlighting

the college and career readiness of the ACT-tested high school class of 2013. This report is updated annually.

The Condition of STEM



Late in 2013, ACT will release this first-of-its-kind report looking at the condition of STEM education in our country. We are uniquely positioned to deliver this report for two key reasons. First is our continued commitment to science by the inclusion of subject-level

science tests within ACT Explore®, ACT Plan® and the ACT. Second, through the ACT Interest Inventory, we are able to determine interest levels in specific STEM fields and more importantly determine academic readiness in math and science of those interested in STEM careers.

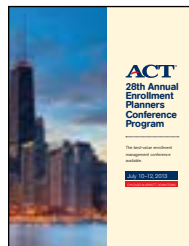
The Reality of College Readiness



Matching data from ACT's high school graduate file and The National Student Clearinghouse®, these national and state-level reports identify the 2012 enrollment and migration

status of 2011 ACT-tested high school graduates. Data are provided for two-year, public four-year, and private four-year colleges and include percentages of students meeting ACT College Readiness Benchmarks.

Enrollment Planners Conference



The ACT Enrollment Planners Conference is ACT's national enrollment management conference that draws more than 600 presenters and attendees from across the country every July.

A copy of this report can be found at
www.act.org/collegechoice

