



RESEARCH REPORT

Gender diversity in K-12 education and career readiness

Male and female high school students face
different challenges in planning for the future





Students at a crossroads



A significant percentage of male and female high school graduates don't feel prepared to make a career choice or declare a major. Female students, in particular, are looking for different pathways, as more than half of our respondents chose to not pursue a 4-year college or university.

Despite women outnumbering men in college enrollment¹ and now making up the majority of the college-educated labor force in the United States,² new data reveals female high school graduates are pursuing different opportunities outside of the traditional 4-year college or university pathway.

The data is from a national online survey, which polled more than 500 high school graduates from the 2020, 2021, 2022, and 2023 classes. The results are in line with the recent [YouScience 2023 Post-Graduation Readiness Report](#), which found that less than half of all 2023 high school graduates pursued a 4-year college pathway. From the soaring cost of college to growing skepticism that a degree will lead to a lucrative career, students are open to exploring other postsecondary options.



Women now comprise nearly 60 percent of enrollment in universities and colleges and men just over 40 percent.¹



This report not only highlights the declining interest in college but also how confidence, preparedness, exposure, and opportunities vary between male and female high school students.



44%

of female high school graduates in the class of 2023 chose to attend a 4-year college or university, that's a decrease from 53% in the class of 2022.

36%

of female high school graduates and 31% of male high school graduates did not feel prepared to make a career choice or declare a major.

72%

of female high school graduates didn't feel confident about pursuing their chosen pathway upon graduation.

37%

of female high school graduates and 31% of male high school graduates reported not being exposed to a wide enough variety of options.

54%

of female high school graduates reported that they would have taken CTE courses if they were available to them.

68%

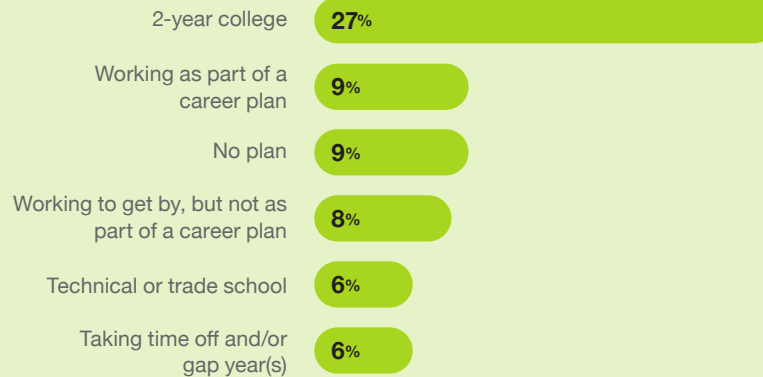
of male high school graduates and 59% of female high school graduates changed their major since initial selection.



College enrollment declines

In 2022, 53% of female high school graduates pursued a 4-year college or university. That percentage decreased to 44% as female students in the class of 2023 pursued other pathways instead:

Pathways besides 4-year college pursued by female high school grads in the class of 2023.





Confidence is key

In 2023, the Centers for Disease Control and Prevention (CDC) released a report that found nearly three in five teenage girls felt persistent sadness in 2021, which was double the rate of boys.³



“High school should be a time for trailblazing, not trauma,” said Debra Houry, M.D., M.P.H., CDC’s Chief Medical Officer and Deputy Director for Program and Science. “Our kids need far more support to cope, hope, and thrive.”

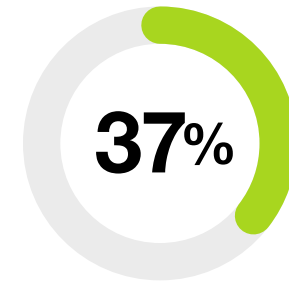
Aptitude discovery and matching those aptitudes to in-demand careers is one way to build confidence and engagement in students. However, our data found that 34% of female high school graduates reported that their school did not help them discover their aptitudes and match them with future careers.

The lack of understanding of aptitudes and exposure to a wide variety of options has contributed to 36% of female high school graduates not feeling prepared to make a career choice or declare a major. For those who do pursue a college degree, our study found that 59% of female high school students changed their major since their initial selection.

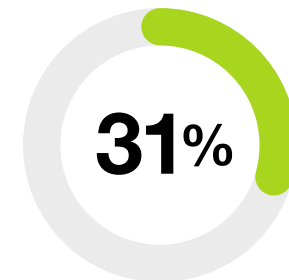
Even when high school graduates do make a decision regarding their future, 72% of female high school graduates said they don’t feel confident about pursuing their chosen pathway upon graduation, according to our study.

“Aptitude assessments are important to providing insights and conversations that really help lead to meaningful planning.”

—Melanie A., District Coordinator



37% of female high school graduates reported not being exposed to a wide enough variety of options.



31% of male high school graduates reported not being exposed to a wide enough variety of options.



Women in CTE

STEM careers are expected to grow faster than many other occupations between now and 2031.⁴ Many STEM careers can be attained through CTE courses, like health sciences, computer programming, engineering, and many more.

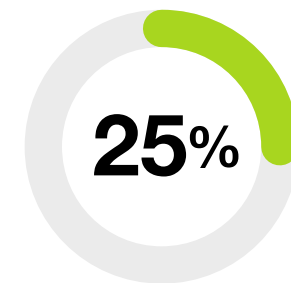
Women earn a larger percentage of undergraduate degrees than men, but only 10% of those degrees are in STEM fields.⁵ This has led to women comprising of only one-third of the STEM workforce.⁶



Career and technical education (CTE) in high school can lead to rewarding and in-demand career opportunities. As we've found in states across the country,⁷ female high school students have a high aptitude for CTE careers but lack interest or even knowledge of what's available to them.

In our study, we found that 54% of female high school graduates reported that they would have taken CTE courses if they were available to them. We also found that the top reason female high school graduates did not feel prepared to choose a career or continue their education due to lack of exposure.

There's clear evidence that more emphasis and awareness around CTE is needed in high school, especially for female students.



Nearly 25% of female high school grads indicated they would have been interested in more discussions with industry professionals.



Need for awareness and exposure

Despite these encouraging numbers, male high school graduates stated that the top reason for not feeling prepared was a lack of awareness, according to our study. Additionally, more than a quarter of male high school graduates stated that they would like to have more exposure to career opportunities in various fields. These two factors likely contributed to another finding in our research, which was that more male high school graduates (68%) than females (59%) changed their major since the initial selection.

If improvements can be made to both awareness and exposure to career opportunities, it would help all students make more informed decisions about their futures.

Despite the need for more awareness and exposure to career opportunities, male high school graduates still reported feeling more prepared to make postsecondary decisions than female counterparts. According to our data:

78% of male high school graduates reported that their high schools let them know that employers look for candidates with certain aptitudes compared to females at 68%



71% of male high school graduates feel they are where they want to be compared to females at 63%



83% of male high school graduates felt better prepared to choose an educational or career pathway because of their identified aptitudes compared to 75% of females



79% of male high school graduates reported being exposed to a variety of different career options more often compared to females at 69%





The impact of educators



“The father of a student recently told me his daughter is doing exactly what an aptitude assessment told her she would be good at. She’s loving it and recently got a raise. The dad told me, ‘I never would have dreamed that would be a career for my daughter.’”

— Donna M., career coach

Figuring out which postsecondary pathway is right for each student is extremely challenging, and one major change our research found was that the number of female high school graduates who determined their post-graduation pathway on their own decreased from 20% (class of 2022) to 9% (class of 2023) according to our study.

Instead, students are relying primarily on their families for guidance but they may lack the full picture. Educators and counselors can play a greater role in guiding students to the best pathways for them, using aptitude and discovery tools. Students also need access to industry professionals who can provide real-life career guidance and internship opportunities.

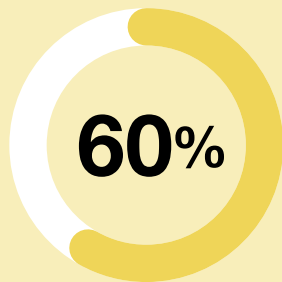
Female high school graduates who determined their post-graduation pathway on their own





What's the answer?

Students need tools to identify and better understand their aptitudes so they can plan their personalized pathways sooner and more effectively.



60% of male high school graduates felt more prepared to make a career choice or declare a major upon graduation

Without aptitude discovery and career guidance, students pursue the careers they are most exposed to and interested in. For example, a recent study found that more than half of students would be a “social media influencer” if the opportunity presented itself.¹⁰ While that may be an option for a select few students, more needs to be done to provide awareness of other careers that are in demand today and in the future.

When students understand what makes them unique, what they're naturally good at, and what career opportunities are open to them, they become more active in the planning of their future and can make personalized and intentional decisions about their post-graduation pathways.

For female students, in particular, having more exposure to career fields, industries, and opportunities will increase their confidence and preparedness for careers post-graduation.

While male students self-reported feeling more prepared for post-graduation decisions, the data shows they are switching their majors more than their female counterparts, indicating that they also need more understanding of their aptitudes to guide their decisions.





Our suite of solutions

To help students discover their aptitudes and connection with teachers and classroom content, we suggest the following.



Aptitude and interest assessment

Utilize a science-based aptitude and interest assessment to help students discover their best-fit postsecondary education and career pathways.



Collaborative planning

Working in concert with family, educators, and counselors, students can apply their own aptitude knowledge to plan courses, obtain beneficial certifications in select CTE courses, and be better prepared to enter the workforce or pursue a degree suited for their skills.



Interdisciplinary teaching

In an interdisciplinary teaching approach, schools and districts work together in a teaming model to create personalized pathways through sequenced and integrated programs of study—all through the lens of relevant career clusters.



Career-connected learning

Connect students to real-world training, with a variety of available programs implemented on the state and local levels.



Education-to-career tools

Provide counselors and teachers the resources to help create personalized plans for postsecondary education and training based on student aptitudes and interests.



Industry-recognized certifications

Quantify student knowledge and skills through certifications.



Work-based learning, internships, and apprenticeships

Connect students with business and industry partners to gain real-world work experience.



About YouScience

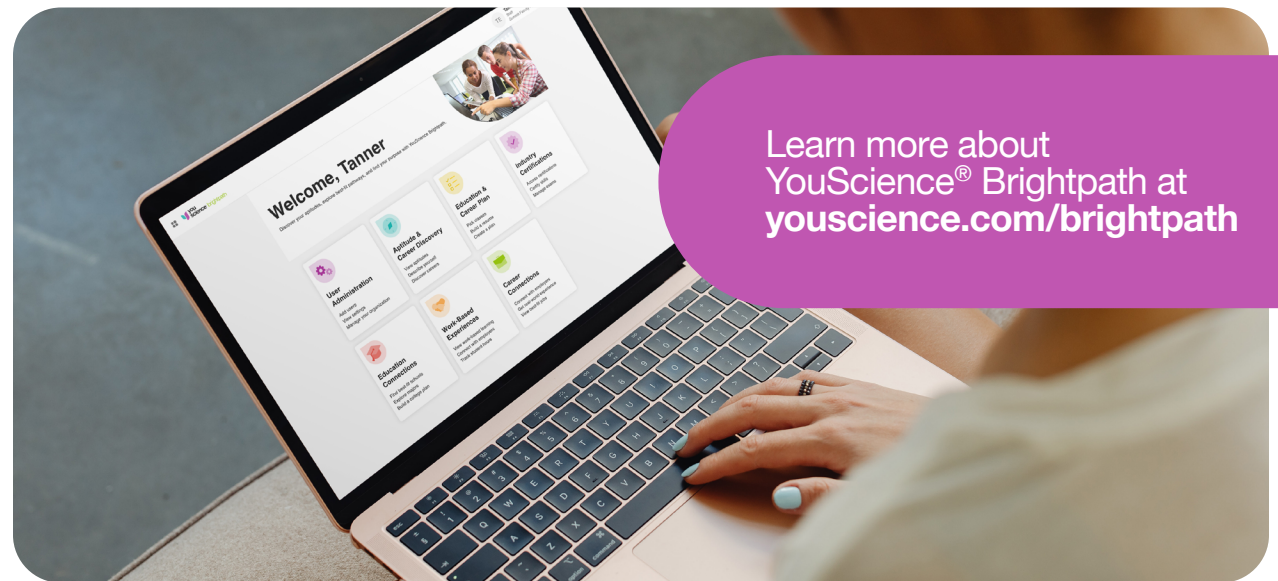


“I strongly believe that together as educators, parents, and industry representatives, we can make a difference in the lives of our students. Our mission is to empower everyone to find intentional, individual success.”

Edson Barton
YouScience Co-Founder & CEO

YouScience® is the leading technology provider dedicated to solving the skills and exposure gap crisis for students and employers. Its end-to-end platform, YouScience® Brightpath, leverages proven research, artificial intelligence, and industry input to help students identify their aptitudes, validate their skills, and get matched with best-fit educational and career pathways.

YouScience is the preferred choice of individuals, parents, educators, and counselors to guide and support educational and career pathways. Currently more than 7,000 educational institutions and millions of users nationwide use YouScience to unlock potential and plan brighter futures.



Learn more about YouScience® Brightpath at youscience.com/brightpath



¹ <https://hechingerreport.org/an-unnoticed-result-of-the-decline-of-men-in-college-its-harder-for-women-to-get-in/#:~:text=for%20Education%20Statistics,-,Women%20now%20comprise%20nearly%2060%20percent%20of%20enrollment%20in%20universities,men%20and%20women%20on%20campus.>

² <https://www.pewtrusts.org/en/trust/archive/winter-2023/women-now-outnumber-men-in-the-us-college-educated-labor-force>

³ <https://www.cdc.gov/media/releases/2023/p0213-yrbs.html>

⁴ <https://www.bls.gov/ooh/math/home.htm>

⁵ https://nces.ed.gov/programs/digest/d20/tables/dt20_318.10.asp?current=yes

⁶ <https://nces.nsf.gov/pubs/nsb20221/u-s-and-global-stem-education-and-labor-force>

⁷ https://resources.youscience.com/lp/806-BFU-539/WS-RP-SAR-CA_LPStudentAbilityReport.html

⁸ https://resources.youscience.com/rs/806-BFU-539/images/2023_PostGraduationReadinessReport_PartOne.pdf

⁹ <https://pro.morningconsult.com/analysis/gen-z-interest-influencer-marketing>