

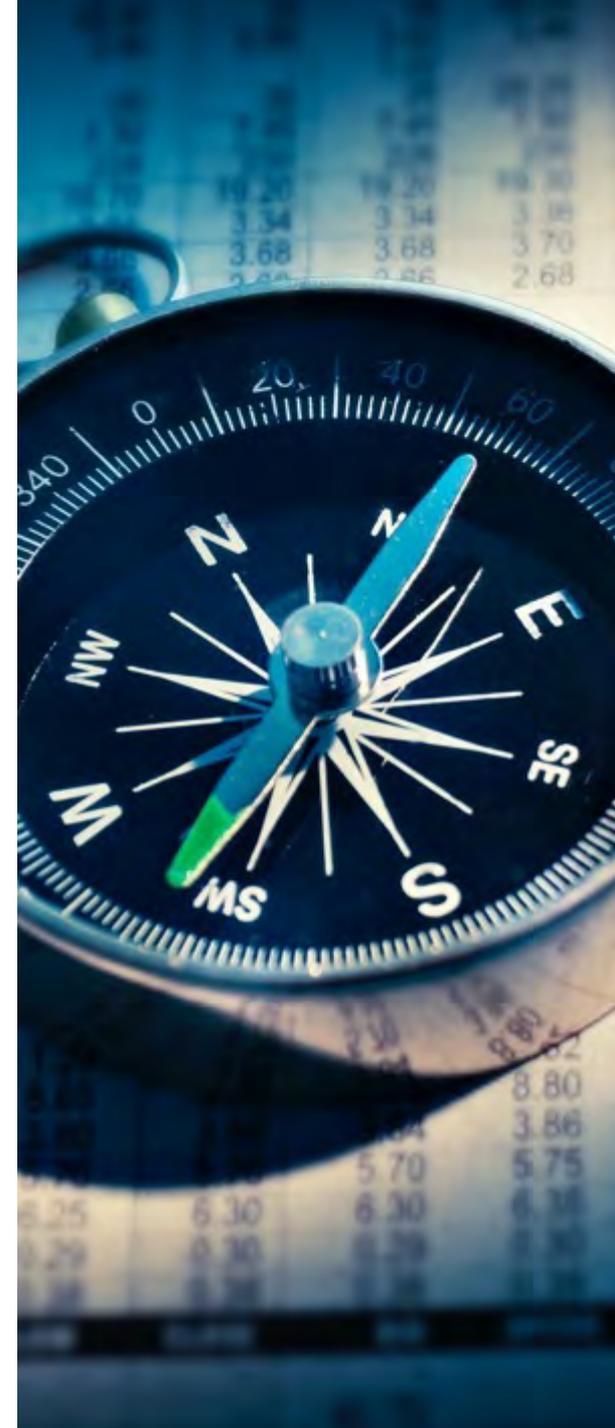
2022
COLLEGE CHANGES EVERYTHING[®]
CONFERENCE



What is the “**System**” in
Career Navigation Systems?

Agenda

- Welcome and introduction
- Career navigation in pathways
- Defining career navigation systems
- Example advising resource
- Equity considerations
- Question and answer session



About JFF



The American labor market is broken. Our rapidly changing economy demands skilled and adaptable workers, but many people lack the education and training employers require. *JFF is transforming the workforce and education systems to accelerate economic advancement for all.*

About Me



Sarah Jenness
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Senior Program Manager
Jobs for the Future

JFF'S PATHWAYS TO PROSPERITY FRAMEWORK



Secondary-
Postsecondary
Integration ›



Career Navigation
Systems ›



Work-Based Learning ›

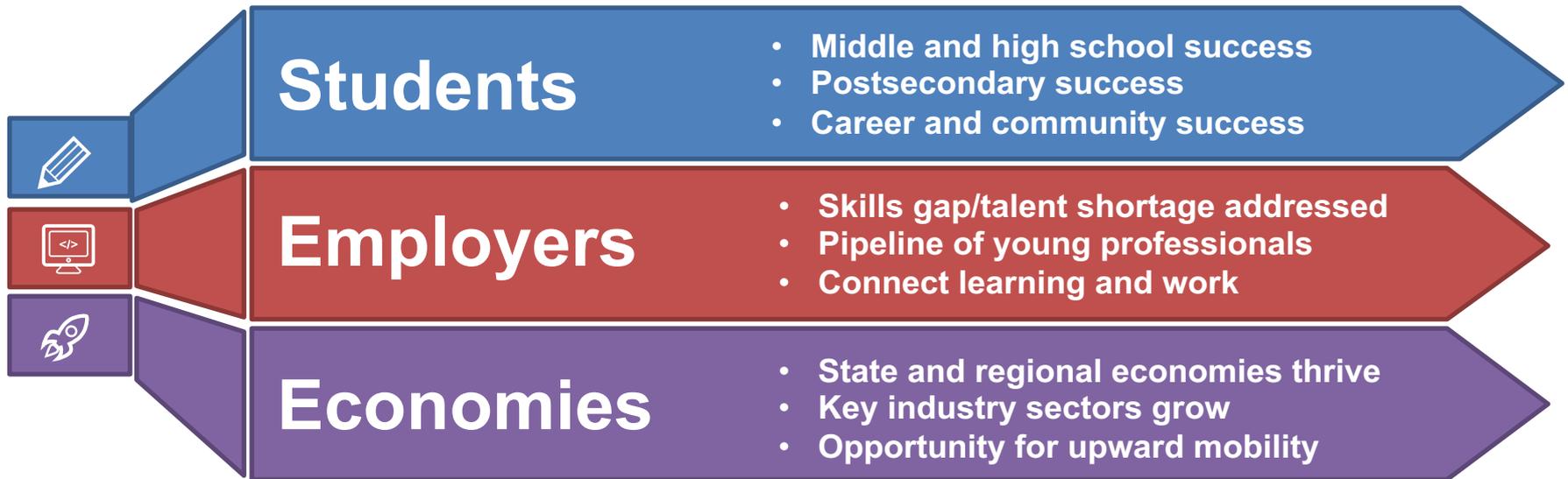


Intermediaries ›

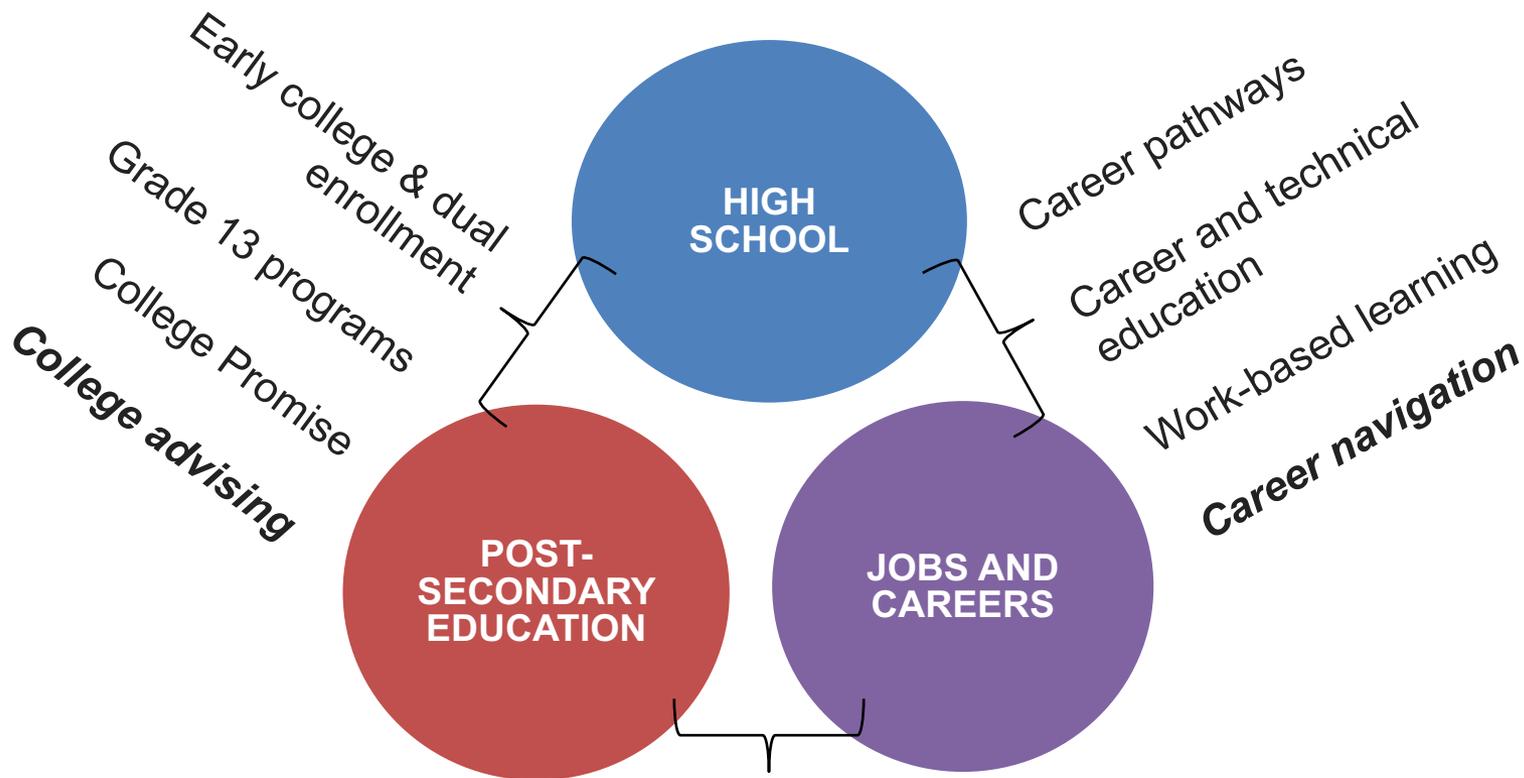


Leadership and Policy ›

PATHWAYS FOCUS ON TRANSFORMATIVE OUTCOMES



WE'VE BEEN TRYING TO IMPROVE TRANSITIONS FOR A LONG TIME



Career navigation and services

Work-based learning

Industry-aligned credentials

THE BIG BLUR

- High School
- Postsecondary Education
- Labor Market



FREE FOR STUDENTS

**GUIDED PATHWAYS
MODEL**

**INTEGRATED WORK-
BASED LEARNING
EXPERIENCES**

**ACADEMIC AND
CAREER NAVIGATION**

**WRAPAROUND
SUPPORTS**

Michael Collins, Vice President, JFF

From

Career Information & Advising

"When we talk about career navigation often we're talking about the advising and counseling functions."

"I've been talking about career navigation as if it was a thing and I'm not sure it's a thing yet."

To

Career Navigation Systems

WHAT MAKES A CAREER NAVIGATION "SYSTEM"?

A developmental approach...

Help students understand:

- their skills & interests
- career opportunities regionally available
- skills, education, and training required

...that builds social capital...

“Resources embedded in one’s social networks, resources that can be accessed or mobilized through ties in the networks.” (Lin, 2005)

...and takes a network

Educators, employers, intermediaries, families, communities all contribute to helping students make informed decisions about pathways and careers.

WHAT DO CAREER NAVIGATION SYSTEMS LOOK LIKE?

- Intentional **sequence of college and career advising and exploration activities** embedded within pathways
- Individualized plans that **identify education and career goals** and the steps needed to achieve them
- **Resources and professional development opportunities** that enable stakeholders to effectively advise students
- Students build **professional networks**, engage in **self-advocacy**, identify **good jobs and good employers**, and **combat barriers** based on race, gender, and class.
- **Responsive to the real hiring needs** of local employers and the future outlook of high-wage, high-demand careers.



WHY DO CAREER NAVIGATION SYSTEMS MATTER?

- Shifting career landscape; **career navigation doesn't end when students finish school and enter the workforce**
- **Capacity and access challenges** in the current system
- While coursework is a key part of pathways, young people need access to additional **information to make informed choices** about their education and career options
- Supports **economic vitality**



THE ROLE OF **LABOR MARKET INFORMATION** IN PATHWAYS AND CAREER NAVIGATION

PROGRAM CREATION & RIGHT-SIZING

- Prepare young people for careers that are growing, offer advancement and livable wages
- Ensure that the local economy can support trained graduates

PROGRAM DESIGN

- Develop programs of study that align with in-demand credentials
- Develop curriculum and WBL to address competencies and skills of value to labor market

EMPLOYER ENGAGEMENT

- Better understand current and future needs of employers
- Arm yourself with information to make targeted and educated outreach

INFORM STUDENT/ FAMILY DECISION- MAKING

- Incorporate LMI in advising and counseling practices so that students and families make an informed choice

WHO ARE THE PARTNERS IN CAREER NAVIGATION SYSTEMS?

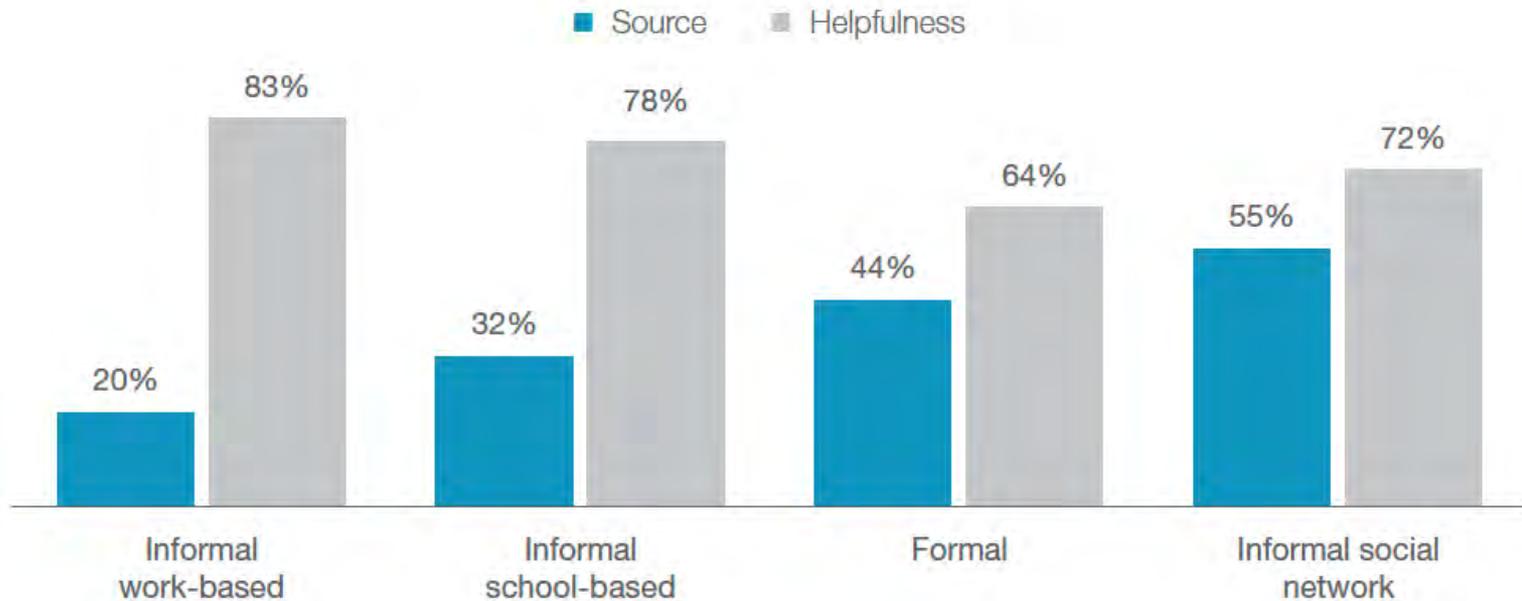
- **Secondary and postsecondary educators** develop and implement a college and career advising continuum
- **Employers** participate in career awareness and exploration, provide feedback on curriculum
- **Intermediaries** support coordination and collaboration among educators and employers.
- **Workforce development boards** provide educators with labor market information
- **CBOs** provide support services and bridge programs



COLLEGE MAJOR ADVICE

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



formal: counselors and the media

informal social network: friends, family and community leaders

informal school-based: college staff and professors, high school teachers and coaches

informal work-based: employers, coworkers, experienced professionals and the military

EXAMPLE RESOURCES: LONE STAR STEM EIR PROJECT

1. Computer science industry overview for high school students
2. Computer science industry overview resource for educators
3. Computer science job profiles

Today is a preview of the content, to receive these resources, please email sjenness@jff.org and ask to be added to our distribution list!

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EXAMPLE RESOURCE CONTENT:

INDUSTRY OVERVIEW

A Career in Computer Science means...

- **Higher pay:** These careers pay very well! The median salary for computer science jobs is over \$90,000 per year.
- **More job opportunities:** Computing fields are expected to grow 13 percent, adding 667,600 jobs, between 2020 and 2030, showing the need for more students and workers in the future.
- **Opportunities for advancement:** Many people entering their careers can advance as they develop skills and continue their education.
- **Flexibility:** Opportunities for flexible hours and/or remote work-from-home options for a positive work/life balance.
- **Space for innovation and creativity:** Your creativity can help solve the world's pressing issues like how to make a website user friendly, how to protect customer information, and how to design new applications.
- **Diverse job opportunities, not just in tech:** In a tech-dependent world, companies are looking computing professionals across all industries including healthcare, finance, education, art, environmental protection, entertainment, and humanitarian relief.

EXAMPLE RESOURCE CONTENT: INDUSTRY FIELDS AND EXAMPLE OCCUPATIONS

IF YOU LIKE TO...	YOU MIGHT LIKE A CAREER IN...	DESCRIPTION	SAMPLE JOB TITLES AND PAY
Use creativity to solve challenges	Computer Science	Invent apps and software and to solve problems within a company	<ul style="list-style-type: none"> • Software Developer (\$110,140/year) • Web Developer (\$77,200/year)
Solve new and unique puzzles	Cybersecurity	Set up security solutions to help companies, schools and the government keep their information safe	<ul style="list-style-type: none"> • Information Security Analyst (\$103,590/year) • Vulnerability Analyst (\$92,870/year)
Take things apart to understand how they work	Computer Networking	Manage the devices and computers an organization uses to run their business	<ul style="list-style-type: none"> • Network Support Specialist (\$65,450/year) • Network Systems Administrator (\$84,810/year)

EXAMPLE RESOURCE CONTENT: COMPETENCY STATEMENTS

Skill	Skill Definition
Critical Thinking	Use logic and reasoning to analyze and address problems.
Adaptability and Flexibility	Understand workplace change and be open to new ideas and handle ambiguity.
Logic & Fundamentals of Computer Languages	Understand how computer languages communicate to build basic mobile and web applications.
User & Customer Support	Provide assistance and technical support to help users implement and solve problems related to computer software and hardware.
Networks	Use hardware and software to facilitate communication between people and computer systems.
Risk Management & Information Assurance	Protect the confidentiality, integrity, and availability of information and information systems.

EXAMPLE RESOURCE CONTENT: STACKABLE CREDENTIALS

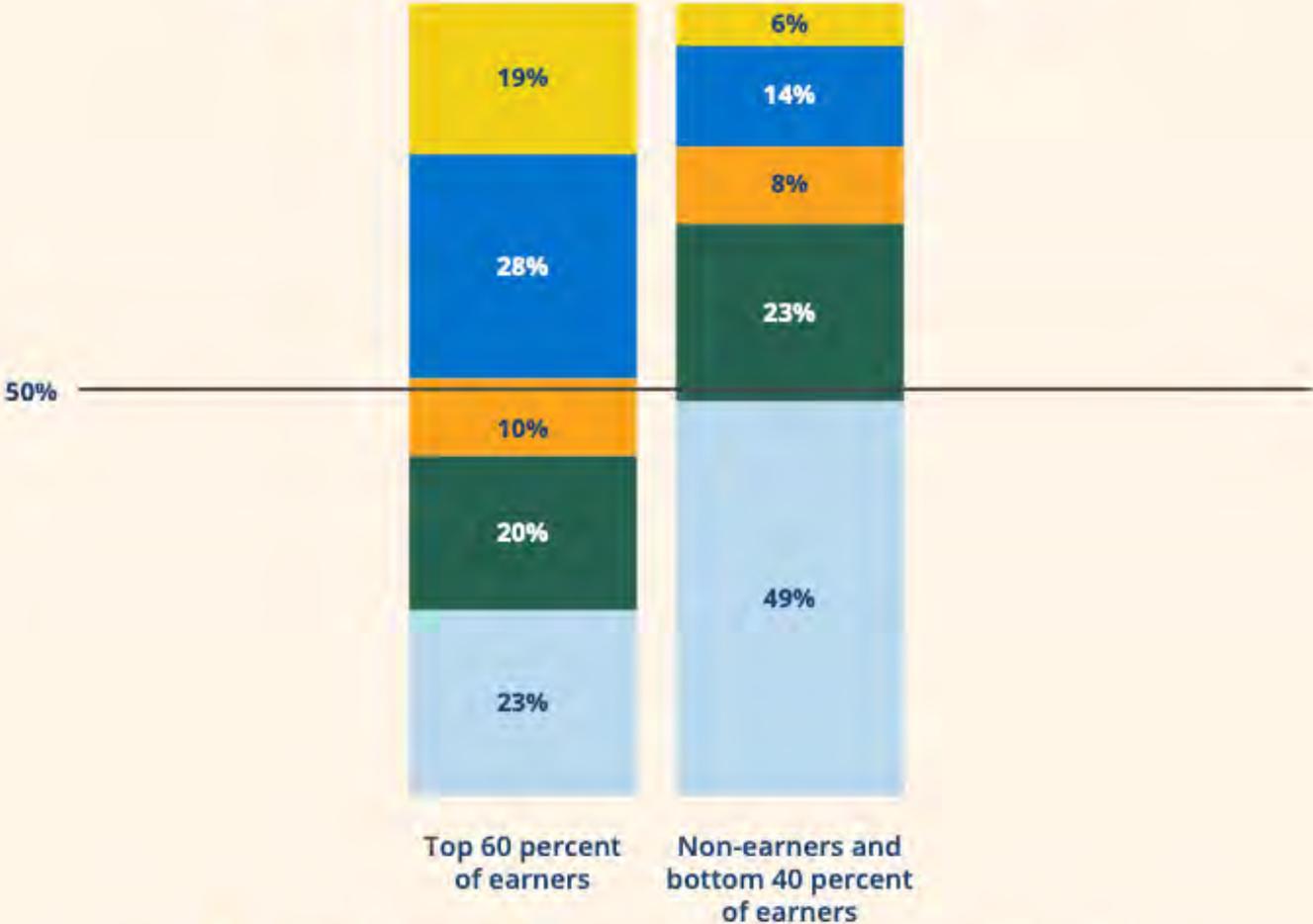
	Initial Certifications	Associate's Degree	Bachelor's Degree	Graduate Degree	Advanced Certifications
Computer Science	CompTIA A+, IT Infrastructure Library (ITIL) Foundations, Microsoft Certified: Fundamentals	Computer Science, Information Technology, Software Engineering	Computer Science, Computer Programming, Software Engineering, Information Technology	Computer Science, Computer Programming, Software Engineering, Data Science	AWS Certified DevOps Engineer-Professional, Cisco Certified DevNet Professional (CCDP), Oracle Java EE Application Developer (OCPJAD)

EQUITY
CONSIDERATIONS:
CAREER NAVIGATION
SYSTEMS GO BEYOND
INDIVIDUAL STUDENT
CHOICES AND
OUTCOMES



Among Americans with earnings in the top 60 percent, educational attainment is relatively high.

Highest educational attainment by earnings level

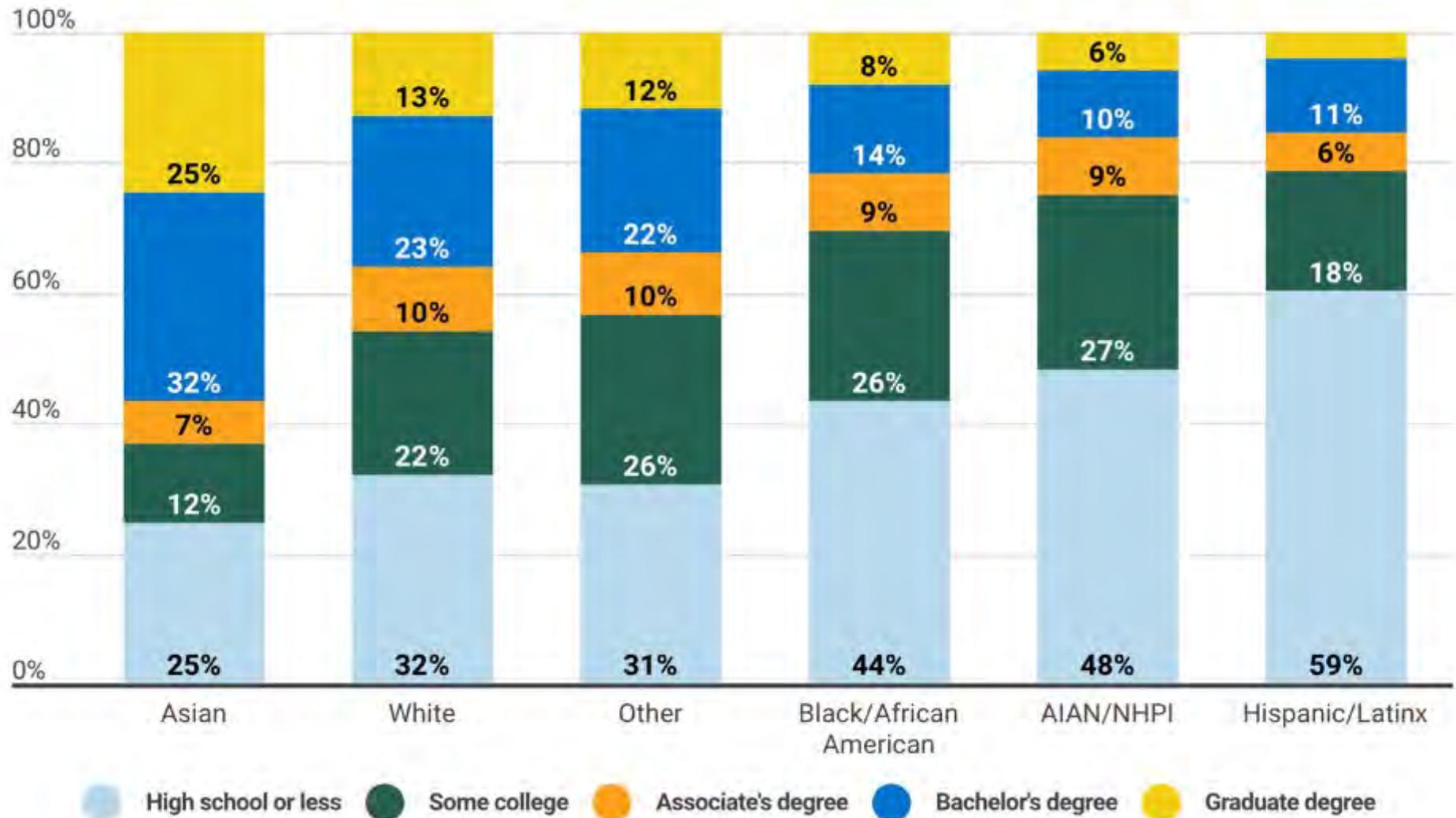


Source: Georgetown University Center on Education and the Workforce analysis of data from the US Census Bureau, American Community Survey (ACS), 2013–17 (pooled). <https://1gyhoq479ufd3yna29x7ubjn-wpengine.netdna-ssl.com/wp-content/uploads/cew-the-cost-of-economic-and-racial-injustice.pdf>



● Graduate degree ● Bachelor's degree ● Associate's degree
● Some college ● High school or less

Highest educational attainment by race/ethnicity



Note: The figure shows the educational distribution in the population ages 25 to 64. AIAN/NHPI stands for American Indian, Alaska Native, Native Hawaiian, and Pacific Islander. Values may not sum to 100 percent due to rounding.

Source: Georgetown University Center on Education and the Workforce analysis of data from the US Census Bureau, American Community Survey (ACS), 2013–17 (pooled). <https://1gyhoq479ufd3yna29x7ubjn-wpengine.netdna-ssl.com/wp-content/uploads/cew-the-cost-of-economic-and-racial-injustice.pdf>



EDUCATIONAL HELPS, BUT INEQUITIES PERSIST

- Figure: What if education of bottom 40% of earners matched education of 60% of top earners? And what if educational attainment for all racial/ethnic groups matched White adults?
 - 58% would have associate's degree or higher, compared to 40% currently
- **Result:** annual earnings boost of \$1.03 trillion among new credential holders
- **However:** Wage gaps by race and gender persist

Source: Georgetown University Center on Education and the Workforce analysis of data from US Census Bureau, American Community Survey (ACS), 2013–17 (pooled).



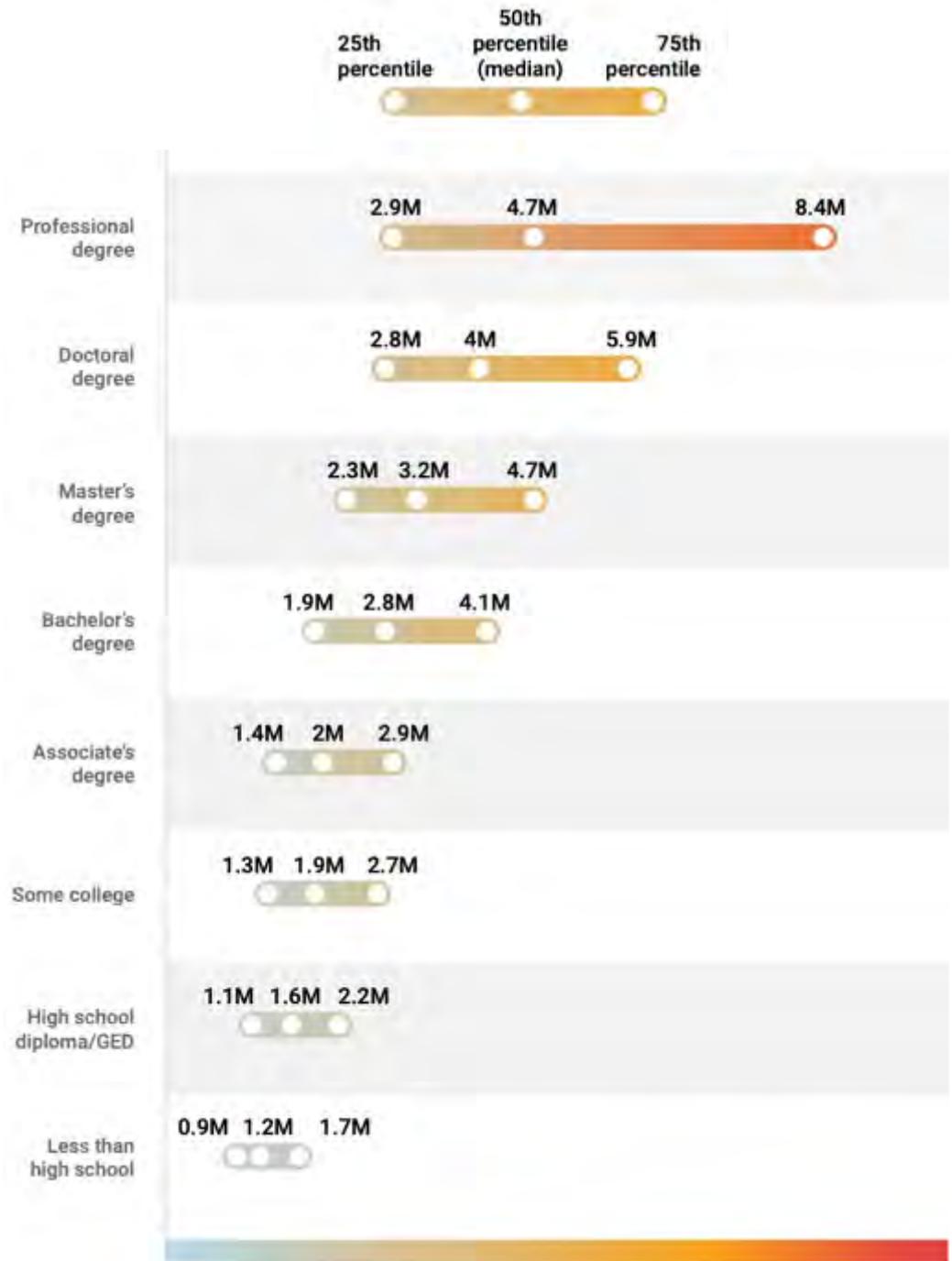
LIFETIME EARNINGS BY EDUCATIONAL ATTAINMENT

- Earnings increase with degrees
- Some workers with less education can earn more than earners with more education

Source: Georgetown University Center on Education and the Workforce analysis of the US Census Bureau, American Community Survey (ACS), 2009–2019.

<https://cew.georgetown.edu/cew-reports/collegepayoff2021/>

Note: The figure is based on data for 25- to 64-year-olds working full-time, full-year.

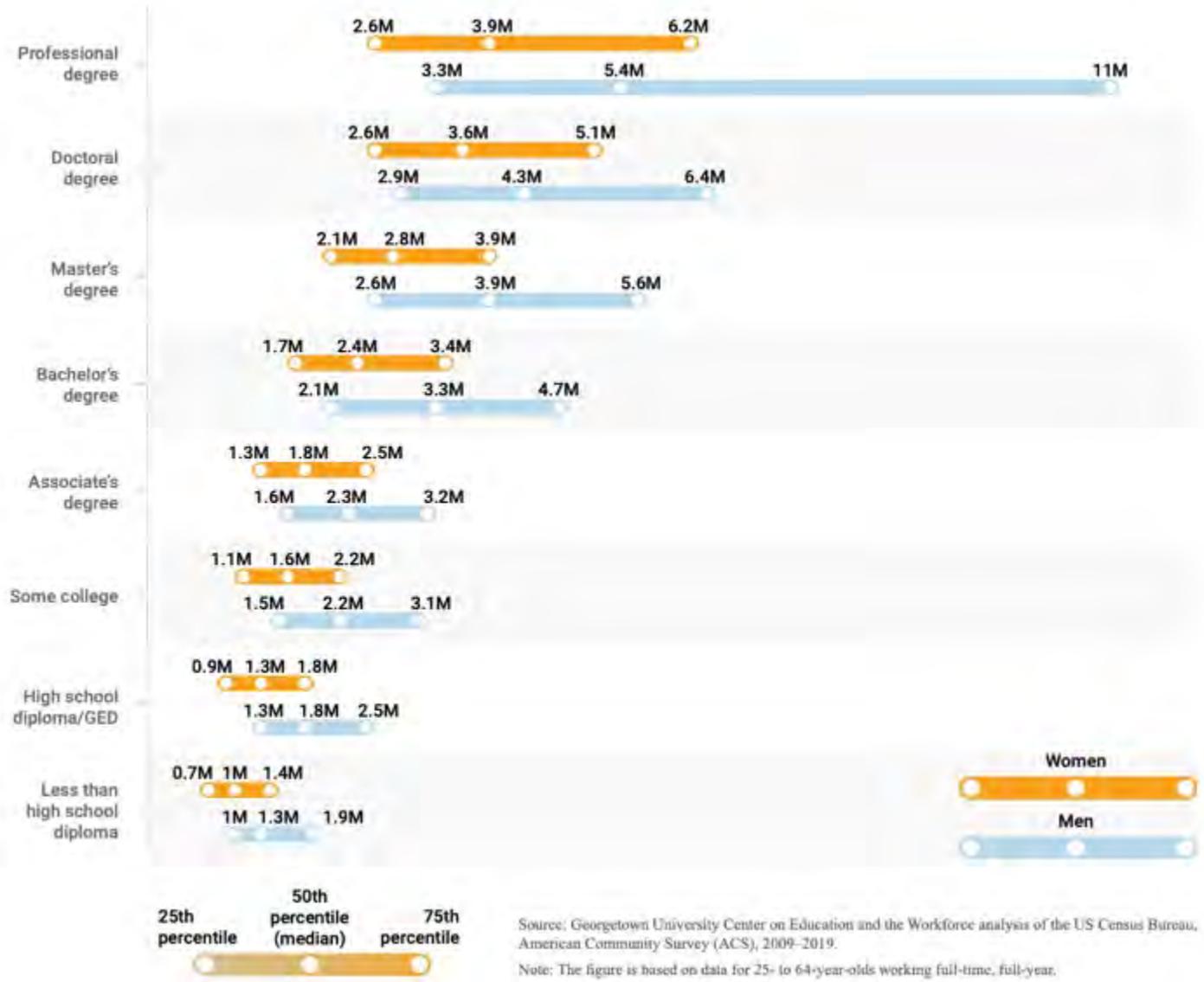


LIFETIME EARNINGS BY EDUCATIONAL ATTAINMENT BY RACE



Source: Source: Georgetown University Center on Education and the Workforce analysis of the US Census Bureau, American Community Survey (ACS), 2009–2019. https://1gyhoq479ufd3yna29x7ubjn-wpengine.netdna-ssl.com/wp-content/uploads/cew-college_payoff_2021-fr.pdf

LIFETIME EARNINGS BY EDUCATIONAL ATTAINMENT BY GENDER



Source: Source: Georgetown University Center on Education and the Workforce analysis of the US Census Bureau, American Community Survey (ACS), 2009–2019.

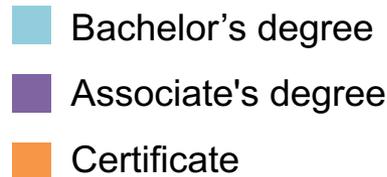
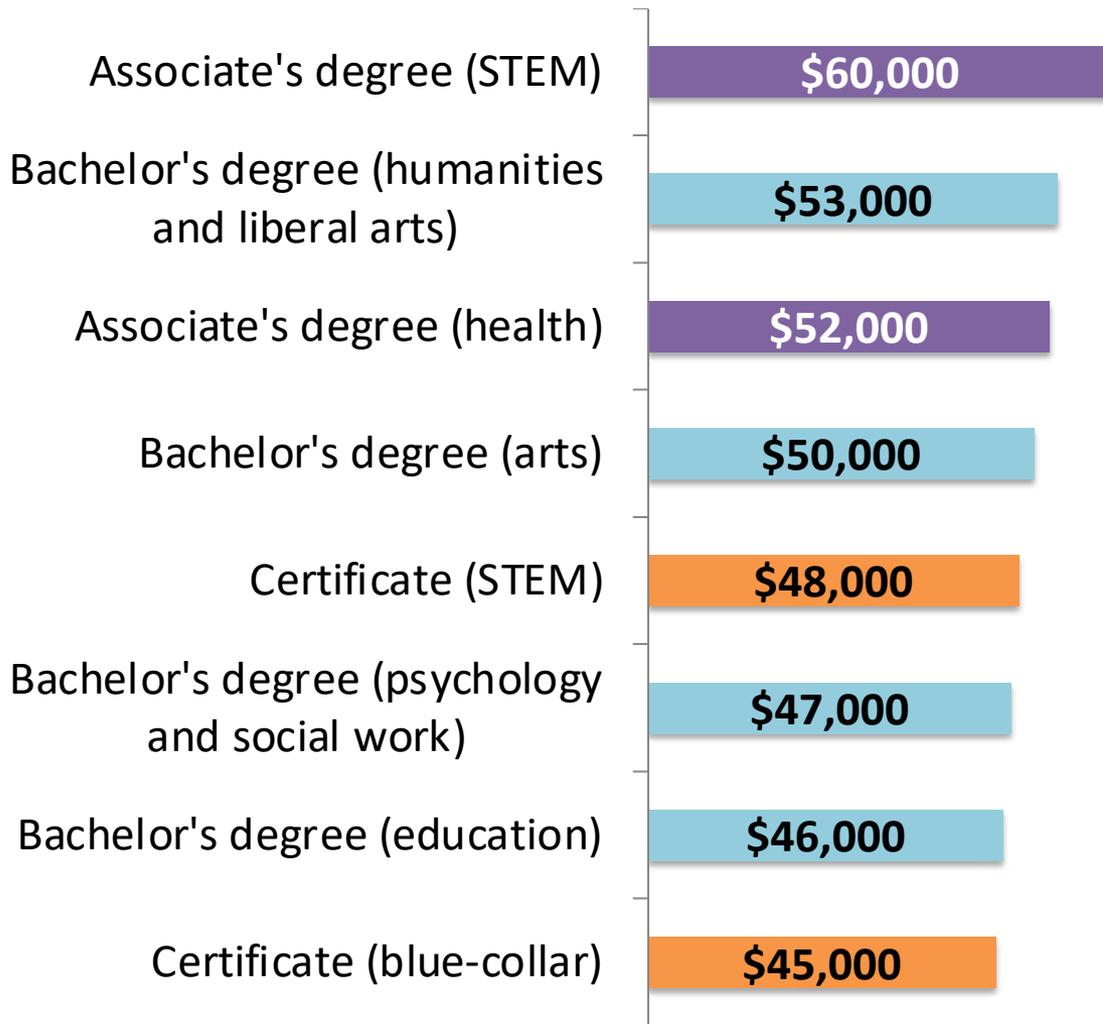
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Source: Georgetown University Center on Education and the Workforce analysis of the US Census Bureau, American Community Survey (ACS), 2009–2019.

Note: The figure is based on data for 25- to 64-year-olds working full-time, full-year.

INFLUENCE OF COLLEGE MAJOR ON EARNINGS



- Comparison of median earnings by education level and field of study
- *The College Payoff Report*: 16% of workers with high school diplomas and 28% of workers with associate's degrees earn more than half of workers with bachelor's degrees
- **Both/And**: Program of study matters, but different industries and occupations are gendered and racialized (e.g.: many home health aides are women of color)

CAREER NAVIGATION SYSTEMS MUST SUPPORT STUDENTS AND ADDRESS INEQUITIES

ACTION STEPS

- Convene cross-sector pathway teams
- Use labor market information in advising opportunities
- Increase dual credit to save students time and money in earning a postsecondary credential
- Increase learn-and-earn work-based learning opportunities like internships, apprenticeships, and OTJ training
- Shift toward competency-based hiring
- Ensure compensation packages meet living wage threshold
- Collect data and disaggregate by race and gender
 - Pathway enrollment and completion
 - Hiring, wages, and advancement



Question & answer session

Thank you for attending!

If you're interested in the forthcoming computer science advising publications or have questions, **please feel free to reach me at sjenness@jff.org**

