



GRAY
ASSOCIATES



Demand for Higher-Education Programs: Community Colleges

Results through September 2023



Gray has developed a complete Program Evaluation System.



Agenda

Student Demand

- Leading Indicators: Google
- Recent Trends: Enrollment
- Non-Degree Courses

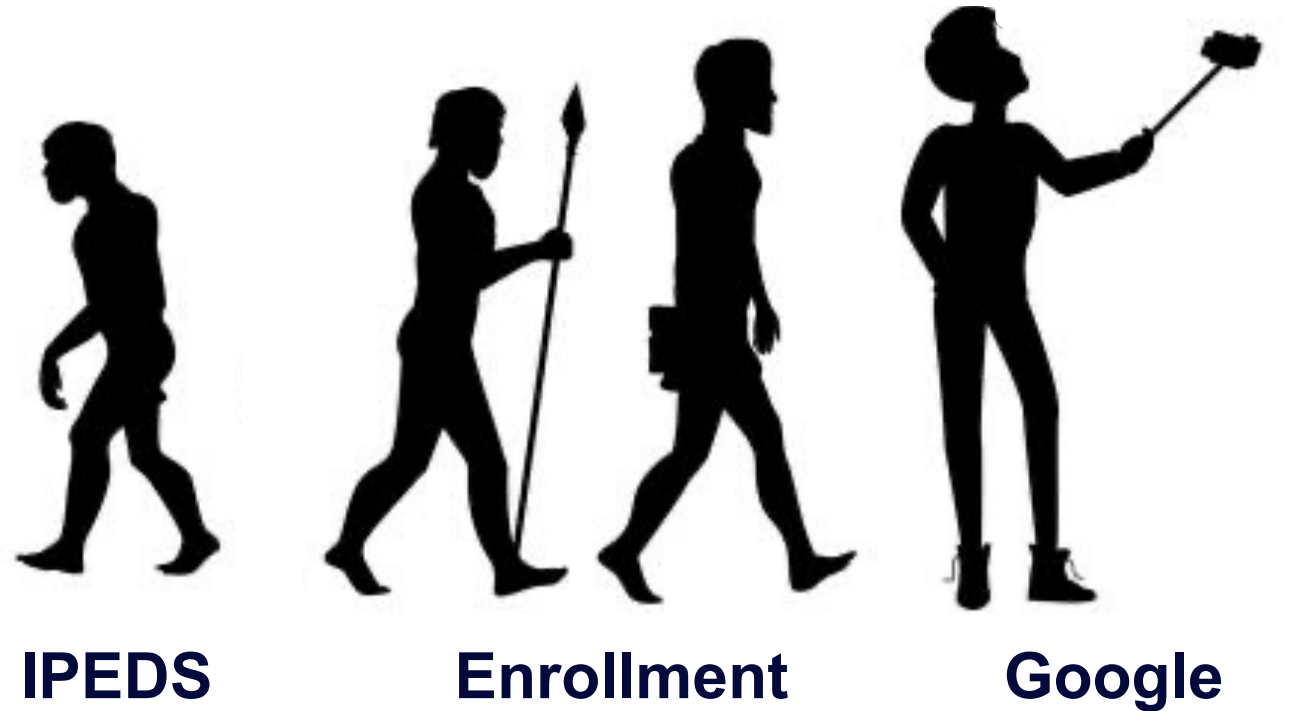
Employment: Current Indicators

Program of the Month

Summary

IPEDS, Enrollment, and Google Search: Past, Present, and Future

Insights on Student Demand



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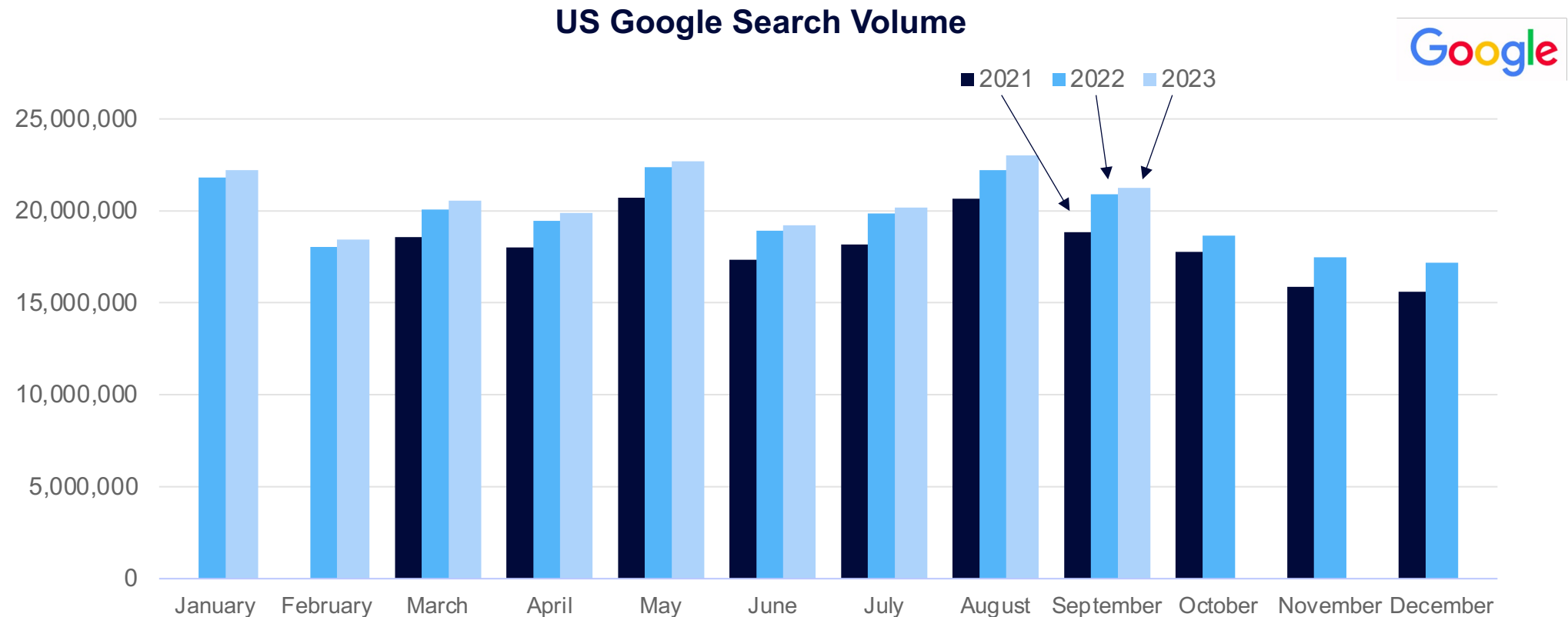
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Google Search Trends: Programs

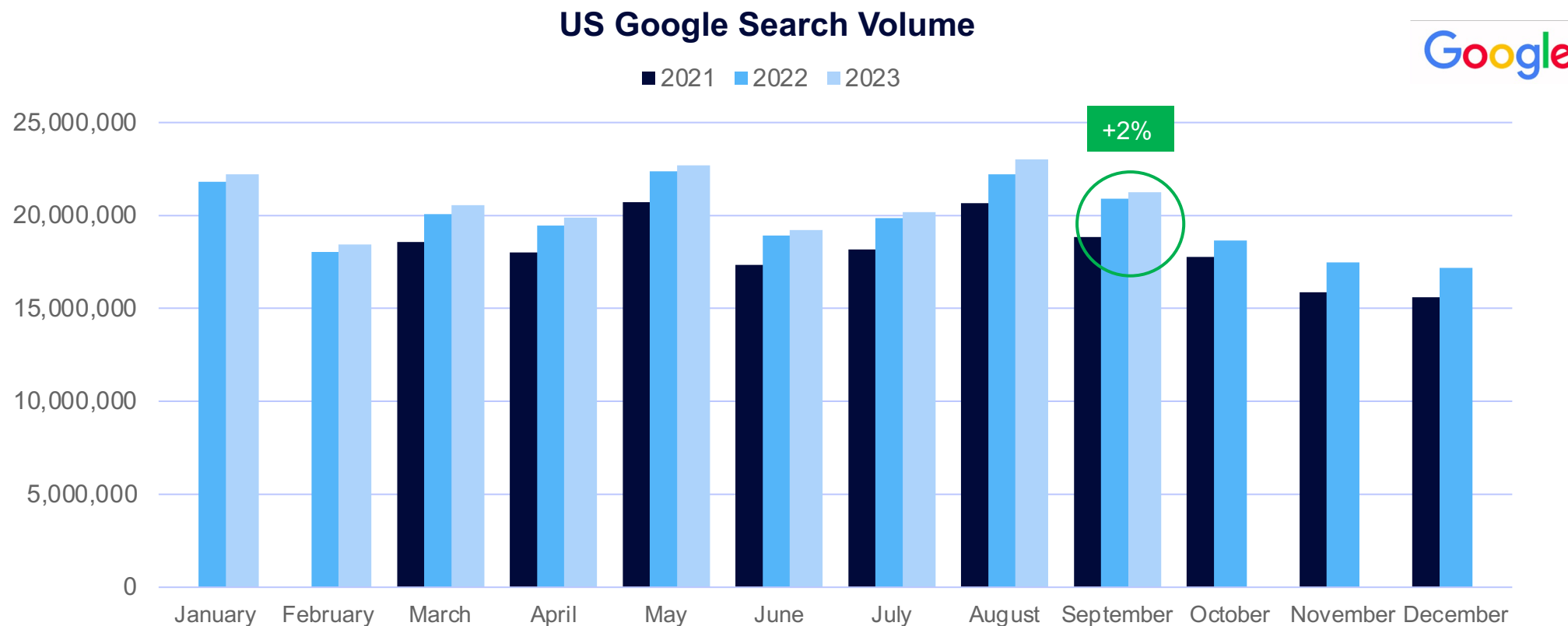
Gray tracks searches for over 900 programs (90% of all US completions).



Source: PES Keyword Search Dashboard

Google Search Trends: Programs

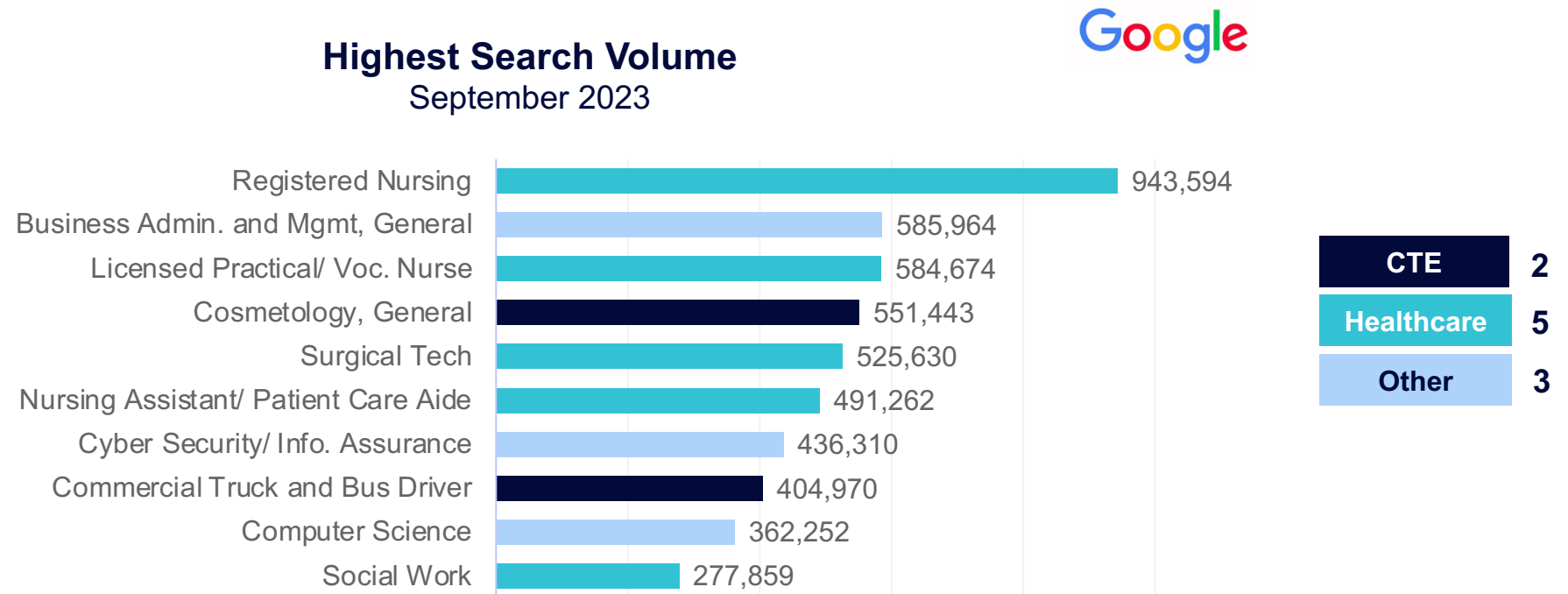
In September 2023, Google searches for academic programs rose 2% year-over-year.



Source: PES Keyword Search Dashboard

Google: Largest Programs

In September, Registered Nursing had the highest search volume.



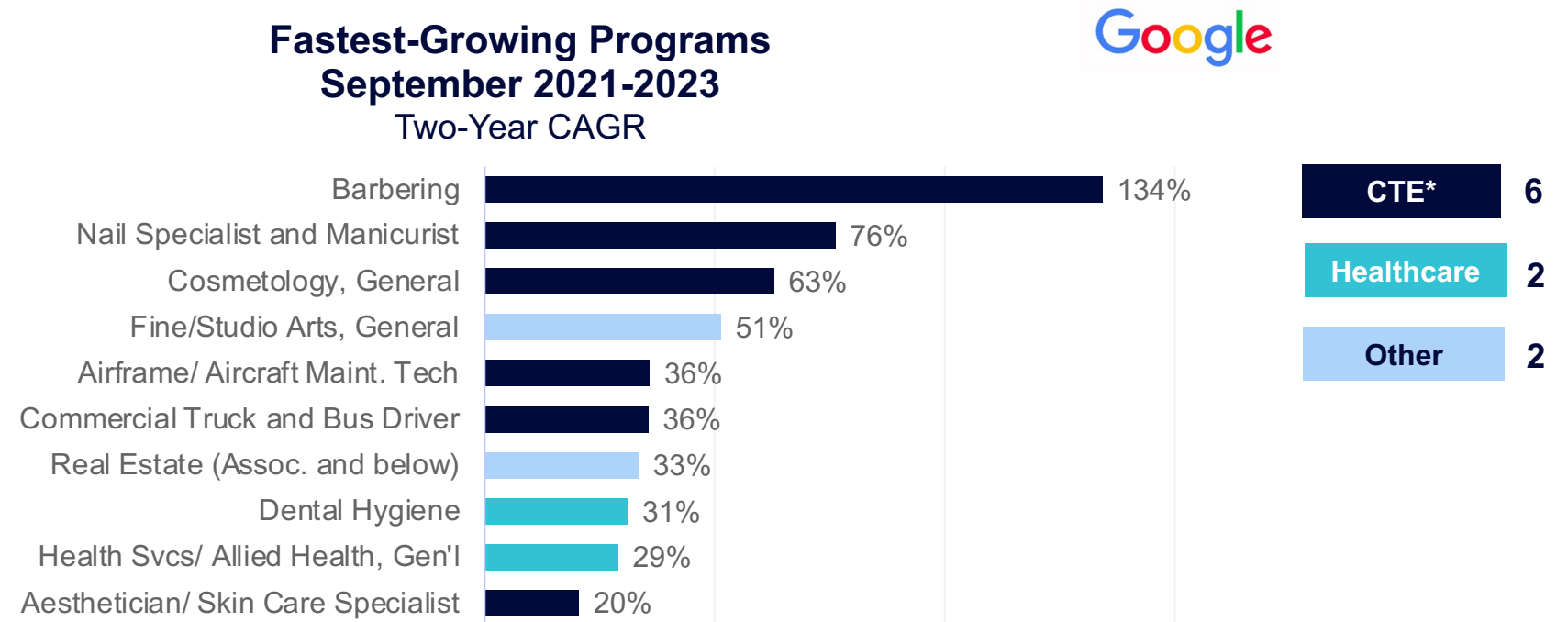
*CTE: Career and Technical Education

Google search volume for standardized sets of academic keywords for community college programs

Source: Gray's Keyword Search Dashboard

Google: US Fastest-Growing Programs

Since 2021, searches for Barbering have increased 134% annually.



*Minimum 10,000 searches September 2021

*CTE: Career and Technical Education
Google search volume for standardized sets of academic keywords for community college programs
Source: Gray's Keyword Search Dashboard

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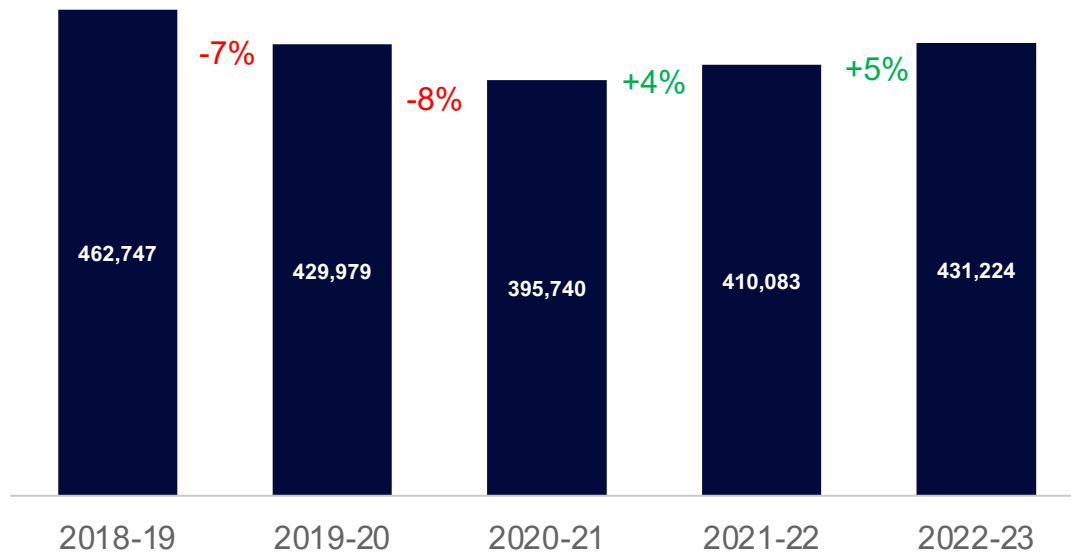
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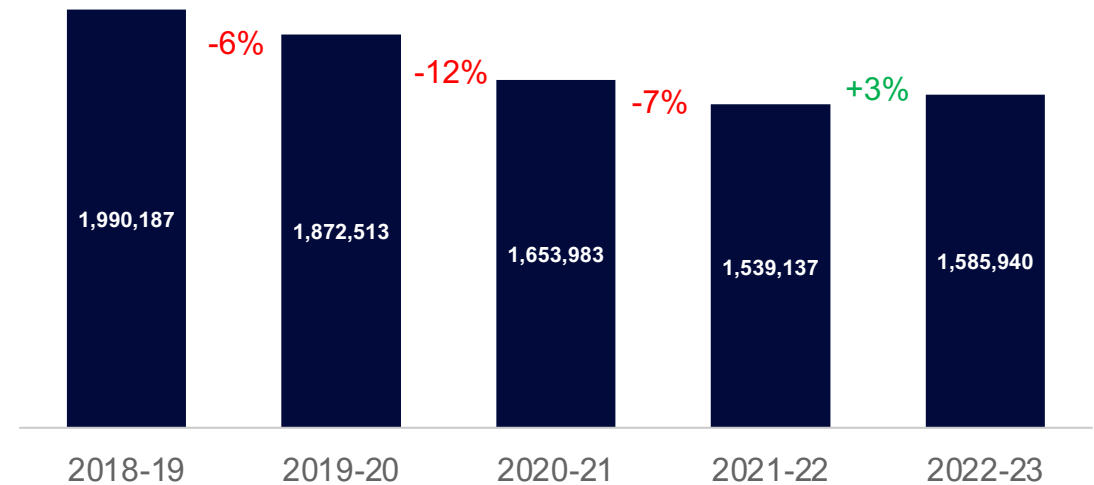
In Academic Year 2022-23, new student enrollment grew year-over-year.

- Certificate new enrollment grew 5% year-over-year.
- Associate new enrollment grew 3% year-over-year.

US New Enrollment
Certificate Programs, 2018 - 2023

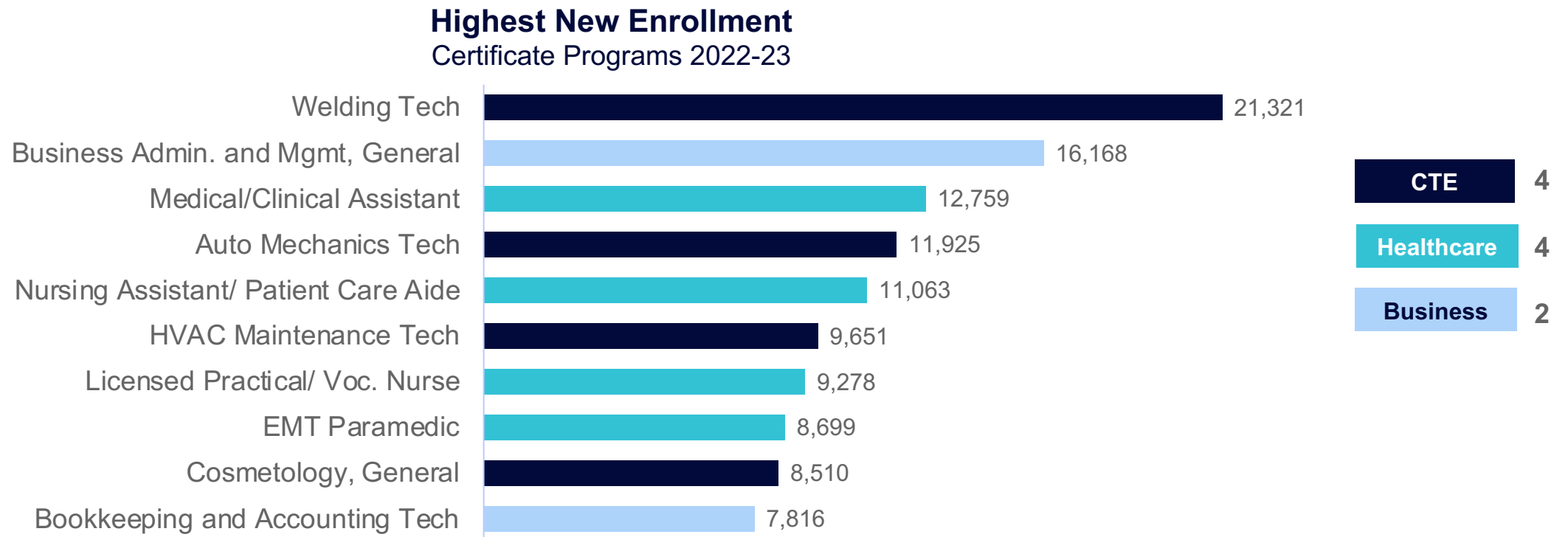


US New Enrollment
Associate Programs, 2018 - 2023



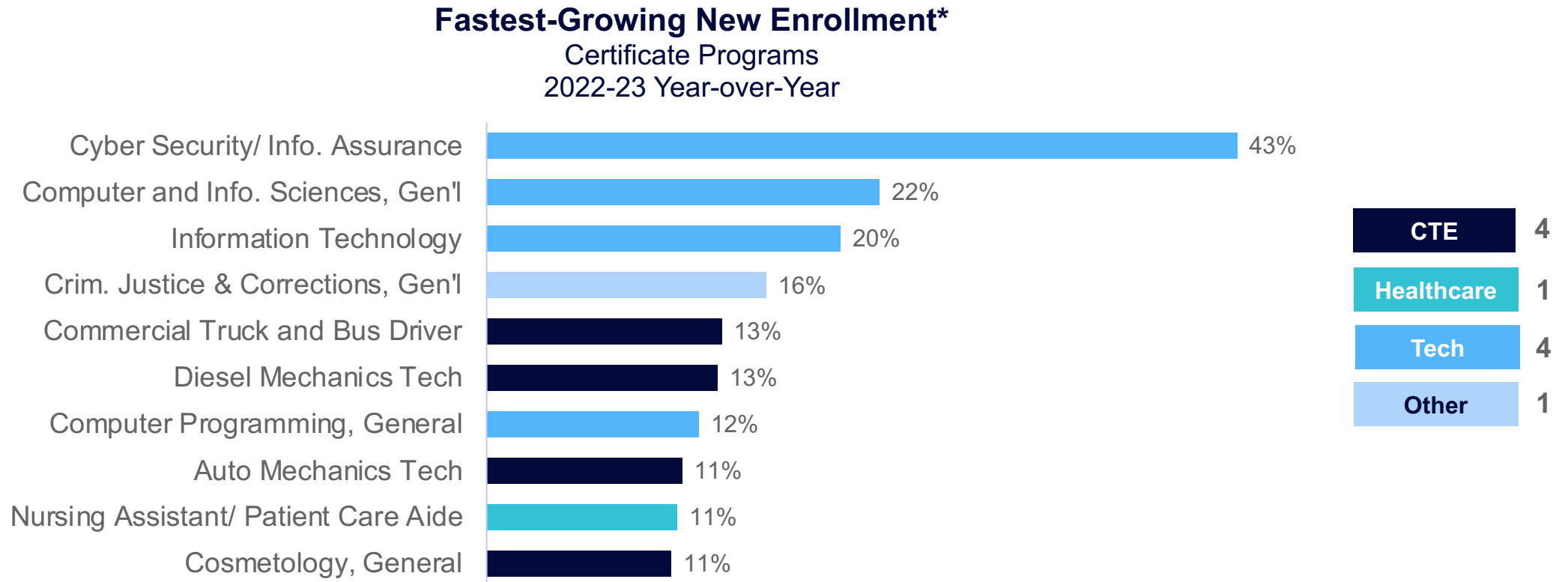
Source: Gray Analysis of National Student Clearinghouse

Certificate: In 2022-23, Welding Tech had the highest new enrollment.



Source: Gray analysis of National Student Clearinghouse data
Excludes CIP codes ending in 99, "Other" and Liberal Arts/General Studies

Certificate: In 2022-23, Cyber Security grew 43% year-over-year.



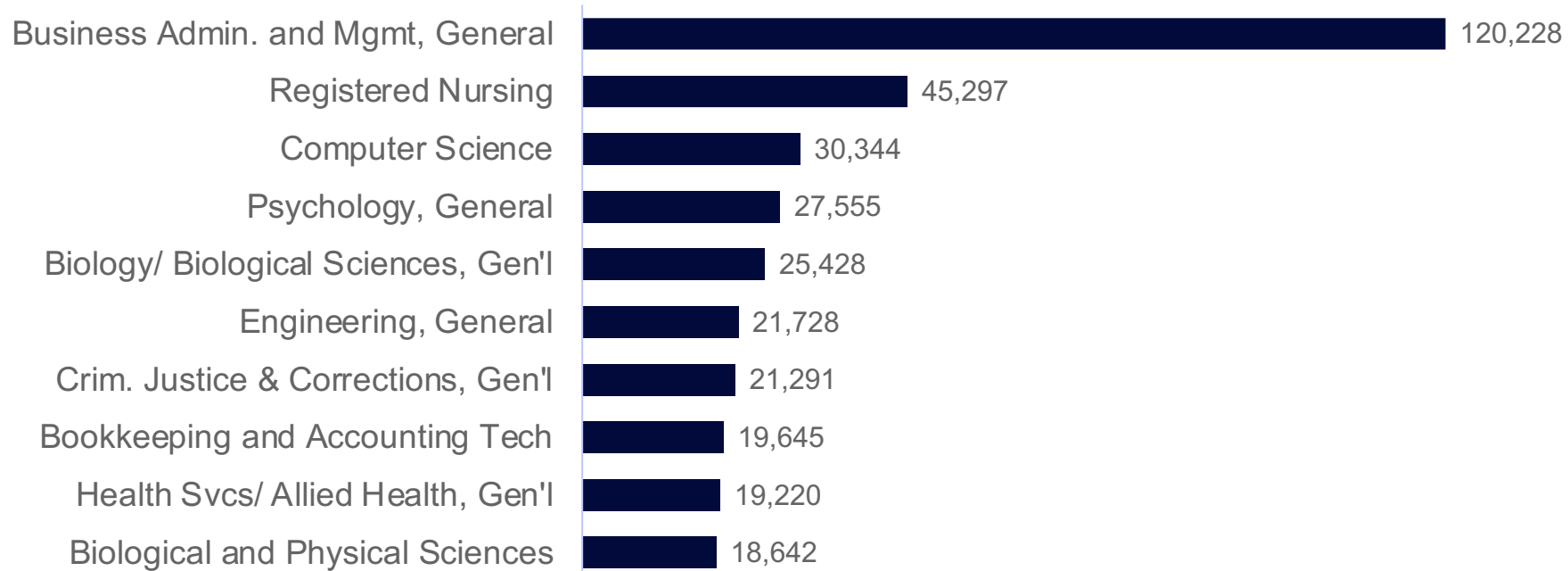
Source: Gray analysis of National Student Clearinghouse data

* Excludes CIP codes ending in 99, "Other"

*Minimum 2,000 enrollees in 2021-22

Associate: In 2022-23, Business had the highest new enrollment.

Highest New Enrollment* Associate Programs 2022-23

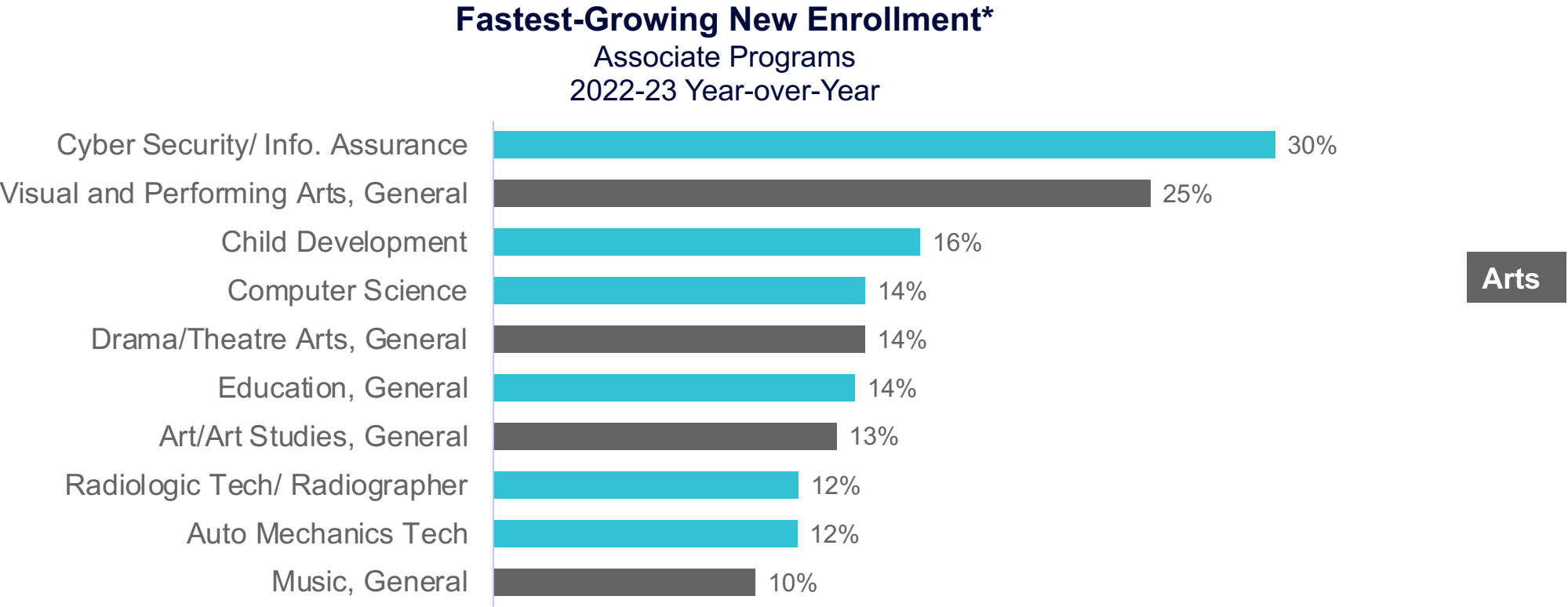


Source: Gray analysis of National Student Clearinghouse data

* Excludes CIP codes ending in 99, "Other" and Liberal Arts/General Studies

Associate: Cyber Security grew 30% year-over-year.

Four arts programs were among the fastest-growing programs.



Source: Gray analysis of National Student Clearinghouse data
 * Excludes CIP codes ending in 99, "Other"

*Minimum 3,000 enrollees in 2021-22

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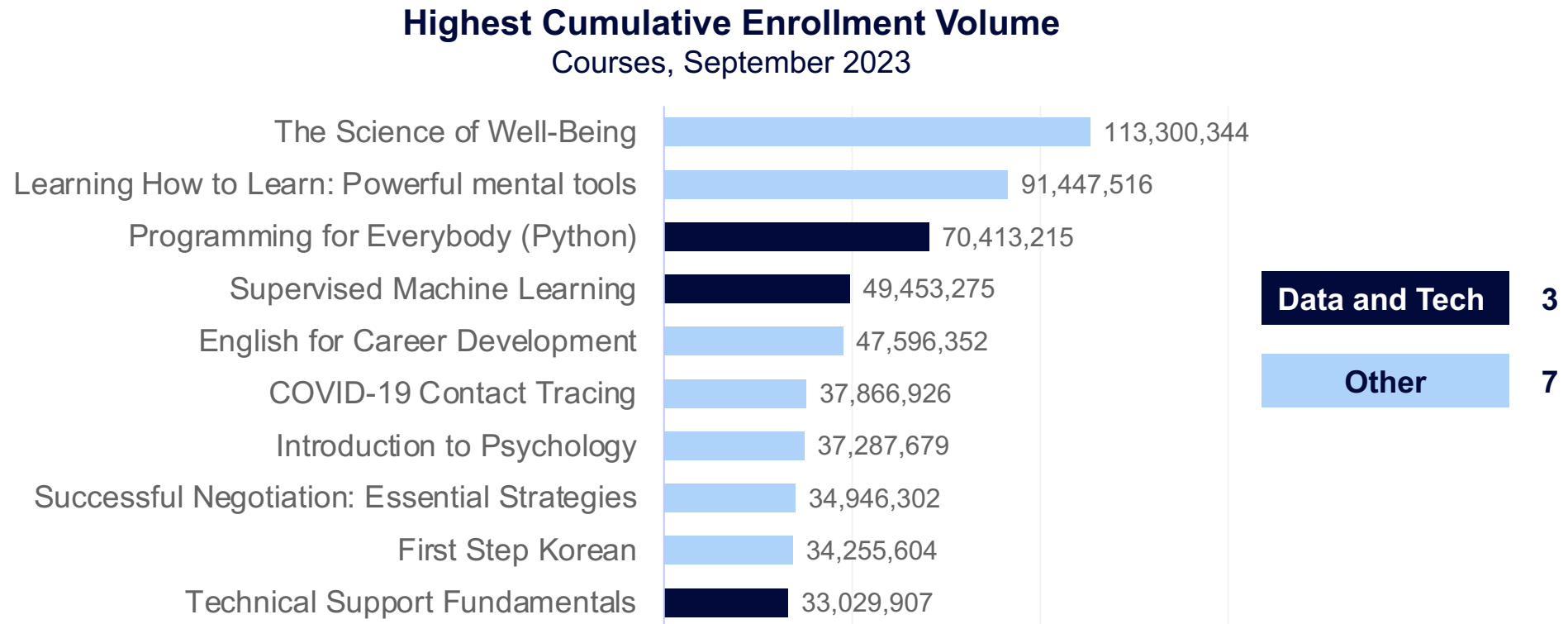
Employment: Current Indicators

Program of the Month

Summary

Coursera: Highest Course Enrollment

As of September 2023, The Science of Well-Being had the highest cumulative enrollment.

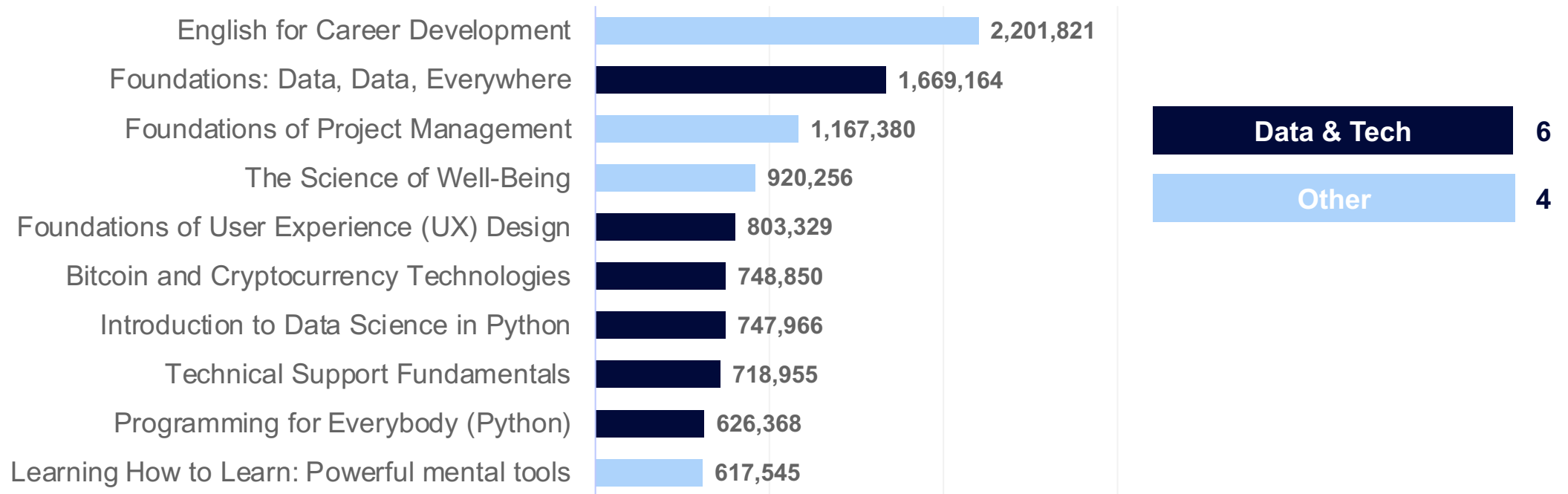


Coursera: Fastest-Growing Courses

In September, English for Career Development had the highest two-year enrollment growth.

Highest Two-Year Unit Change in Cumulative Enrollment

Course Categories, September 2023



Agenda

Student Demand

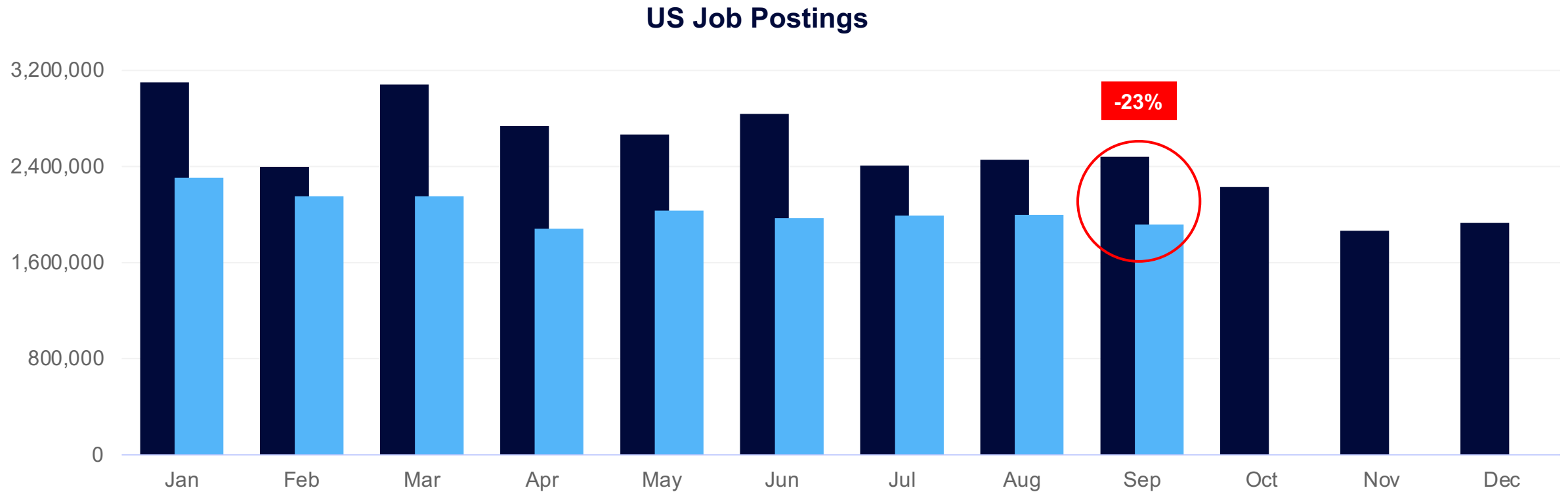
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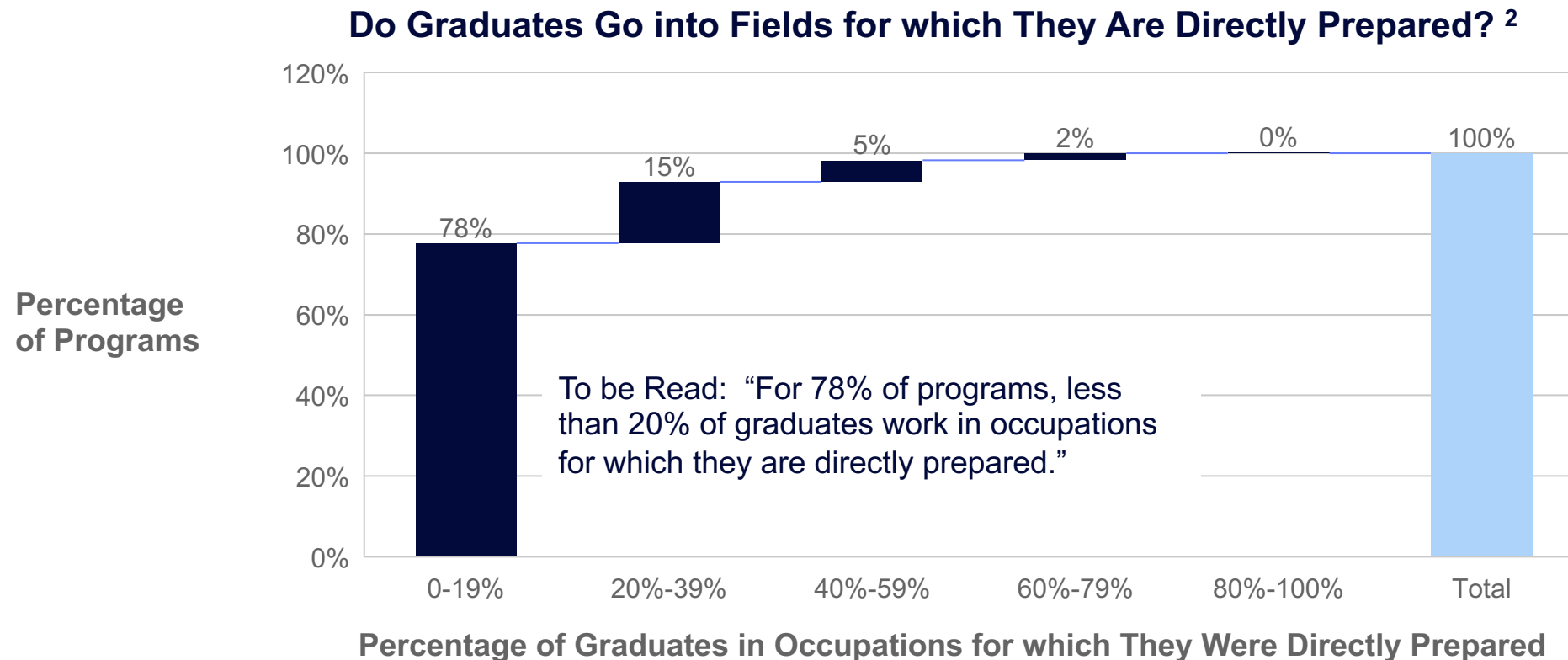
Summary

In September, US job postings fell 23% year-over-year.



NCES: “The CIP SOC Crosswalk is not based on actual empirical data.”¹

78% of programs place less than 20% of graduates in jobs for which they are directly prepared.

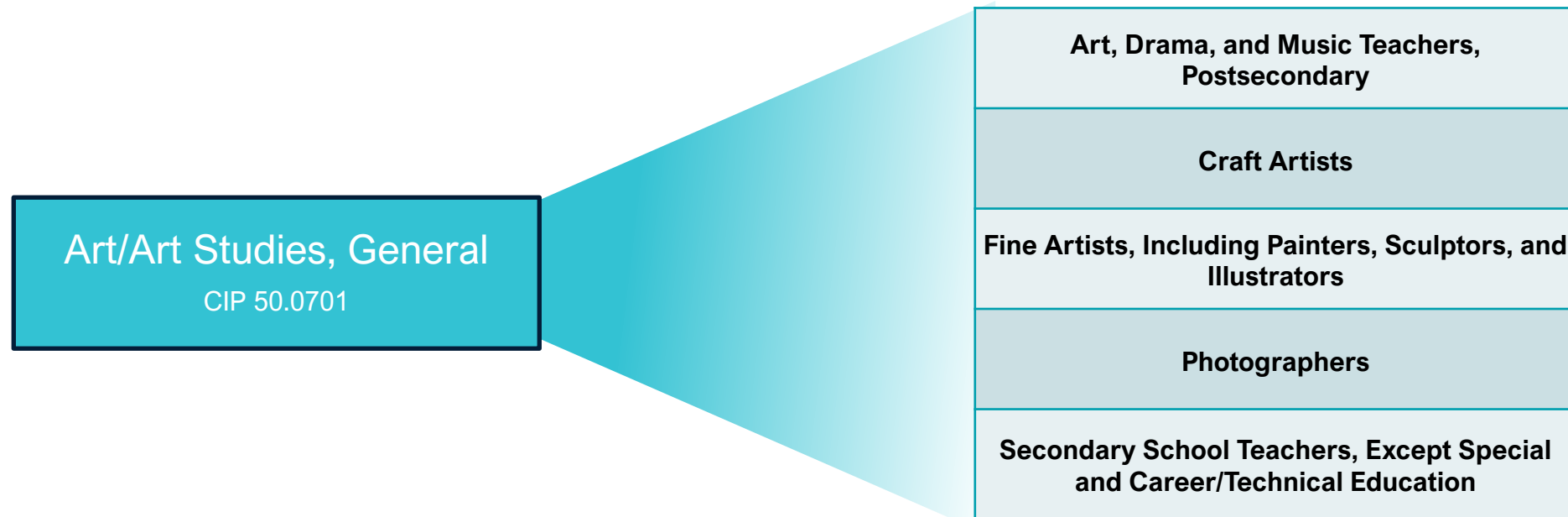


1. Source: IES NCES: “CIP SOC Crosswalk”, July 2021 <https://nces.ed.gov/ipeds/cipcode/post3.aspx?y=56>, Gray Analysis. Number of Programs: 634

2. US Census, American Community Survey, Gray Analysis. Bachelor’s-degree programs with over 100 completions.

NCES CIP 2020 to SOC 2018 Crosswalk: Art/Art Studies, General

What NCES says Art/Art Studies majors do...



In reality, Art/Art Studies majors go into 476 SOC's.

SOC Title

SOC and SOC Title ▼	Count of Id
11-1011 - Chief Executives	543
11-1021 - General And Operations Managers	324
43-6011 - Executive Secretaries And Executive Administrative Assista...	282
41-3091 - Sales Representatives Of Services, Except Advertising, Insur...	237
43-4051 - Customer Service Representatives	225
27-1014 - Special Effects Artists And Animators	222
11-2022 - Sales Managers	177
13-1071 - Human Resources Specialists	172
13-1199 - Online Merchants	170
15-1232 - Computer User Support Specialists	159
41-2011 - Cashiers	158

What's the good news in job postings?

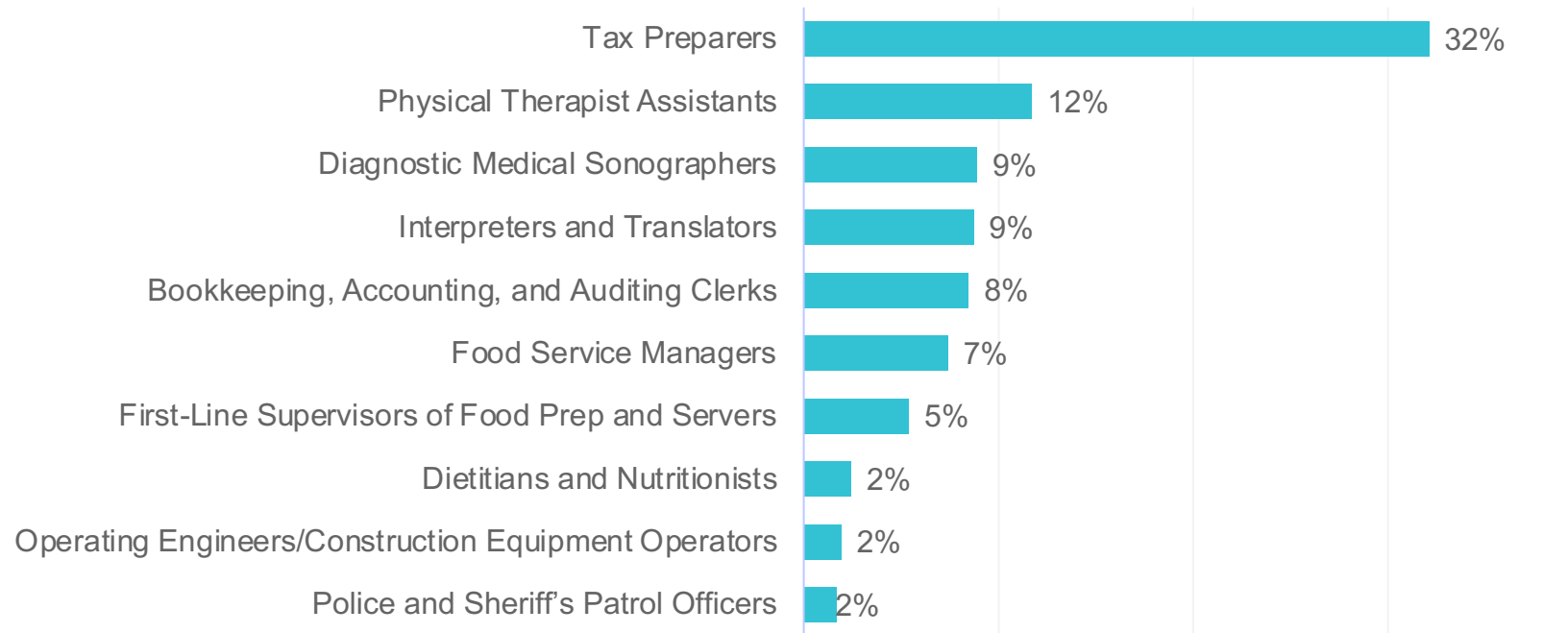
Highest Job Postings by Occupation

September 2023



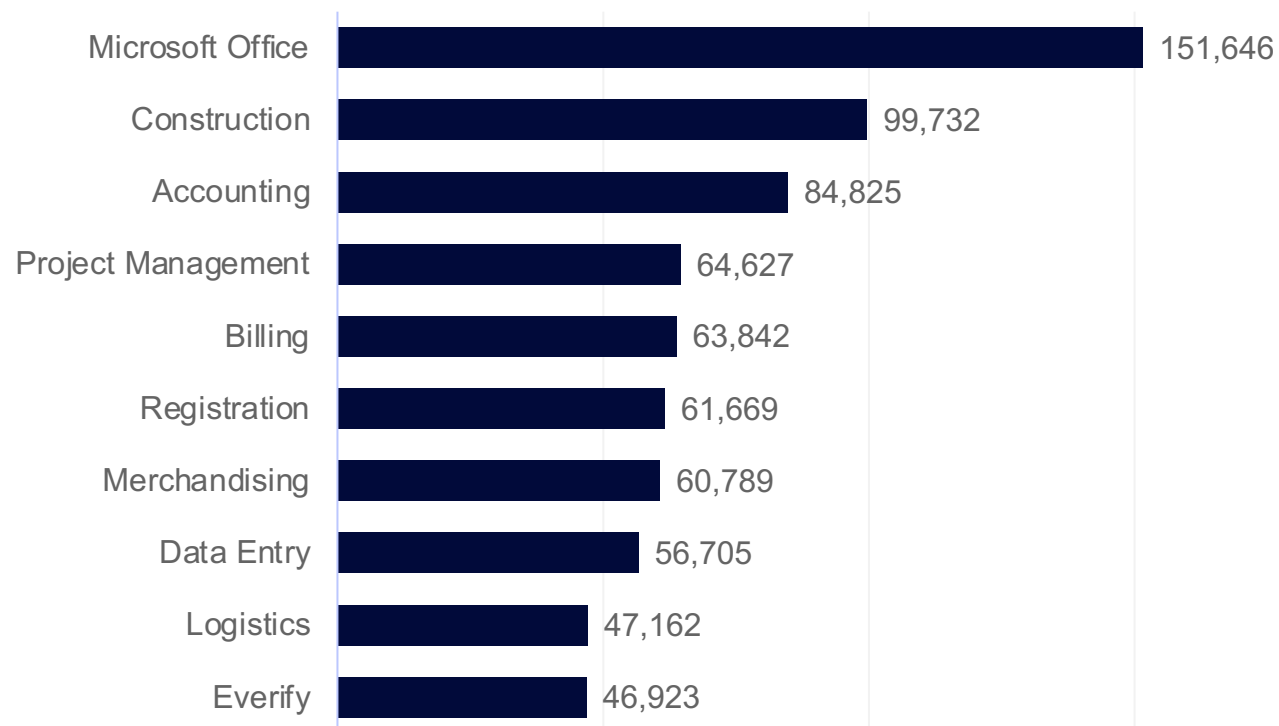
What's growing in job postings?

Highest Job Postings Growth by Occupation (SOC Code) Associate and Below, September 2023



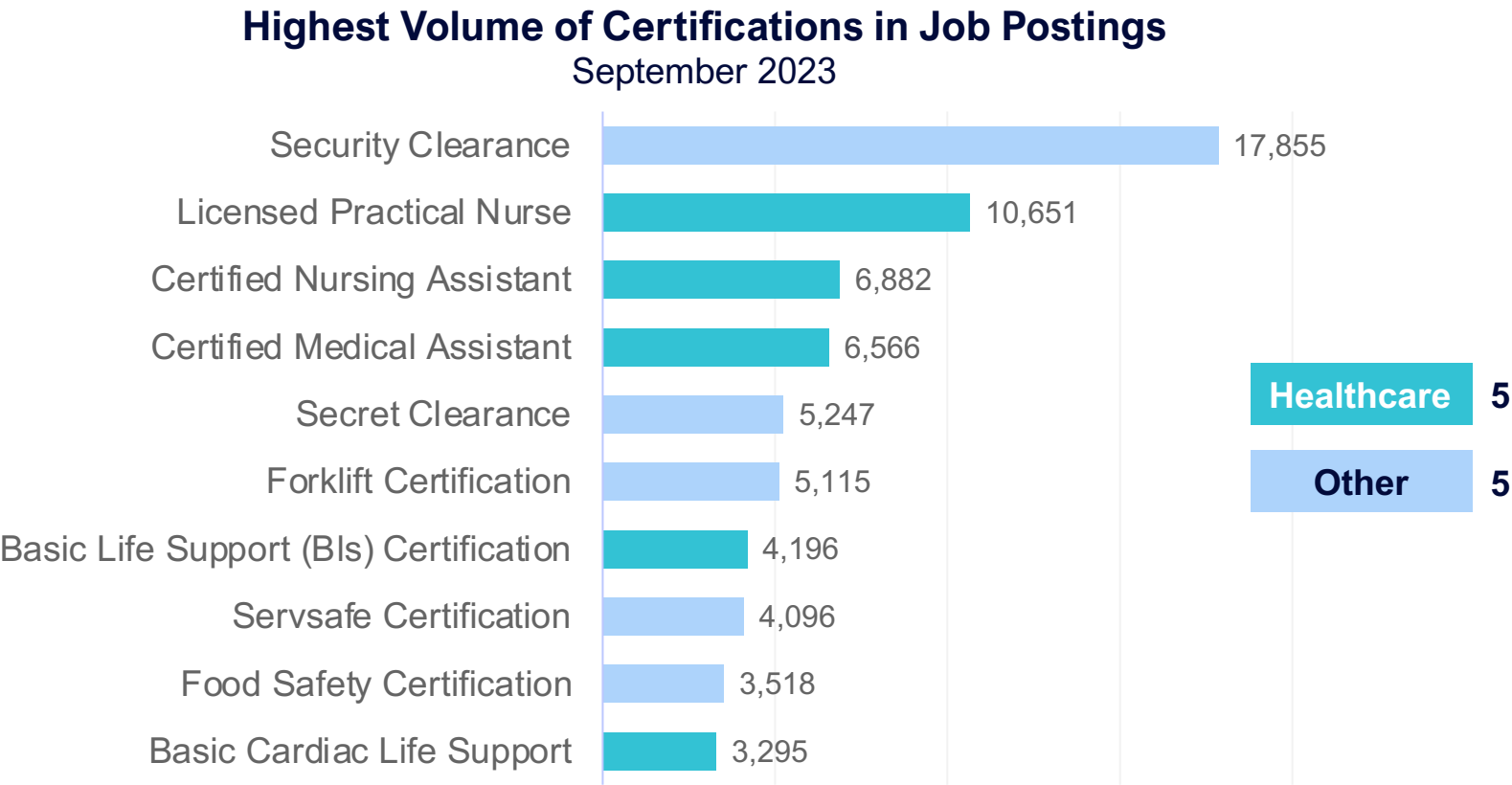
What overall skills are in demand?

**Highest Skills
Mentions in Job Postings**
August 2023



Source: Gray's Job Postings Dashboard

Half of the 10 most-requested certifications were in healthcare.



Source: Gray's Job Postings Dashboard

Agenda

Student Demand

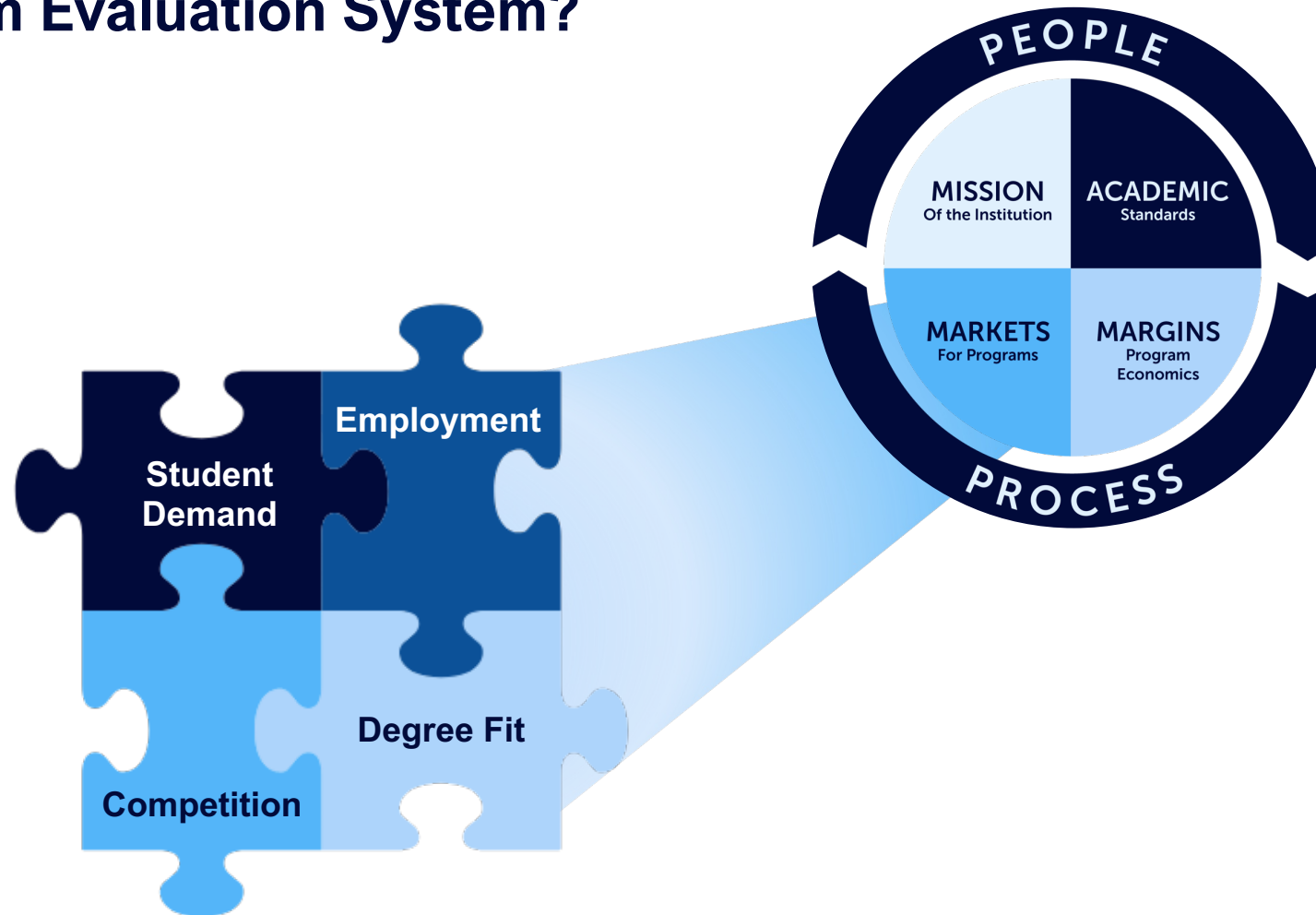
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Employment: Current Indicators

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What is a Program Evaluation System?



US Associate and Below Program Ranking

Program	Overall Score	Student Demand	Competitive Intensity	Jobs	Degree Fit
46.0000 Construction Trades, General	95	78	83	95	100
52.1201 Management Info. Systems, General	95	78	83	94	100
15.0701 Occupational Safety and Health Tech	95	78	50	95	100
52.1701 Insurance	95	78	19	97	100
12.0399 Funeral Service & Mortuary Science, Other	95	71	98	79	100
51.0704 Health Unit Manager/Ward Supervisor	95	50	96	93	100
12.0401 Cosmetology, General	94	99	83	3	100
52.0302 Bookkeeping and Accounting Tech	94	99	0	59	100
51.0601 Dental Assisting	94	98	1	54	100
24.0102 General Studies	94	96	83	50	100
11.1001 Network and System Admin	94	95	39	63	100
51.0803 Occupational Therapist Assistant	94	94	8	84	100
15.0499 Electromechanical/ Maint. Tech, Other	94	87	50	87	100
12.0411 Permanent Cosmetics/ Makeup and Tattooing	94	71	99	50	100
01.1005 Zymology/ Fermentation Science	94	50	99	50	100
42.0101 Psychology, General	94	99	83	82	50
51.0713 Medical Billing and Coding	93	99	0	13	100
01.8301 Vet/Animal Health Tech and Vet Asst	93	97	30	13	100
50.0409 Graphic Design	93	97	4	59	100
<div> <div>Total Percentile</div> <div>020+40+70+90+95+98+100</div> </div> <div> <div>Total Score</div> <div>-62-31-19-210182768</div> </div>					

Student Demand: Size

Medical Billing and Coding scores in the 99th percentile for Student Demand.

- Google search volume – a future indicator of demand – is in the 96th percentile.
- Program size is healthy.
 - 97th percentile for new enrollment
 - 98th percentile for completions
- This is a large online program.

Student Demand

Score: 30 Percentile: 99

Category	Pctl	Criterion	Value	Score
Size	96	Google Search Volume (3 Months)*	235,340	6
	0	International Page Views (12 Months)	0	NS
	97	New Student Enrollment Volume (12 Mo.)	7,936	6
	98	On-ground Completions at In-Market Institutions	10,594	4
	99	Online Completions by In-Market Students	7,739	4
	98	Sum of On-ground and Online Completions	18,333	4

Student Demand: Size and Growth

Growth indicators for student demand are mixed.

- Google searches increased 22% year-over-year.
- New student enrollment fell 24%.
- Completions rose 17%.

Student Demand Score: 30 Percentile: 99

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	98	Sum of On-ground and Online Completions	18,333	4
Growth	98	Google Search YoY Change (Units)*	42,150	3
	0	New Student Enrollment Vol. YoY Change (Units)	-2,481	-1
	99	Completion Volume YoY Change (Units)	2,700	3
	83	Google Search YoY Change (%)*	22%	1
	23	New Student Enrollment Vol. YoY Change (%)	-24%	0
	72	Completion Volume YoY Change (%)	17%	0

Employment

Medical Billing and Coding scores in the 13th percentile for employment.

- Direct prep employment volume is strong.
- One-year historical growth fell 4%.
 - Three-year historical growth fell 2%.
- Job postings per graduate are healthy.
- BLS mean wages are low.

Employment*

Score: -2 Percentile: 13

Category	Pctl	Criterion	Value	Score
Size: Direct Prep	96	Job Postings Total (12 Months)*	205,229	6
	95	BLS Current Employment*	505,827	6
	95	BLS Annual Job Openings*	49,206	4
Growth (Direct Prep)	43	BLS 1-Year Historical Growth*	-4.2%	0
	19	BLS 3-Year Historic Growth (CAGR)	-1.9%	-2
	35	BLS 10-Year Future Growth (CAGR)*	0.4%	0
Saturation (Direct Prep)	83	Job Postings per Graduate*	11.2	2
	83	BLS Job Openings per Graduate*	2.7	2
Wages (Direct Prep)	12	BLS 10th-Percentile Wages*	\$27,714	-10
	8	BLS Mean Wages*	\$40,136	-10

Competitive Intensity

Medical Billing and Coding is a competitive program.

- There are 546 campuses with graduates.
 - Three campuses discontinued the program.
- Median program size is fair.
 - It was flat year-over-year.
- Marketing costs are one of the highest of all academic programs.
- This program is offered at 151 national online institutions.
 - 42% of completions are online.

Competitive Intensity

Score: -14 Percentile: 0

Category	Pctl	Criterion	Value	Score
Volume of In-Market Competition	99	Campuses with Graduates**	546	-8
	91	Campuses with Grads YoY Change (Units)**	3	-2
	99	Institutions with Online In-Market Students**	133	NS
In-Market Program Sizes	80	Average Program Completions	19	0
	83	Median Program Completions	10	0
	75	YoY Median Prog. Compl. Change (Units)	0	0
	75	YoY Median Prog. Compl. Change (%)	0	0
In-Market Saturation	99	Google Search * Cost per Click**	\$42	-3
	99	Google Competition Index**	0.95	-1
National Online Competition	99	National Online Institutions (Units)**	151	NS
	80	Nat'l Online % of Institutions	16%	NS
	94	Nat'l Online % of Completions	42%	NS

Degree Fit

A certificate is an appropriate award level for Medical Billing and Coding.

- 76% of completions are at the certificate level.
- 24% are at the associate level.
- 49% of the workforce have a certificate or associate.
 - However, 25% have no college education.
 - 20% have a bachelor's degree – underemployment?

National Completions by Level

Score: 0

Award Level	Completions (National)	Completions (Market)	Enrollment (Market)
Certificate	76%	76%	85%
Associates	24%	24%	15%
Bachelors	0%	0%	0%
Postbaccalaureate Certificate	0%	0%	0%
Masters	0%	0%	0%
Post-masters Certificate	0%	0%	0%
Doctoral	0%	0%	0%
Unknown	0%	0%	0%

Degree Fit:

Score: 0 Percentile: 100

National Workforce Ed. Attainment

Score: 0

Award Level	BLS Educational Attainment
No College	25%
Some College	33%
Associates	16%
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Total Percentile	0	20+	40+	70+	90+	95+	98+	100
Total Score	-62	-31	-19	-2	10	18	27	68

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National American Community Survey Bachelor's Degree Outcomes		Wages (Age < 30)	NA	NS
		Wages (Age 30-60)	NA	NS
		% with Any Graduate Degree	NA	NS
		% with Masters	NA	NS
		% with Doct/Prof Degree	NA	NS
		% Unemp. (Age <30)**	NA	NS
		% Unemp. (Age 30-60)**	NA	NS
		% in Direct Prep Jobs	NA	NS

CIP Description:

A program that prepares individuals to perform specialized data entry, classification, and record-keeping procedures related to medical diagnostic, treatment, billing, and insurance documentation. Includes instruction in medical records and insurance software applications, basic anatomy and physiology, medical terminology, fundamentals of medical science and treatment procedures, data classification and coding, data entry skills, and regulations relating to Medicare and insurance documentation.

** Color Scale in Reverse

Percentile (Reverse)	<02	02+	05+	10+	30+	60+
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Degree Fit:

Score: 0 Percentile: 100

Category	Pctl	Criterion	Value	Score
NHEBI Natl 2 Year	44	Cost Index**	93%	NS
	51	Student: Faculty Index	92%	NS

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Score: 0

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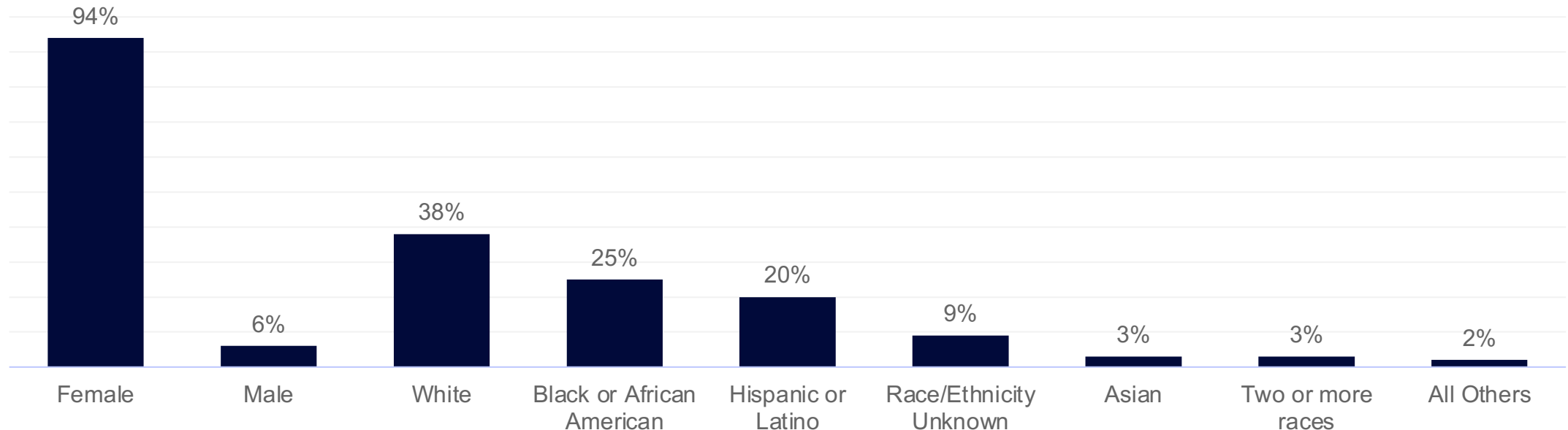
- * - Google search, employment data and Jobs Per Grad Ratio do not filter by award level.
- ** - Color scale in reverse.
- NA - No data available/not currently tracked.
- NS - Not Scored in Rubrics (values = 0).
- 2-Yr - Associates & certificate programs only.
- PCTL - Percentile

US demographics: Medical Billing and Coding

In 2021, 94% of completions were by women— way above the overall enrollment percentage.

- 38% of 2021 completions were by white students.
- 25% were by African American/black students.

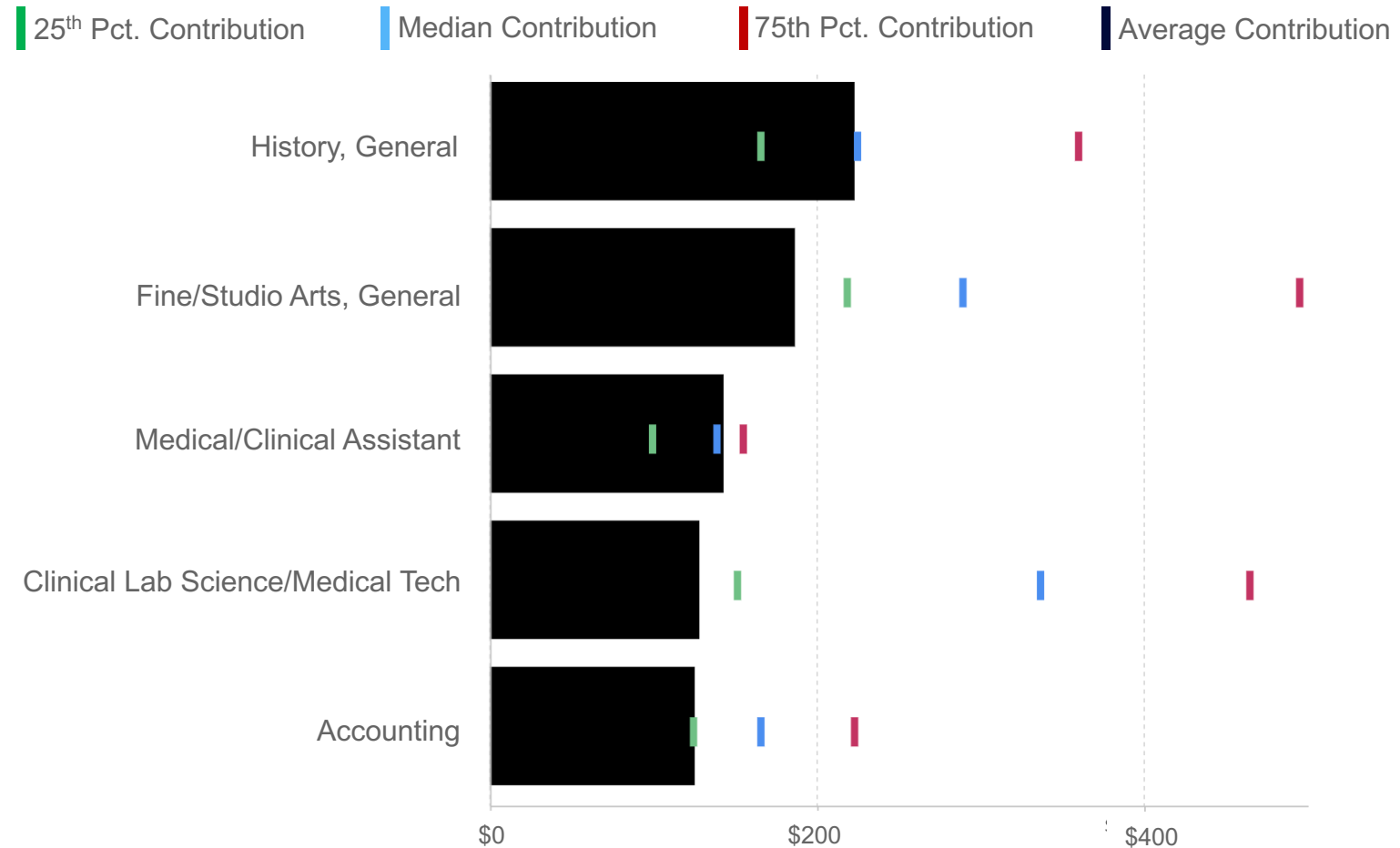
US 2021 Completions by Demographic Group



Source: Gray's PES Markets



Benchmarking Programs: Contribution Margins/Student Credit Hour

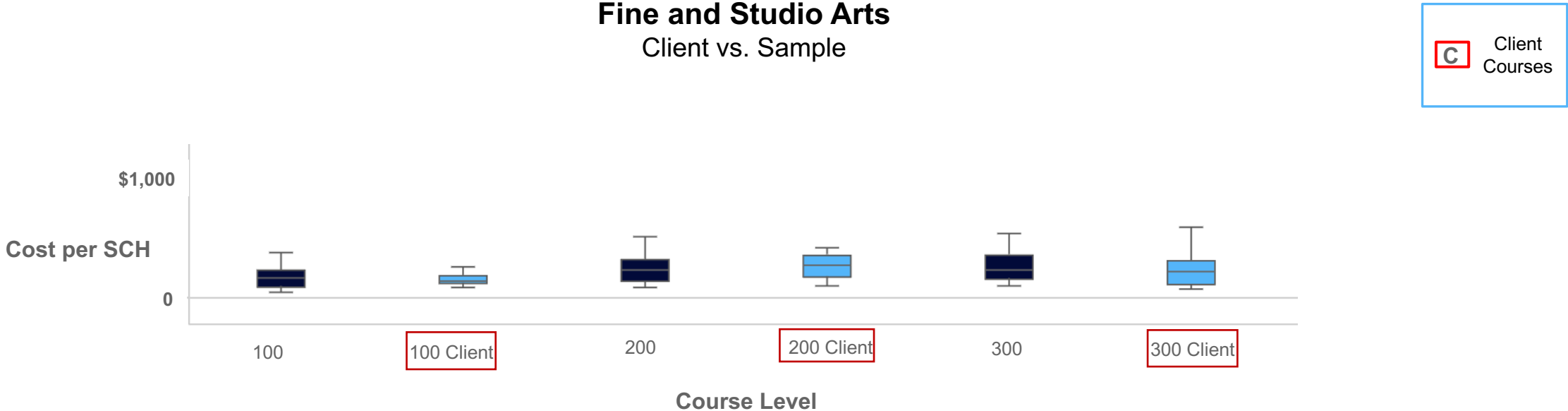


Better-managed courses and institutions have lower variance in cost.

The illustrative client's costs are 8% higher than the benchmark for Fine/Studio Arts courses.

Avg. Cost/SCH, Client	Avg. Cost/SCH, Sample	Percent Difference	Total Cost Difference
\$206	\$190	8%	31.08k

Cost: Student Credit Hour by Course Level
Fine and Studio Arts
 Client vs. Sample



Source: Gray's PES Economics

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Student Demand

- Leading Indicators: Google
- Recent Trends: Enrollment
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Employment: Current Indicators

Program of the Month

Summary

Summary

- Demand for associate and certificate programs is strong.
 - Google searches for Barbering grew 134% annually since September 2021.
 - New student enrollment is up.
 - Certificate: +5%
 - Associate: +3%
- In 2022-23, the programs with the fastest-growing new enrollment were:
 - Certificate: Cybersecurity, 43%
 - Associate: Cybersecurity, 30%
- In September, job postings for Tax Preparers grew 32% year-over-year.
 - Microsoft Office is still the most in-demand skill.
- Demand for Medical Billing and Coding is mixed.
 - This is a very large program, both on-campus and online, but enrollment is down.
 - There are ample job opportunities but very low pay.
 - This program is competitive, with very high marketing costs.

Upcoming Webinars

Topic	Date
Demand Trends Webcast: Community Colleges	<i>Wednesday</i> November 29 th at 2 PM ET
Demand Trends Webcast: Bachelor's and Above With Special Guest Evidence in Motion	<i>Thursday</i> November 30 th at 2 PM ET



In November, growth experts Ad Astra, RIZE, and Evidence in Motion will join forces with proven innovators in higher education for an illuminating panel discussion.

Hear directly from the leaders who made it happen.

Grow Grow Grow: Growth Strategies in Higher Education

Listen on Spotify



Listen on Apple

