Using labor market data to provide 360 support for students

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Outline
1. Data 101
2. Market Trends
3. Application

1. Data 101

Problem: Three Disjointed Spheres

People
(Family /
Home)
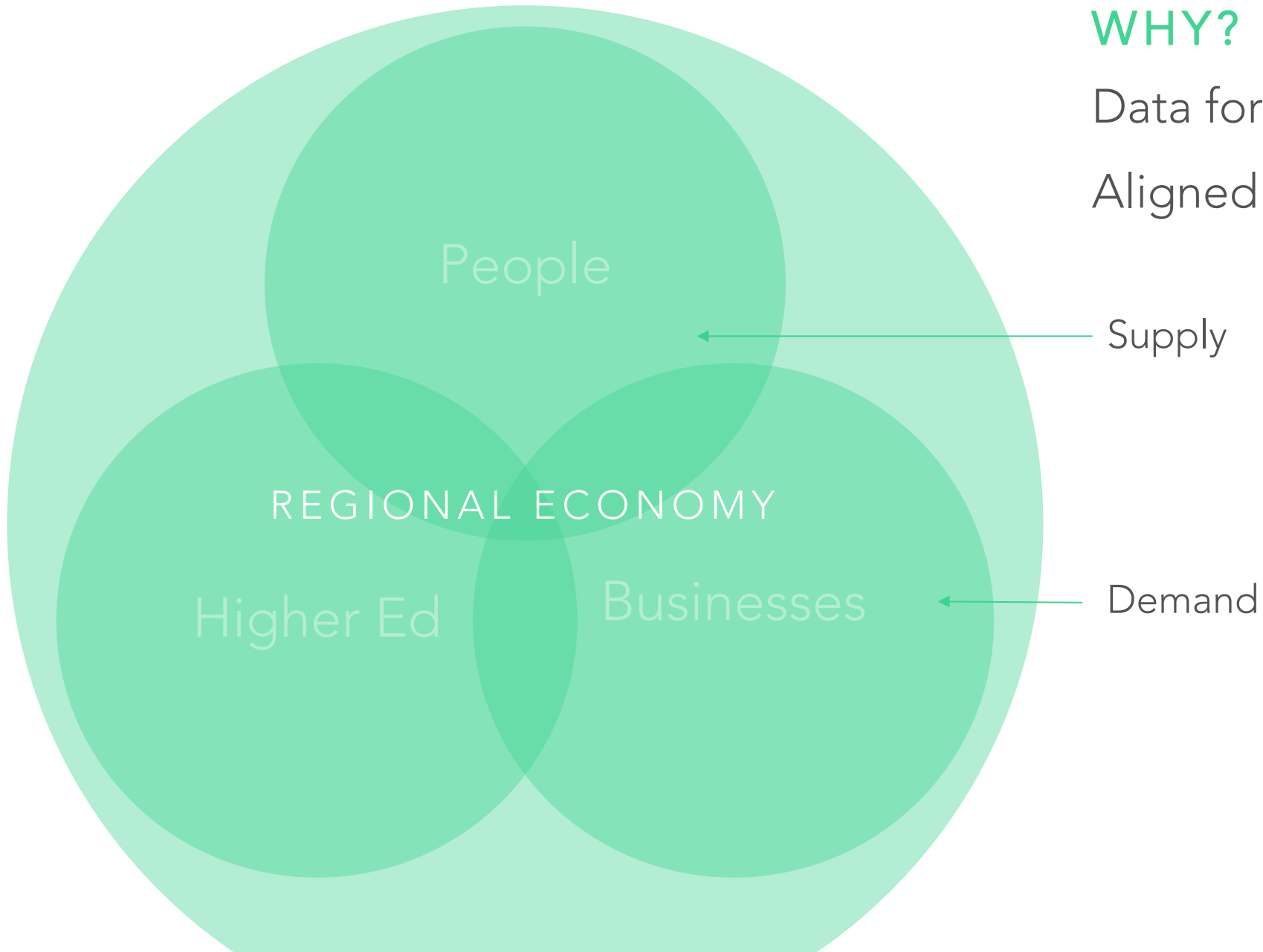
Higher Ed
(Education)

Businesses
(Work)

Emsi's Mission:
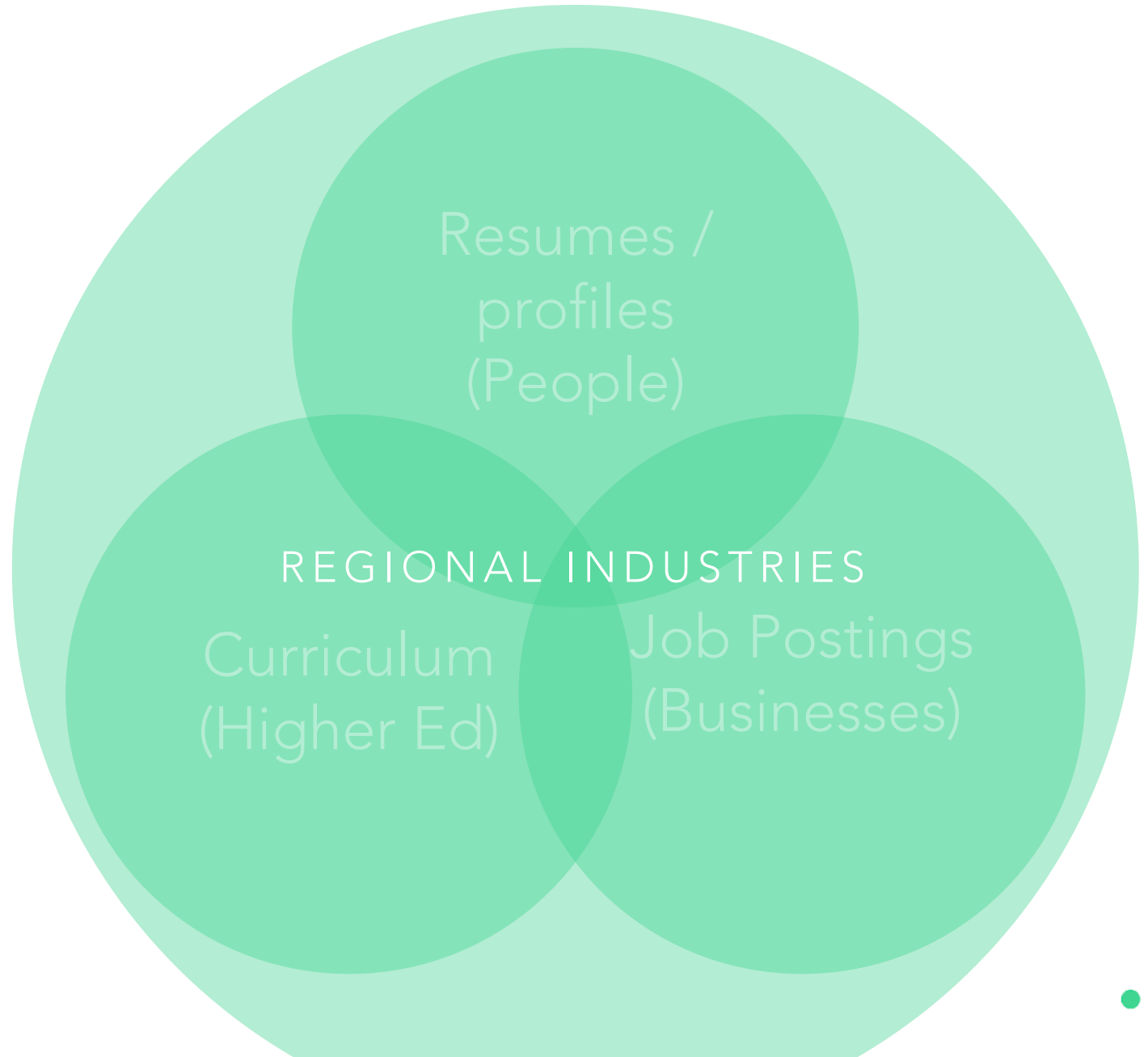Labor market data to inform & connect people, education, and work.

WHY?

Data for Economic Prosperity –
Aligned Economic Ecosystems

People

Supply

REGIONAL ECONOMY

Higher Ed

Businesses

Demand

HOW?

How does the data work?

Resumes / profiles (People)

REGIONAL INDUSTRIES

Curriculum (Higher Ed)

Job Postings (Businesses)

What? Labor Market Dynamics

Local Labor Market
- Total employment
- Growth / Change
- Compensation
- Demographics

Supply
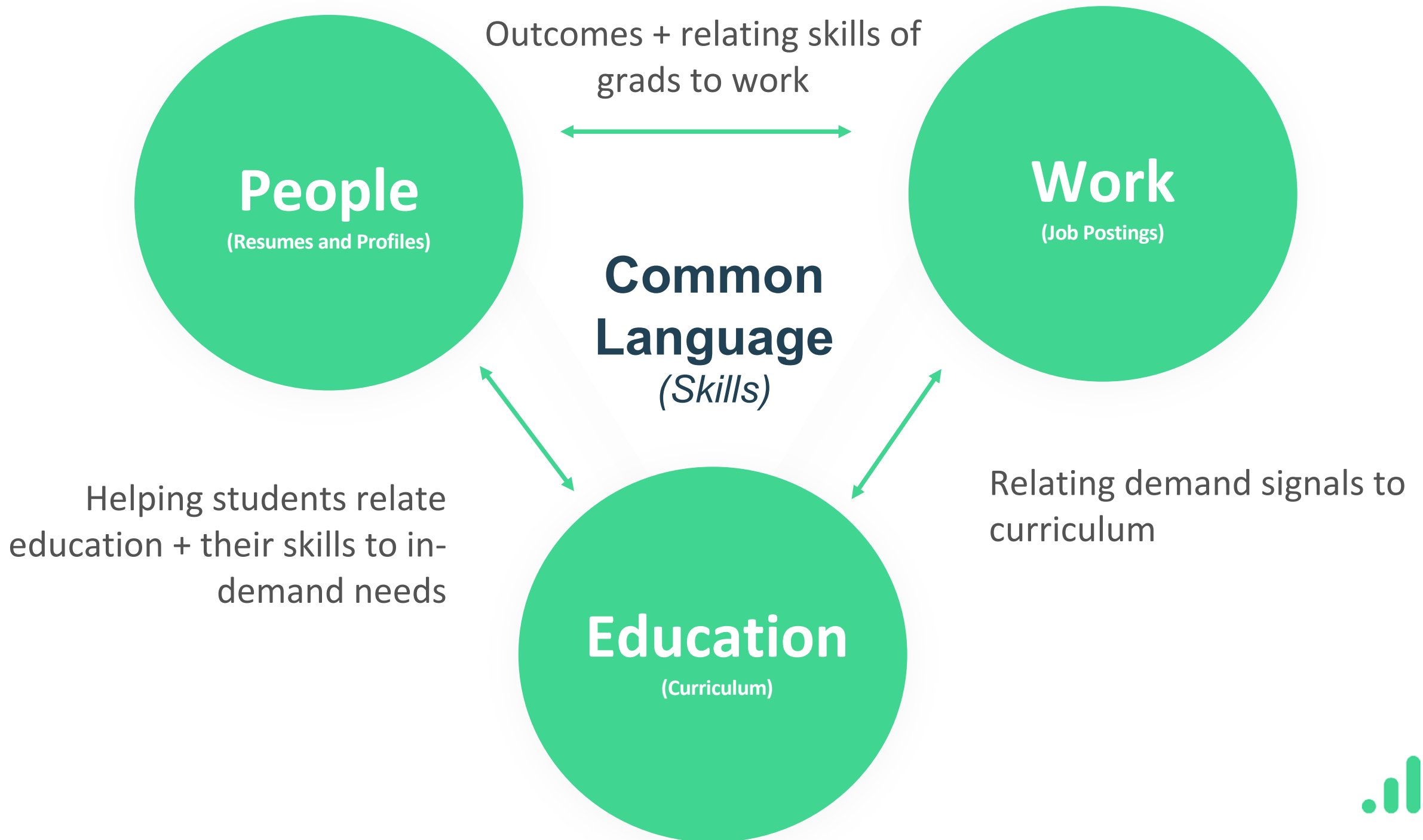- *Locations*
- *Employers*
- *Jobs*
- *Skills*

Education and Training
- *Courses*
- *Student data*
- *Learning outcomes*
- *Skills/Knowledge*

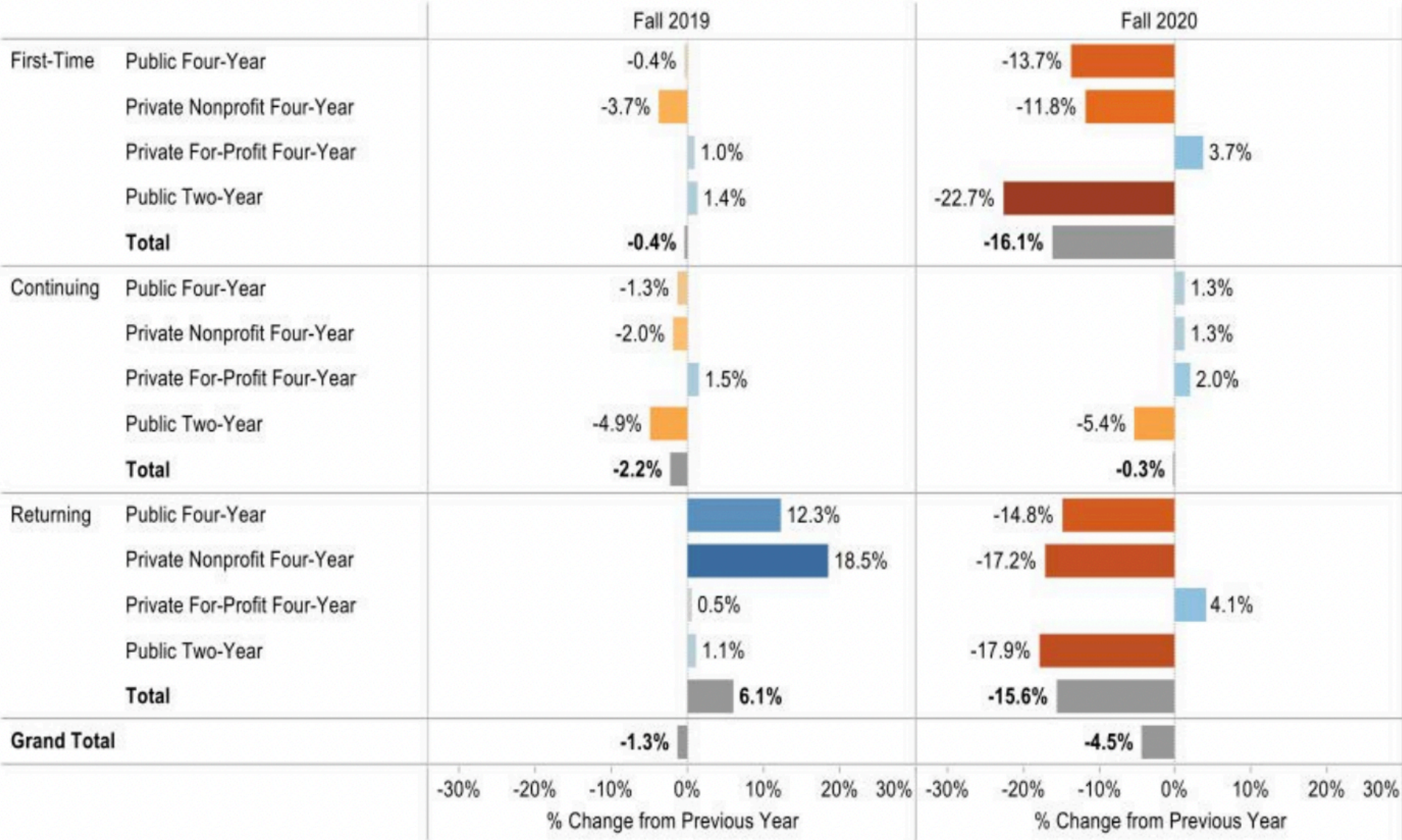**Demand**
- Locations
- Employers
- Jobs
- Skills

2. Market Trends

First time enrollment down 16%

Returning students down 16%

Figure 1. Change in Undergraduate Enrollment by Student Group and Institution Sector

		Fall 2019	Fall 2020
First-Time	Public Four-Year	-0.4%	-13.7%
	Private Nonprofit Four-Year	-3.7%	-11.8%
	Private For-Profit Four-Year	1.0%	3.7%
	Public Two-Year	1.4%	-22.7%
	Total	**-0.4%**	**-16.1%**
Continuing	Public Four-Year	-1.3%	1.3%
	Private Nonprofit Four-Year	-2.0%	1.3%
	Private For-Profit Four-Year	1.5%	2.0%
	Public Two-Year	-4.9%	-5.4%
	Total	**-2.2%**	**-0.3%**
Returning	Public Four-Year	12.3%	-14.8%
	Private Nonprofit Four-Year	18.5%	-17.2%
	Private For-Profit Four-Year	0.5%	4.1%
	Public Two-Year	1.1%	-17.9%
	Total	**6.1%**	**-15.6%**
Grand Total		**-1.3%**	**-4.5%**

% Change from Previous Year

Americans strongly prefer nondegree programs and skills training over degree programs

2020 Public Viewpoint Survey –
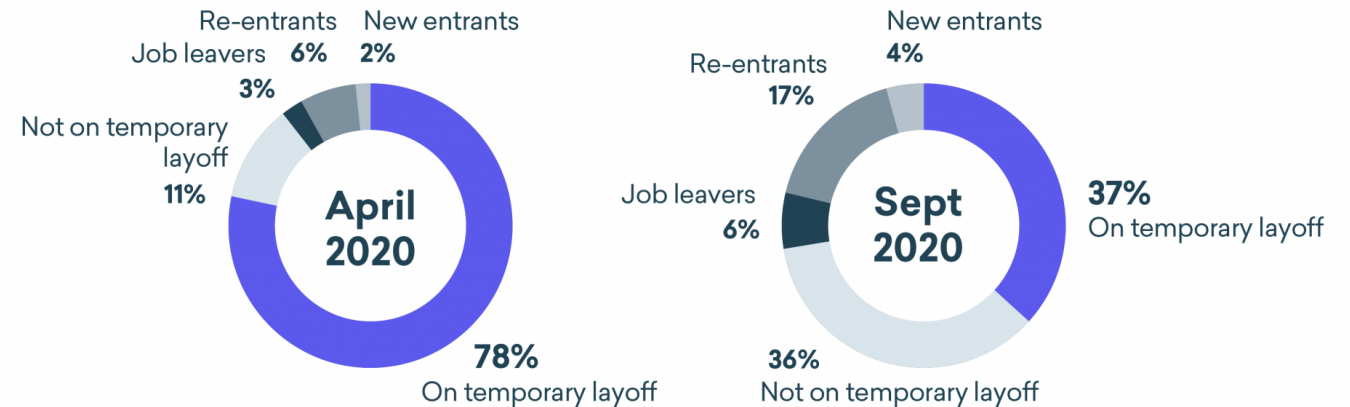Strada Center for Education Consumer Insights

62%
Nondegree & skills training

38%
Degree programs
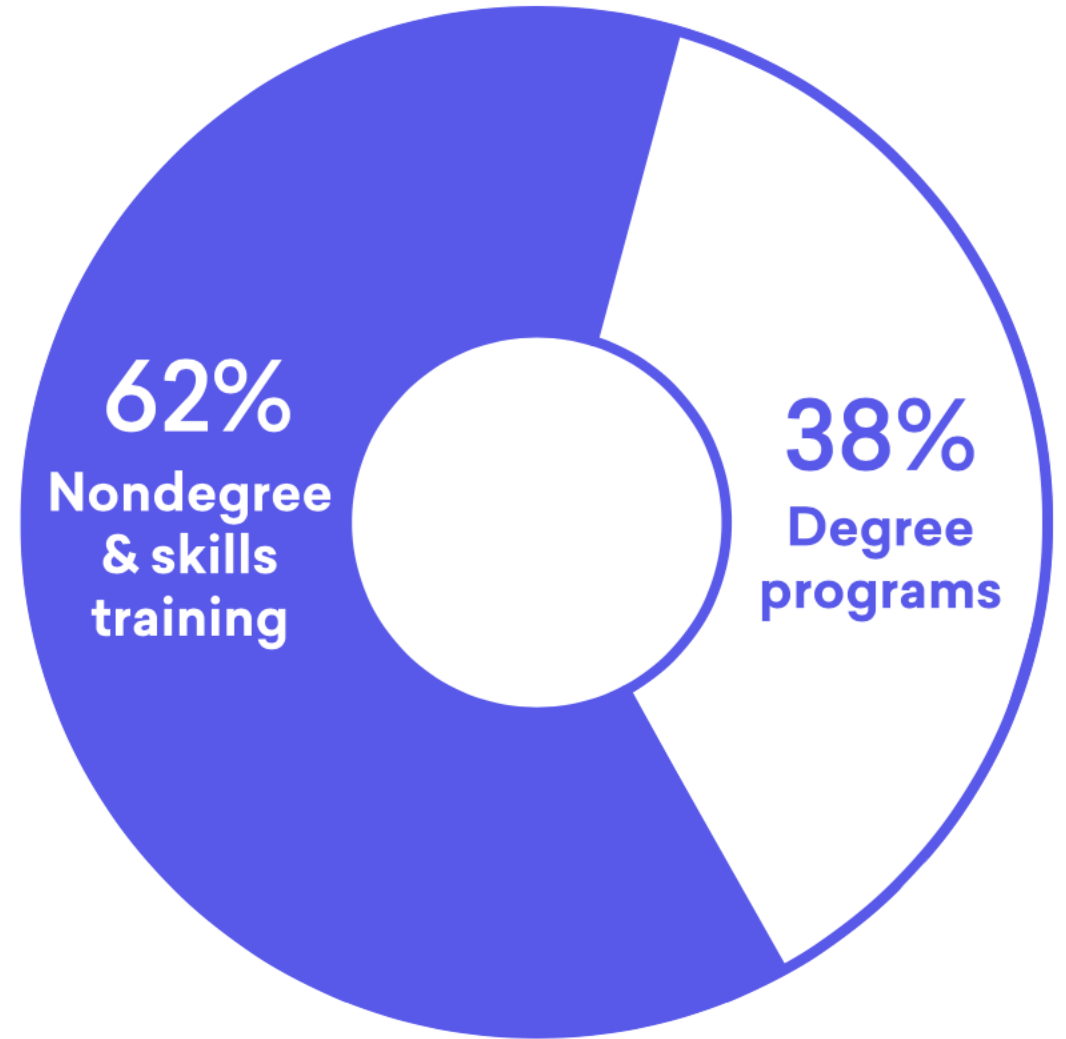
But...

The Covid Paradox: High unemployment + Low labor force participation + Unfilled positions

1. Furloughs
2. Gov assistance
3. Kids are home
4. Fear

Reason for unemployment

April 2020
- Job leavers 3%
- Re-entrants 6%
- New entrants 2%
- Not on temporary layoff 11%
- On temporary layoff 78%

Sept 2020
- Re-entrants 17%
- New entrants 4%
- Job leavers 6%
- On temporary layoff 37%
- Not on temporary layoff 36%

Source: BLS employment survey

Labor market impacts

- Hospitality crushed

- Remote work growing

- … but you already knew that
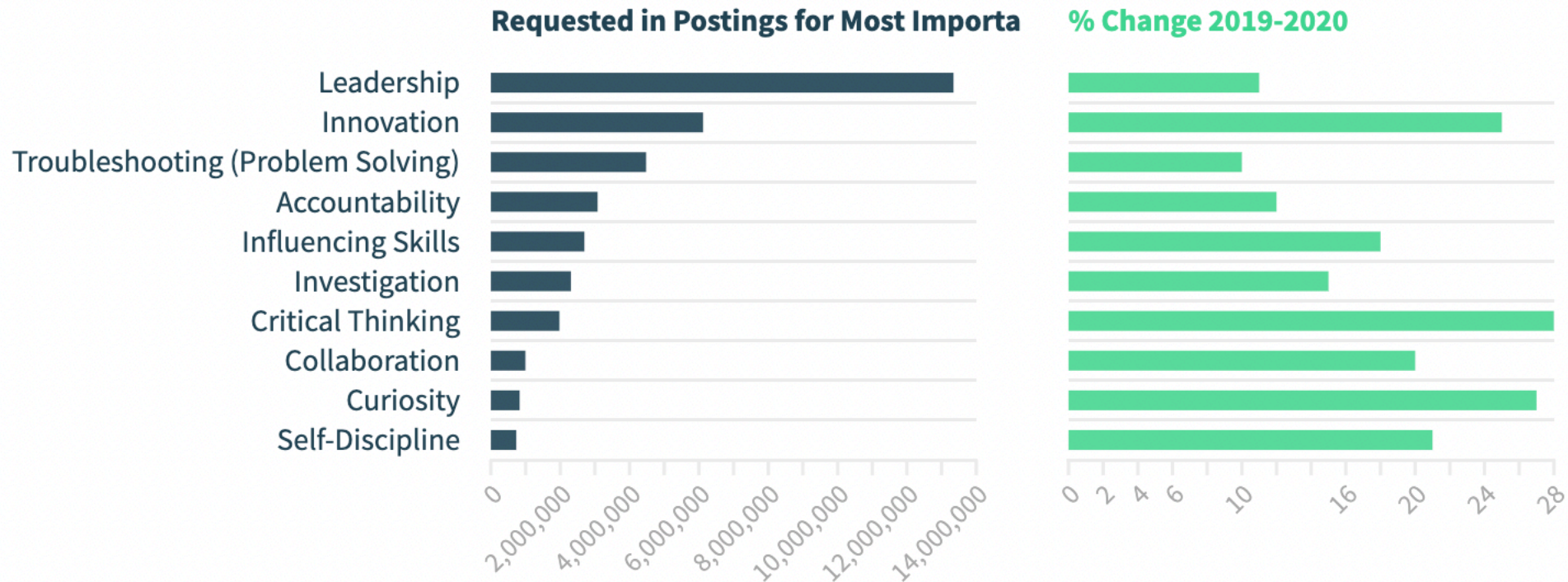
7 key sectors struggle to find people

- Logistics

- Healthcare

- Tech

- Business functions (sales, marketing, CS, finance, HR, operations)

- Education (esp jobs related to mental health and adjuncts)

- Skilled trades

- Public safety

Many skills are in short supply

Top 10 Human Skills

Requested in Postings for Most Importa   **% Change 2019-2020**

Skill		
Leadership		
Innovation		
Troubleshooting (Problem Solving)		
Accountability		
Influencing Skills		
Investigation		
Critical Thinking		
Collaboration		
Curiosity		
Self-Discipline		

Source: Emsi job posting analytics

https://www.economicmodeling.com/2021/01/29/top-skills-for-2021/

3. Application:

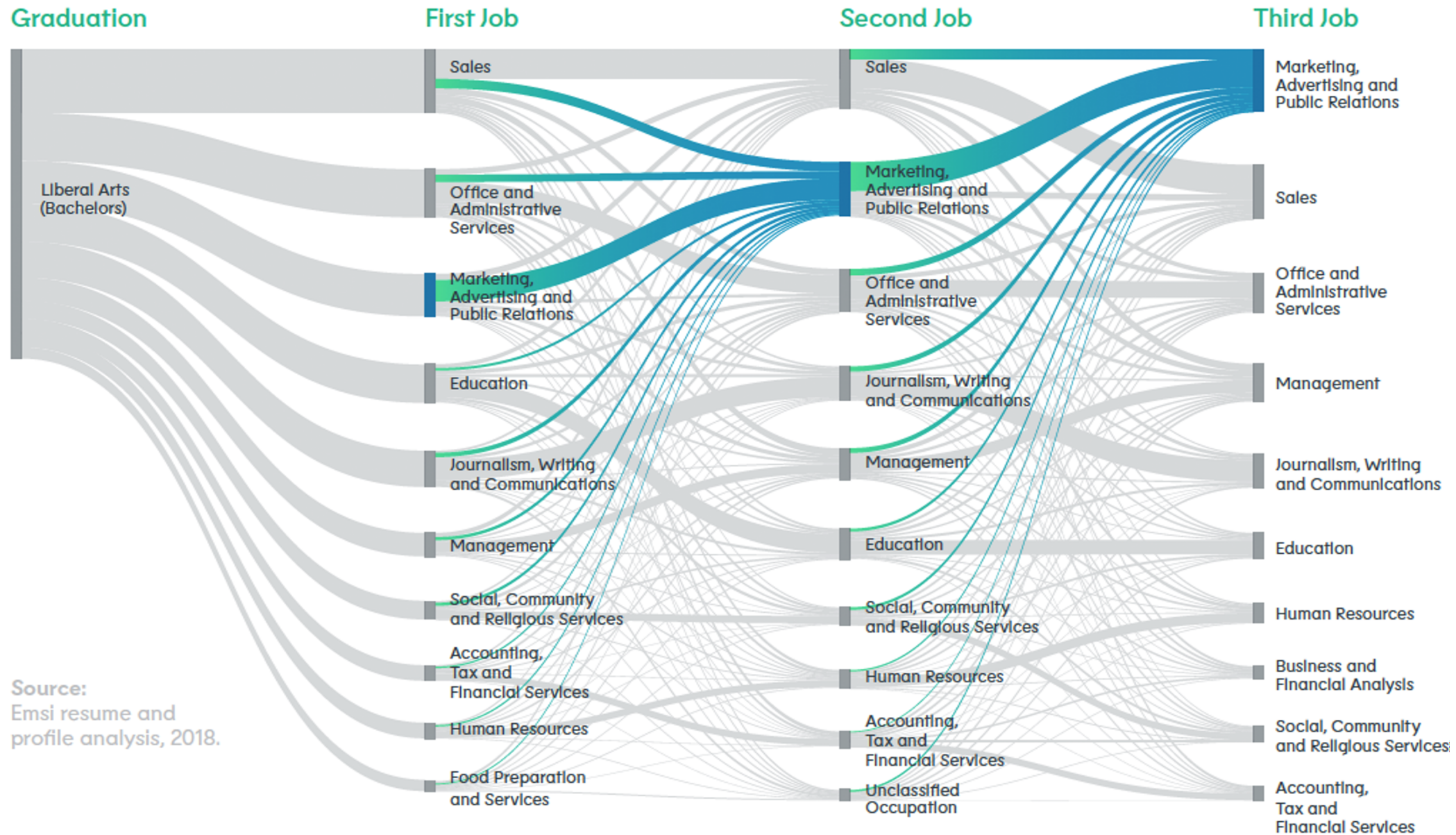How do we help learners and their teachers/helpers know these things?

Steps to knowing

1. Understand outcomes and the connection between education and career
2. Relate skills to courses
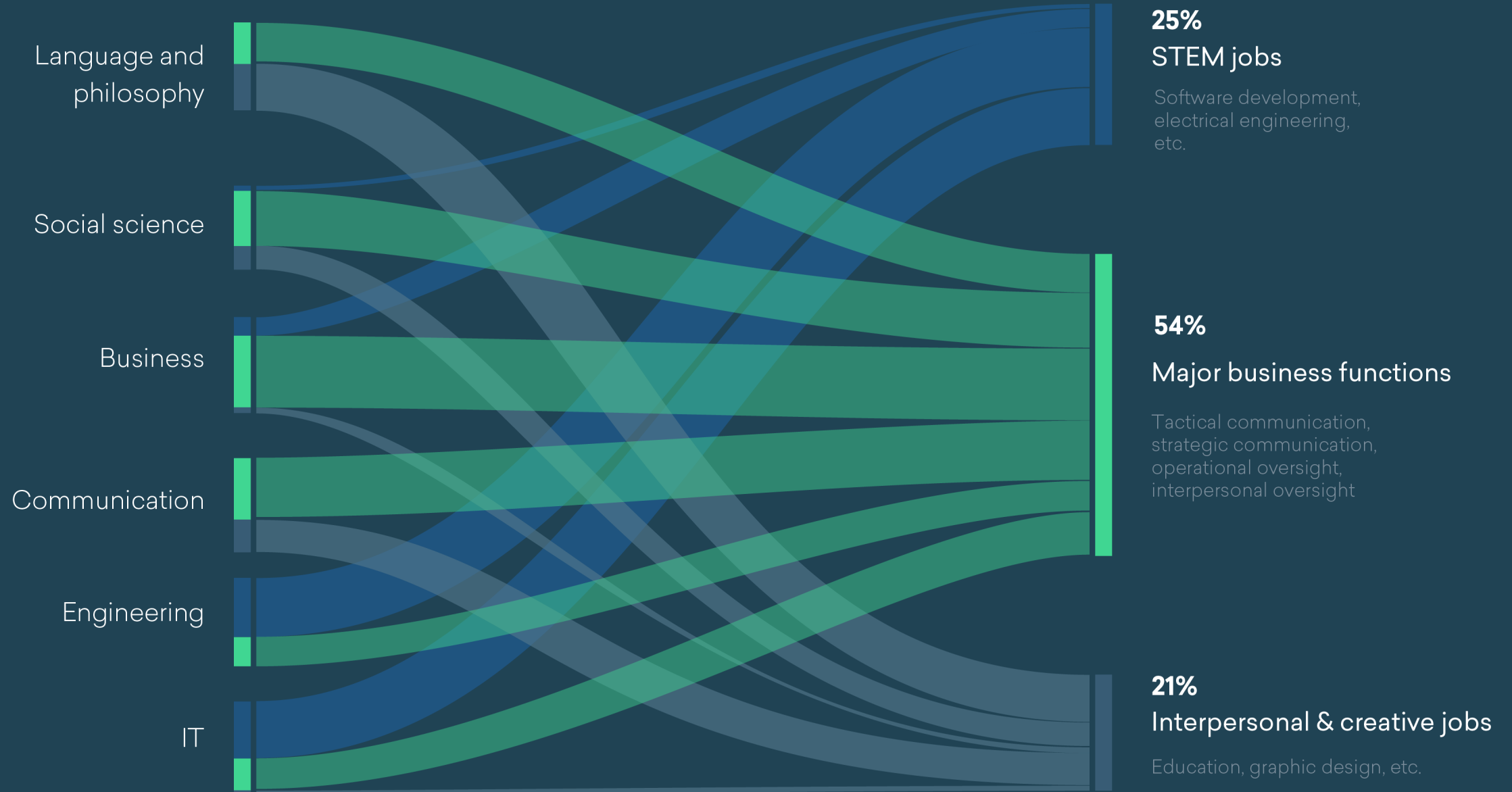3. Understand interest + where people have skills
4. Show people opportunity

# 1. Labor market outcomes (liberal arts grads)

Source: Emsi resume and profile analysis, 2018.

54% of top outcomes are in major business functions

Language and philosophy

Social science

Business

Communication

Engineering

IT

25%
STEM jobs
Software development, electrical engineering, etc.

54%
Major business functions
Tactical communication, strategic communication, operational oversight, interpersonal oversight

21%
Interpersonal & creative jobs
Education, graphic design, etc.

2. Relate skills to courses

The key is to create better relationships between your programs and market demand

SKILLS REQUIRED

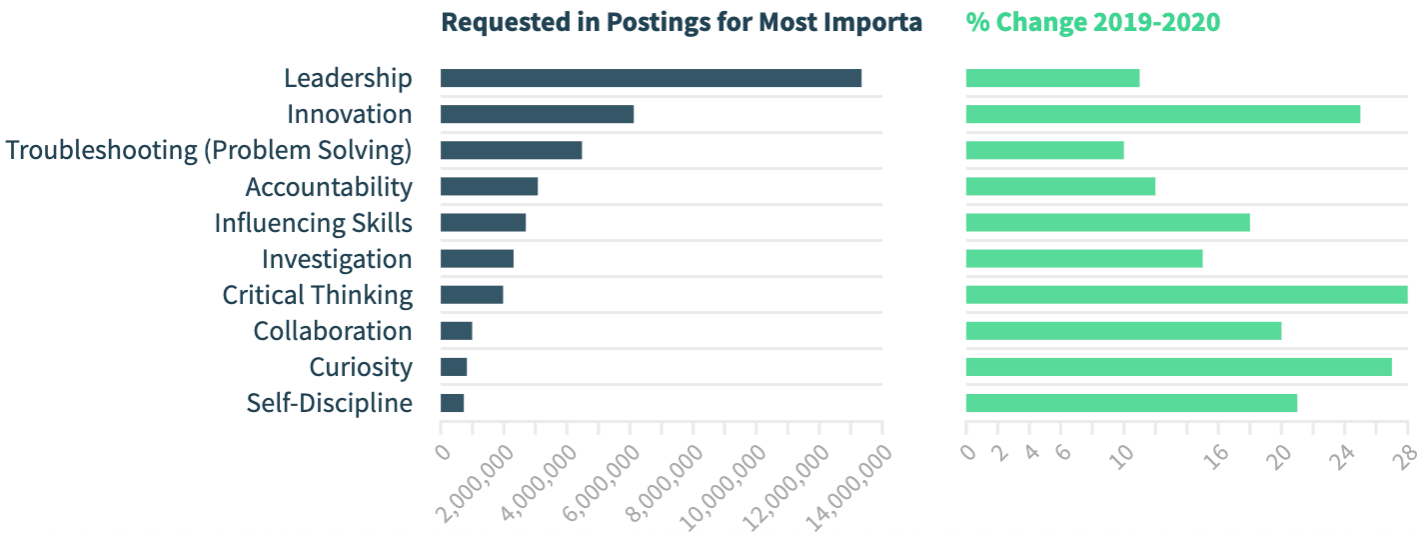How higher ed can meet the needs of learners and employers in a skill-based economy
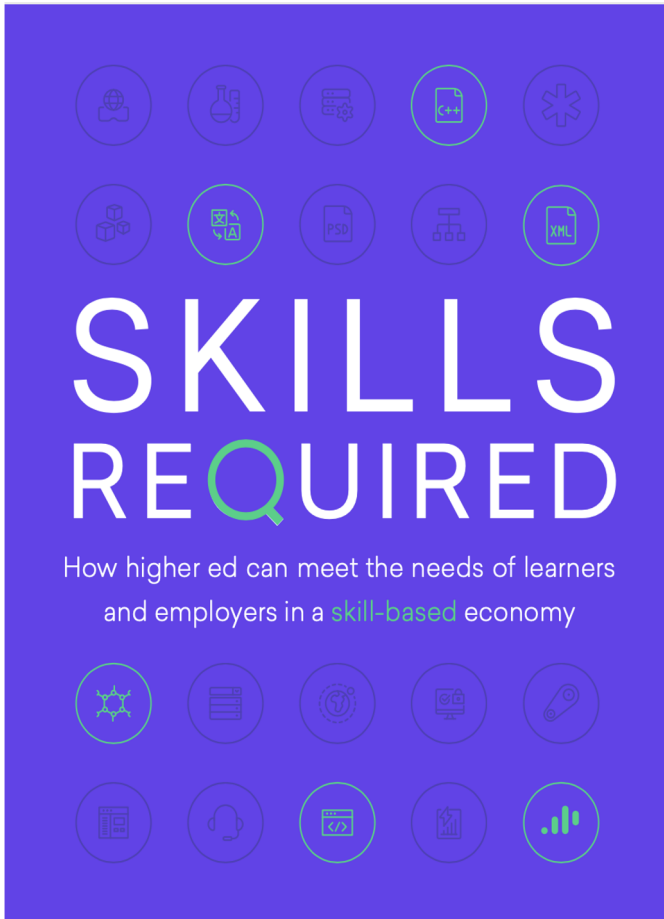
- **Employers post** jobs w/ lots of skills

- **Jobseekers create** online profiles/resumes with more thorough skill descriptions to market themselves

- **"Skillify"** – to translate curricular content into the skills-based language of the modern labor market.
  - The goal is to improve the relevancy of existing or new programs
  - This allows educators to constantly scan the environment for opportunity and alignment
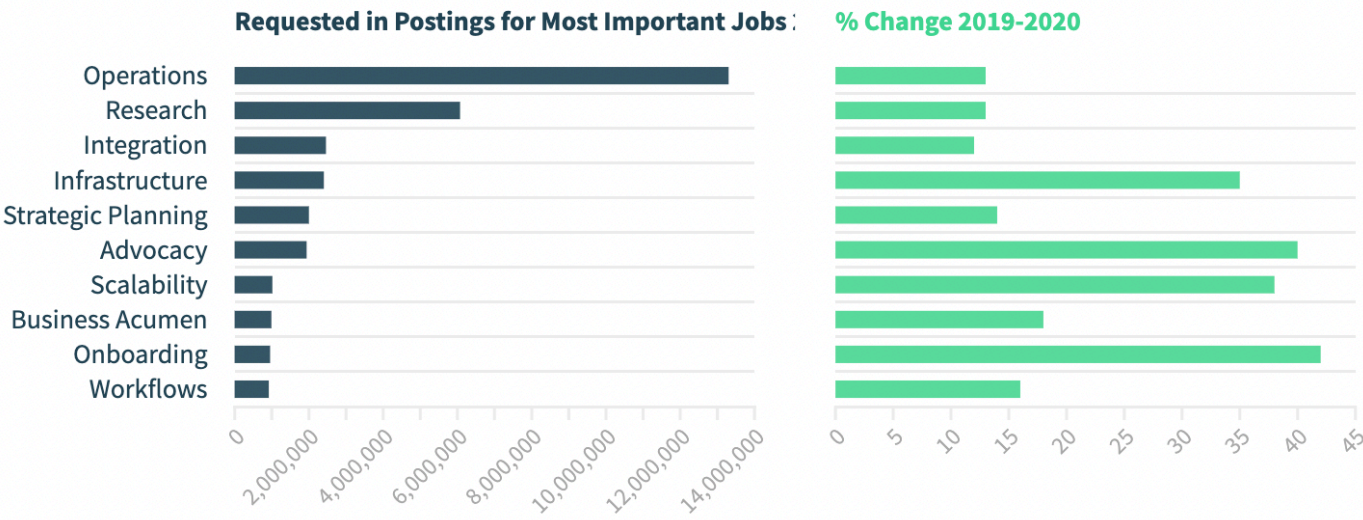
Employer's demand signals

Top 10 Human Skills

	Requested in Postings for Most Importa	% Change 2019-2020

Leadership
Innovation
Troubleshooting (Problem Solving)
Accountability
Influencing Skills
Investigation
Critical Thinking
Collaboration
Curiosity
Self-Discipline

Top 10 Hybrid Skills

These are where human and technical skills overlap. It was hard to label these skills either *human* or *technical*, so we cheated and created a third category.

	Requested in Postings for Most Important Jobs	% Change 2019-2020

Operations
Research
Integration
Infrastructure
Strategic Planning
Advocacy
Scalability
Business Acumen
Onboarding
Workflows

Source: Emsi job posting analytics

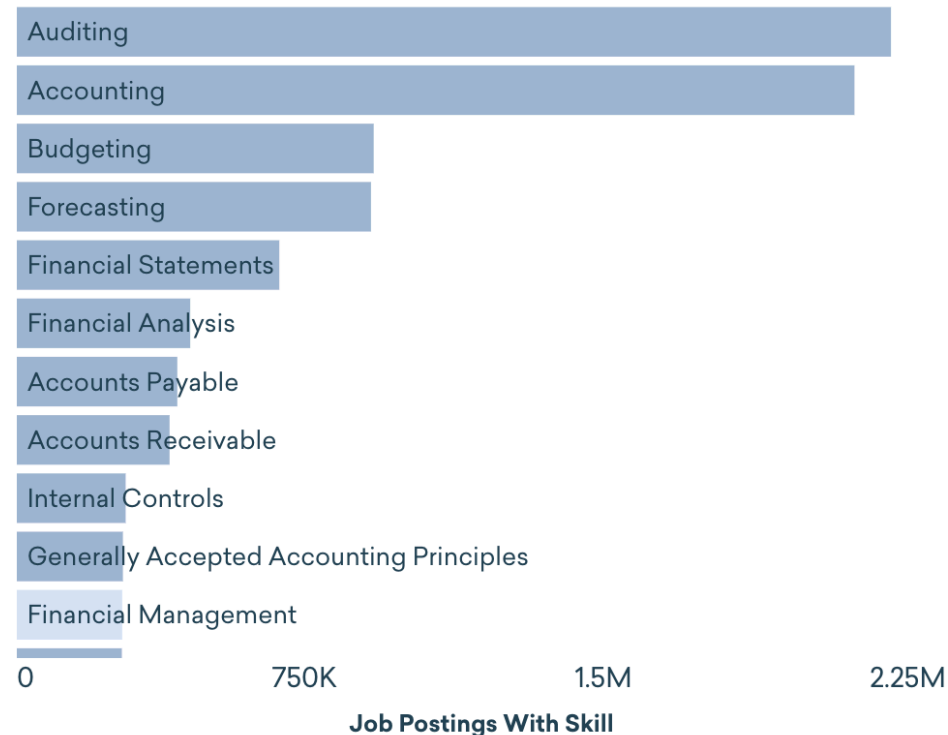# Skillabi – Relate what is taught to what is sought

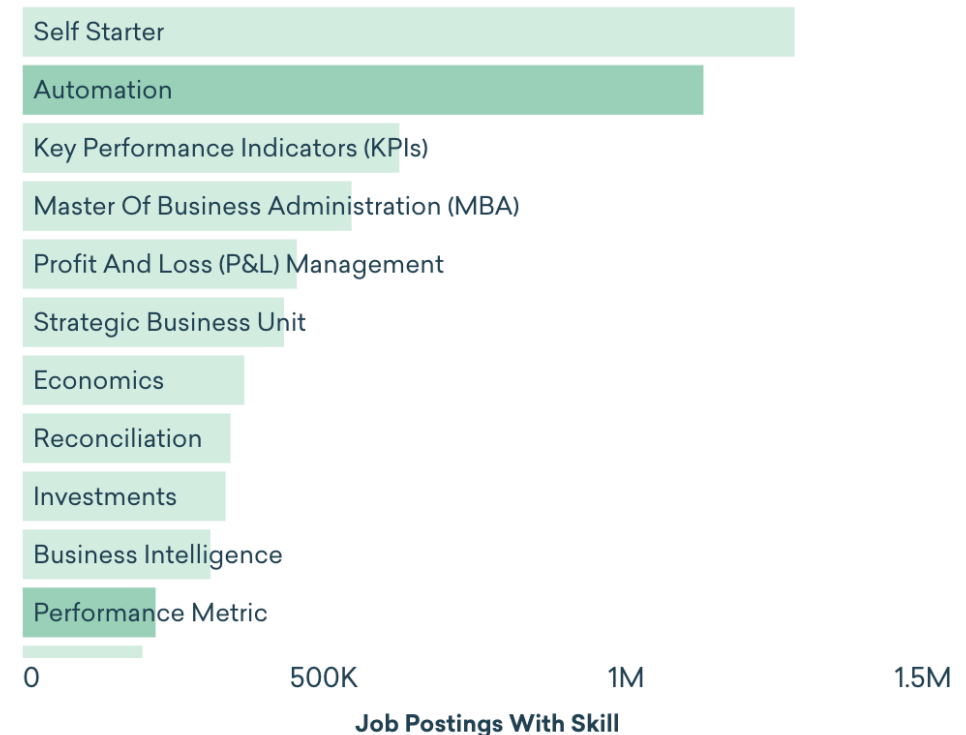**Market Alignment** ❓

Collapse Section ⌃

📍 Region: *United States* ✏ Edit

Taught Skills Aligned With Target Outcomes ❓

- Taught in this group and other groups
- Taught only in this group

Auditing
Accounting
Budgeting
Forecasting
Financial Statements
Financial Analysis
Accounts Payable
Accounts Receivable
Internal Controls
Generally Accepted Accounting Principles
Financial Management

0 — 750K — 1.5M — 2.25M

Job Postings With Skill

Skills to Consider Teaching Based on Target Outcomes ❓

- Taught in other groups
- Not taught in any groups

Self Starter
Automation
Key Performance Indicators (KPIs)
Master Of Business Administration (MBA)
Profit And Loss (P&L) Management
Strategic Business Unit
Economics
Reconciliation
Investments
Business Intelligence
Performance Metric

0 — 500K — 1M — 1.5M

Job Postings With Skill

Skills of language and philosopy graduates

Emsi PROFILE ANALYTICS, 2019

	Themes	Educational product design	Public relations	Digital marketing	Non-profit administration
Fundraising			▮		▮▮▮
Project management		▮			▮▮
Strategic planning			▮		▮▮▮
Budgeting					▮▮
Digital marketing				▮▮▮▮▮	
Email marketing				▮▮	
Marketing communications			▮▮▮▮		
Online advertising				▮▮	
Search engine marketing				▮▮▮	
Property management					▮▮▮
Graphic design		▮▮		▮	
Training and development		▮▮	▮		
Editing		▮		▮	▮▮▮
Cascading style sheets (css)		▮		▮	
Press releases			▮▮▮		▮
Writing				▮	▮▮▮▮▮▮▮▮▮
Public relations			▮▮▮▮▮▮▮		▮▮
Analytics				▮▮▮▮▮▮▮	
Instructional design		▮▮▮▮▮▮▮			

Factor score

0.1 0.2 0.3 0.4 0.5   0.1 0.2 0.3 0.4 0.5   0.1 0.2 0.3 0.4 0.5   0.1 0.2 0.3 0.4 0.5

3. Understand interest and where people have skills

- Interest + skills will help colleges and learners end up in the best possible spot

- Students need to hear this from faculty, career centers, and others they trust to help them

- Help students understand where what they are learning applies

Careers that line up to someone with a background in research and technical writing (skills often associated with the liberal arts)

Career Areas Matched to You

Journalism, Writing and Communications

With emphasis on
Technical Writing / Technical Documentation /...

🏆 Match Score ★★★★☆

View Details →

Surveying and Mapping

With emphasis on
Geographic Information Systems / ArcGIS (GIS...

🏆 Match Score ★★★★☆

View Details →

Marketing, Advertising and Public Relations

With emphasis on
Public Relations / Social Media / Writing

🏆 Match Score ★★★★☆

View Details →

Journalism, Writing and Communications

With emphasis on
Public Relations / Press Releases / Media...

🏆 Match Score ★★☆☆

View Details →

Journalism, Writing and Communications

With emphasis on
Social Media / Search Engine Optimization / Adobe...

🏆 Match Score ★★★☆☆

View Details →

Office and Administrative Services

With emphasis on
Writing / Punctuation / Tactfulness

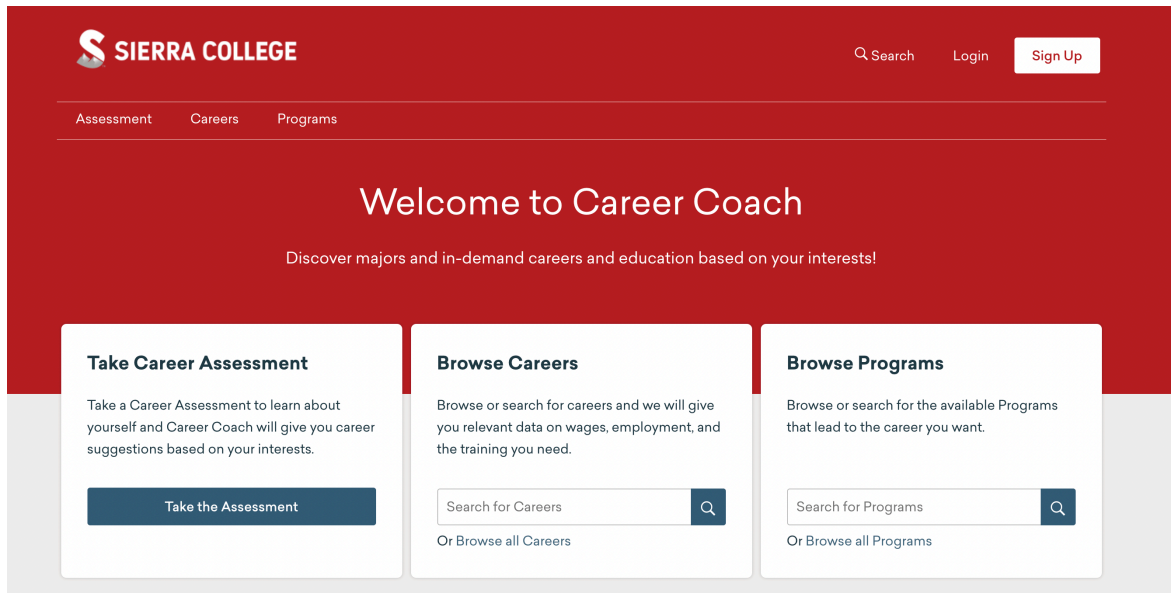🏆 Match Score ★★☆☆☆

View Details →
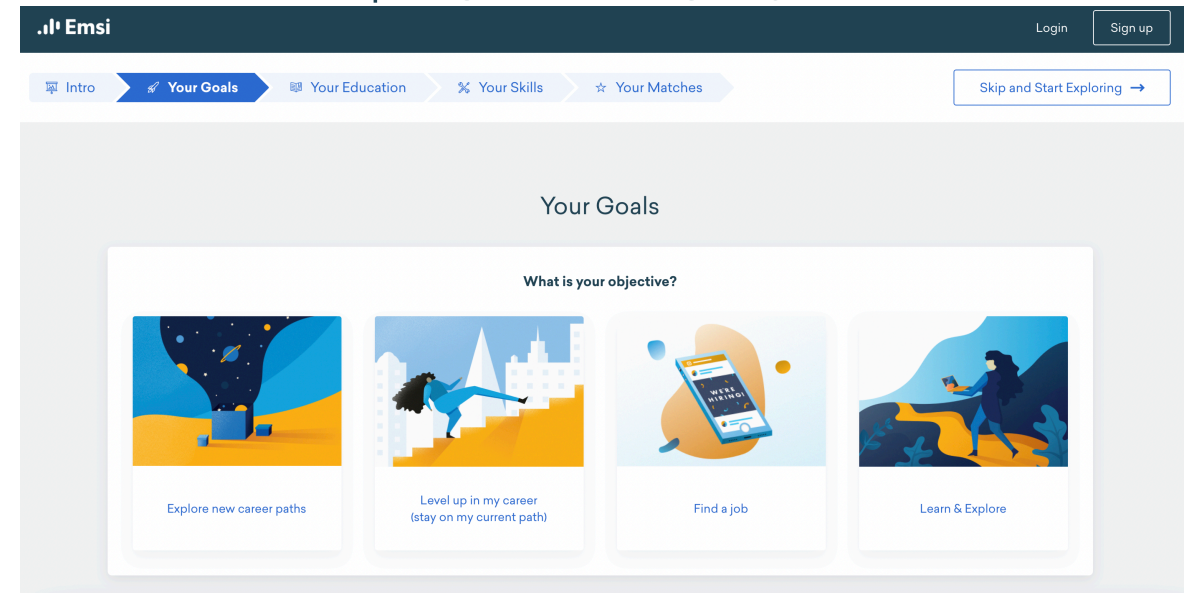
4. Show people opportunity

Career Coach

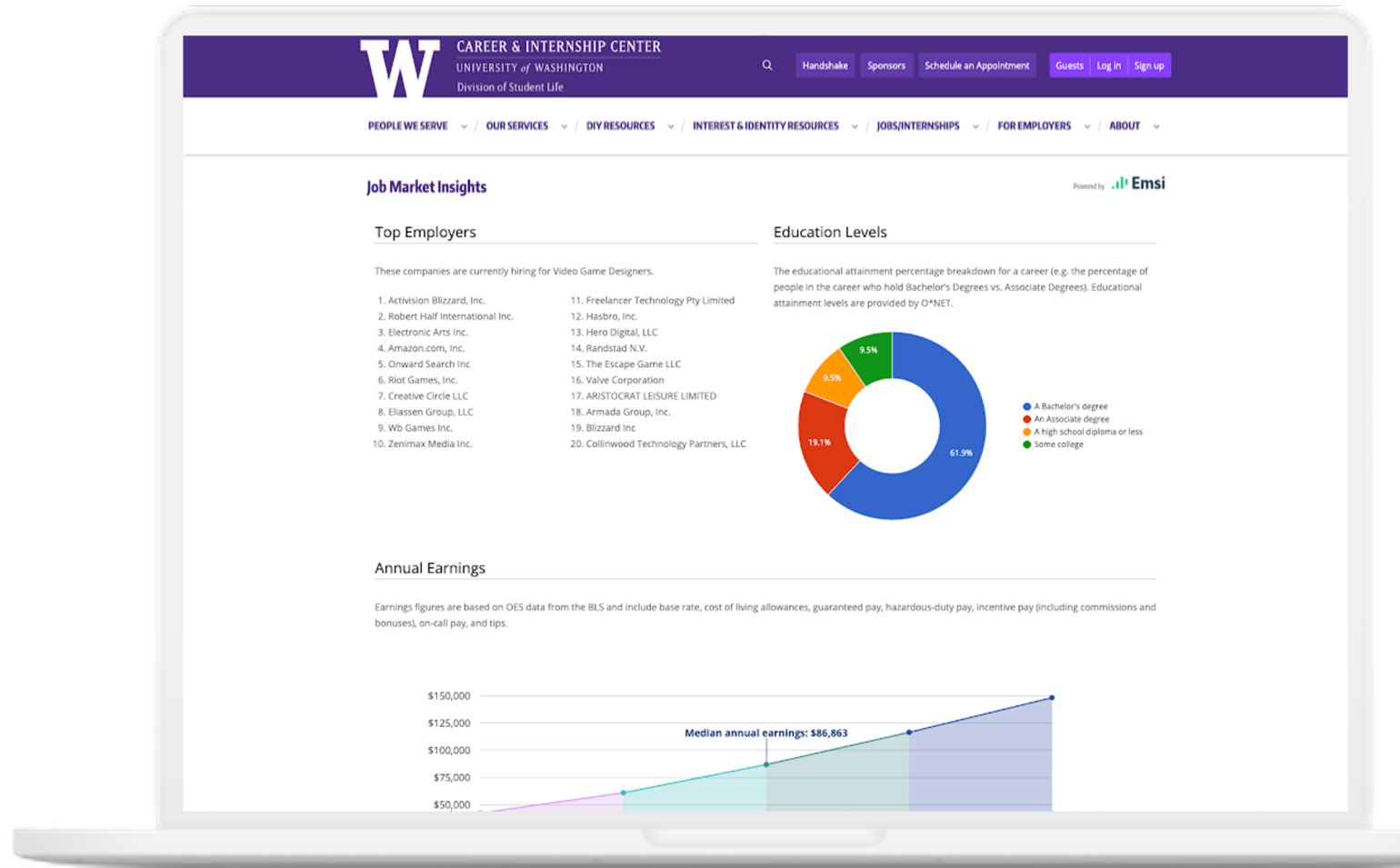For new students. Assess interest. See opportunity.

SkillsMatch

For adult learners. Assess skills. See the best fit + the programs to get you there

Emsi & uConnect Bring Labor Data to Career Services

When it comes to students and careers

Students often want:

- Clear picture of what they can do

But they:

- Underestimate what they can do
- Often have no idea about the amount of opportunity
- Feel confused and intimidated

Data can help…

Thank you!

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