Thinking Ahead: Helping Students Build Skill Awareness
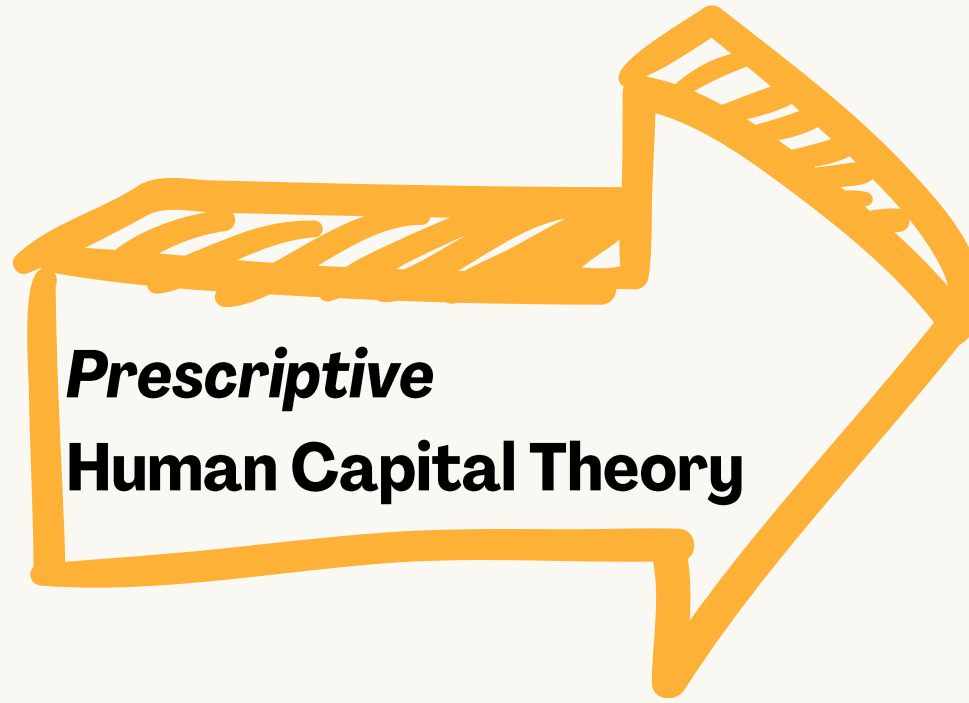
Engineerica Education: Keynote Series | Paige Mertz | December 7

THE SHIFT TO SKILLS AWARENESS

Descriptive
Human Capital Theory

Prescriptive
Human Capital Theory

Finding the middle ground with **Skills Awareness** / **Skills-Based planning**

Higher Education Offerings
= Economic Gains

Highest Economic Gain
= Higher Education Offerings

Skills help define & bolster both higher education and the economy.

(Wheelaham & Moodie, 2022)

People (resumes)

Education (degree)

SKILLS

Labor Market (job title)

Lightcast.io

SKILLS RECAP

DISTINGUISHING SKILLS

DISCIPLINE-SPECIFIC SKILLS
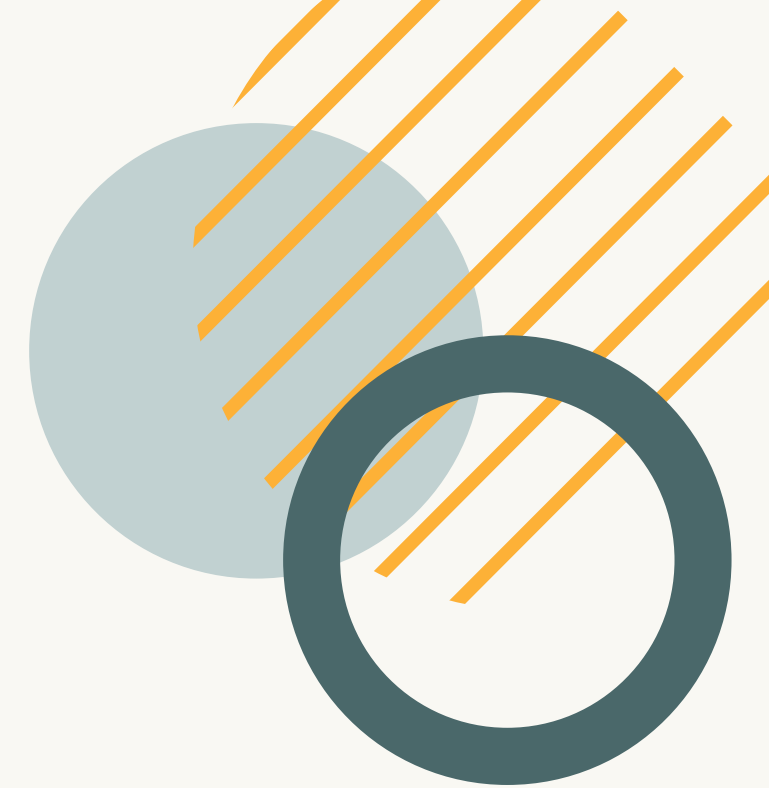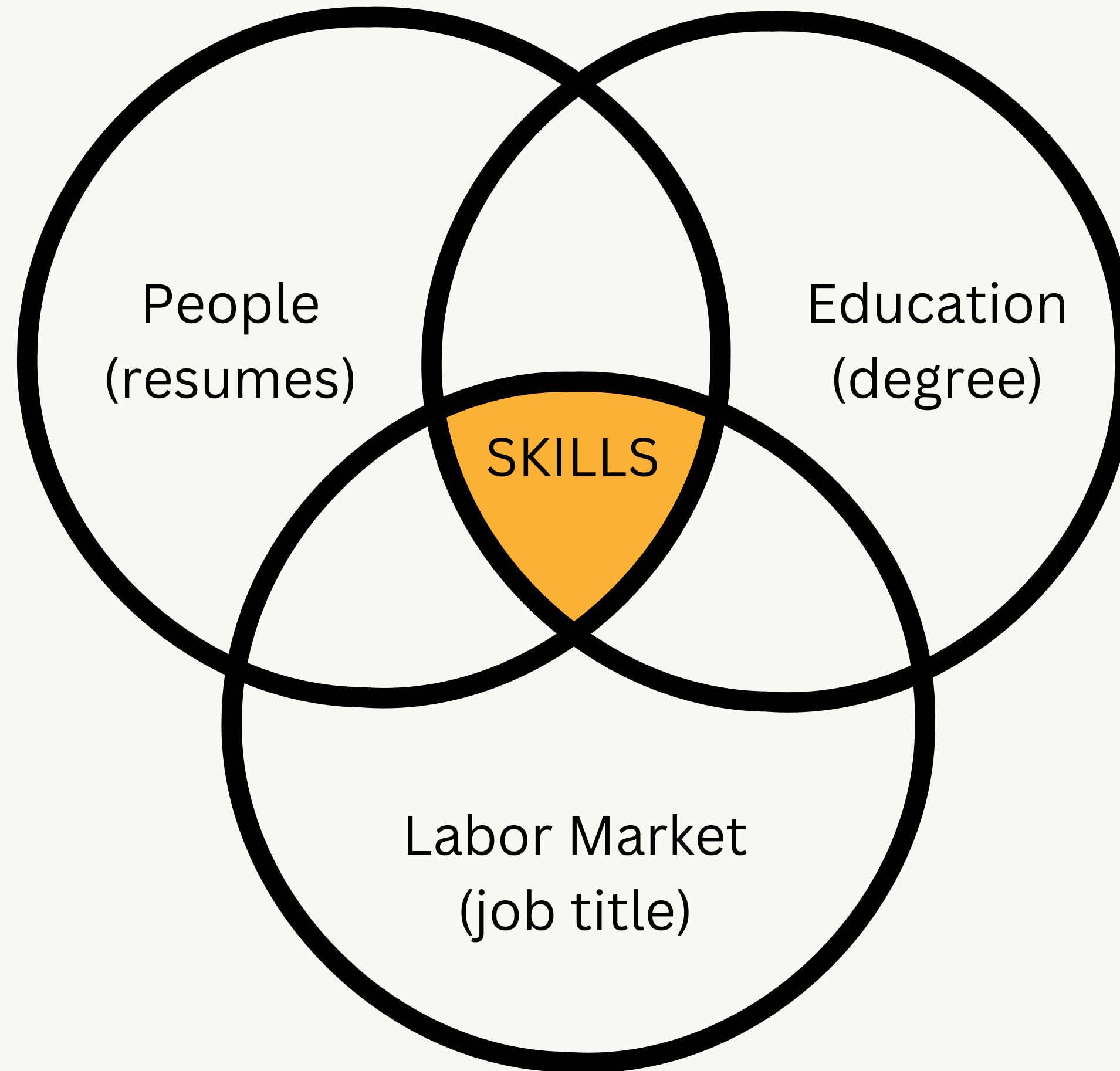
FOUNDATIONAL SKILLS
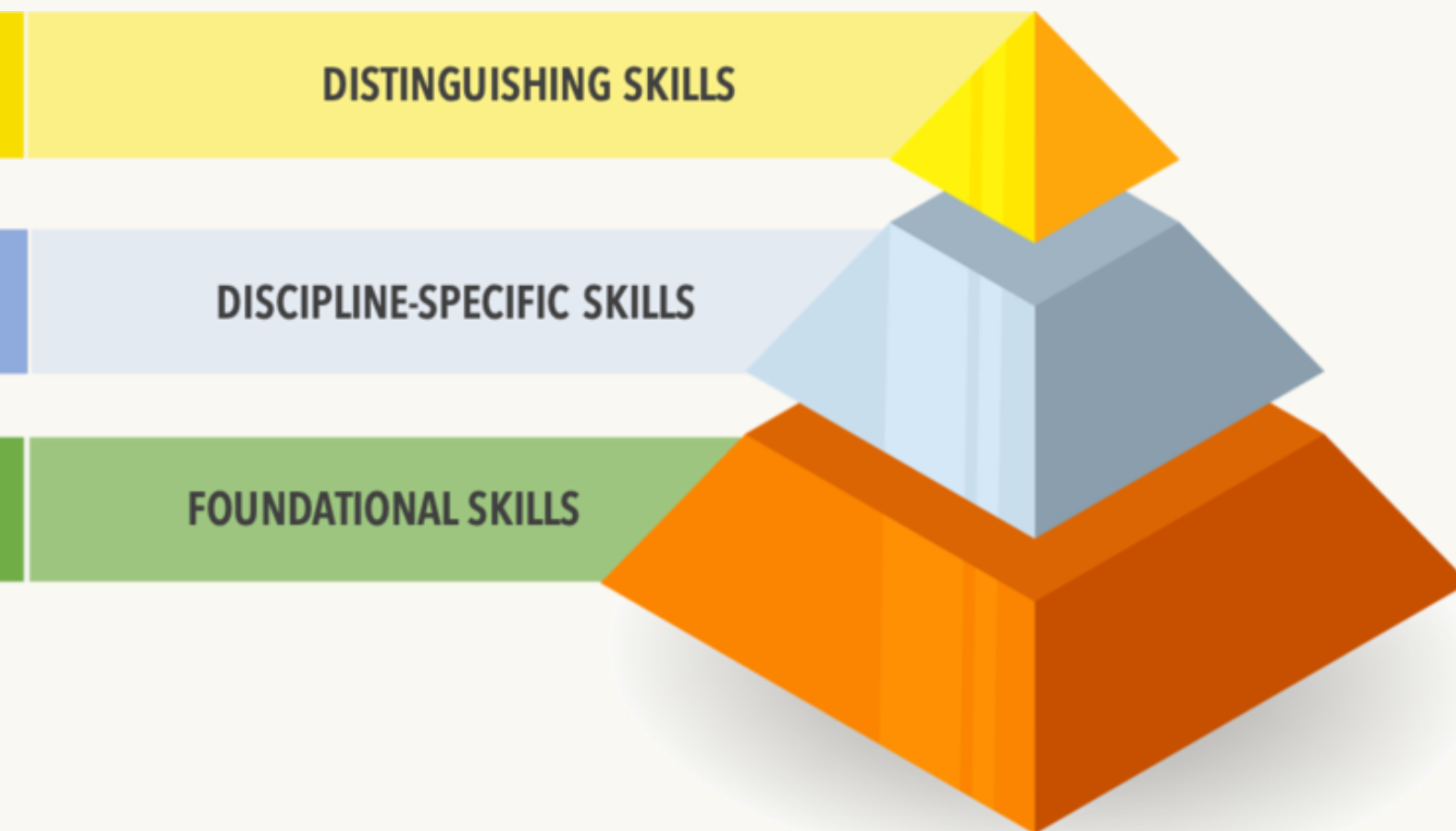
✓ **Common/Soft Skills:**
- Communications
- Leadership
- Problem Solving

✓ **Software Skills:**
- Microsoft Excel
- Python
- SAP Applications

✓ **Specialized/Hard Skills:**
- Marketing
- Accounting
- Nursing

✓ **Certifications:**
- Teaching Cert
- CPA
  Certified Public Accountant
- PALS
  Pediatric Advanced Life Support

"Skills have displaced occupations as the unit of analysis by which the job market should be measured "
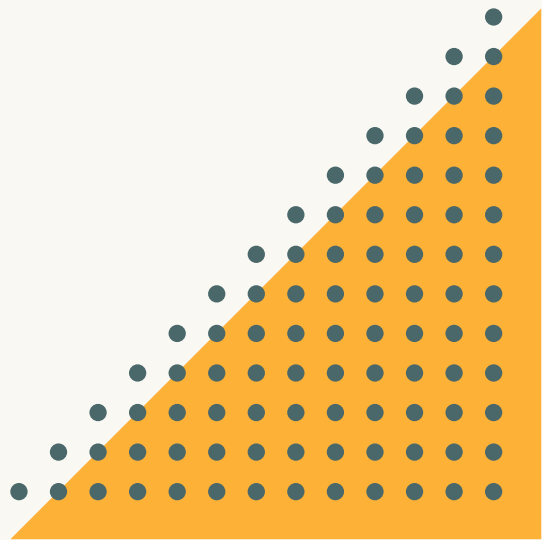
Lightcast, 2023

HOW IS HIGHER ED RESPONDING?

State pressures and **accountability measures** for skills-focused decision making (e.g., marketable skills reporting).

Push for **Micro** Credentials / **Stackable** Credentials.

Career Services and Academic Affairs utilizing **labor market analytics** for student mentoring and program development.

CRITICISMS

Conzelmann et. al., 2023
Unfulfilled Obligations
"Businesses and employers will naturally encourage colleges to produce graduates who can fill specific roles or jobs; however, many stakeholders believe colleges have broader obligations to students, parents, and society"

Wheelaham & Moodie, 2022
"Learning Equals Earning"
"Micro-credentials reorient higher education from educational purposes to employment purposes; they seek to divert students from substantial credentials with substantial value to micro-credentials with micro value"

CRITICISMS

Javadi & Asl, 2020
Losing our Identity?

Academic:

"producing commercially-oriented professionals, rather than public-interest professionals"

Teacher:

"from autonomous professionals to services-oriented workers in quasi-business environments"

Student:

Consumers rather than learners.

BENEFITS

01

Building tighter links between Higher Ed and workplace requirements so universities are more responsive to employer demands in competitive markets and students are more likely to have a ROI after graduation.

Wheelaham & Moodie, 2021
Lightcast, 2023
World Economic Forum, 2023

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Wheelaham & Moodie, 2021
Lightcast, 2023
World Economic Forum, 2023

LIZ COLEMAN
A CALL TO REINVENT LIBERAL A
TED

02

Creates more crossdisciplinarity opportunities for liberal arts and fine arts students
"These fields are relatively more responsive to shifts in the labor demand--with programs in communications, social sciences, and health being particularly responsive"

Conzelmann, et. al., 2023
Coleman, 2009

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03

"Democratizes access to good jobs for those people who have the competencies but not the right formal qualifications for a role"

"focusses on whether a person has the right skills for a particular role, rather than having the right degree, job history, or background"

World Economic Forum, 2023
Wheelahan & Moodie, 2021

"The purpose of education is to prepare individuals to live lives they have reason to value, and not just in the specifics required of particular jobs"

Wheelahan & Moodie, 2021

HOW CAN INSTITUTIONS RESPOND?

1. Map out labor markets for each academic program, including occupations but focusing on skills. Have these conversations with Faculty or academic affairs
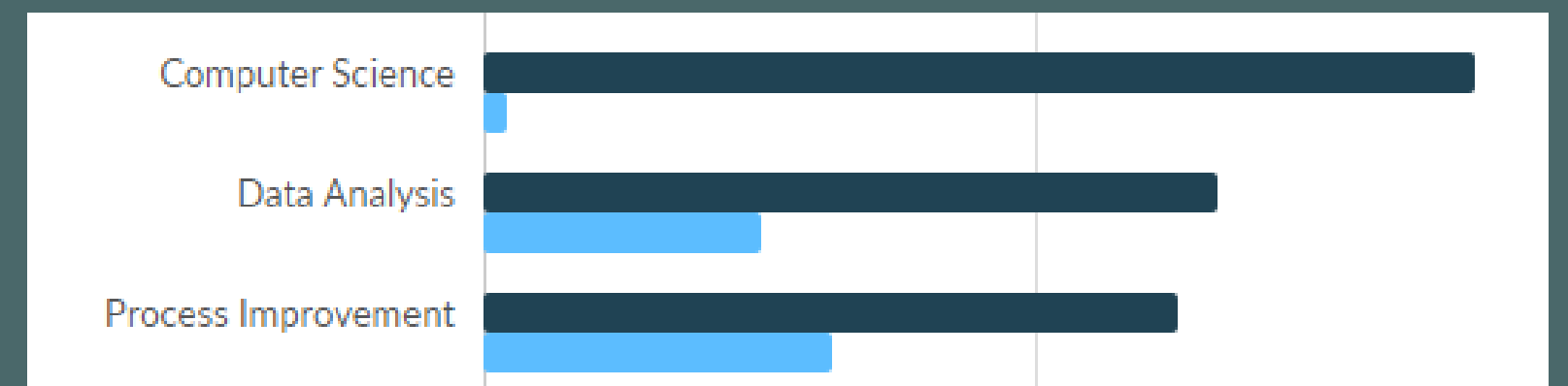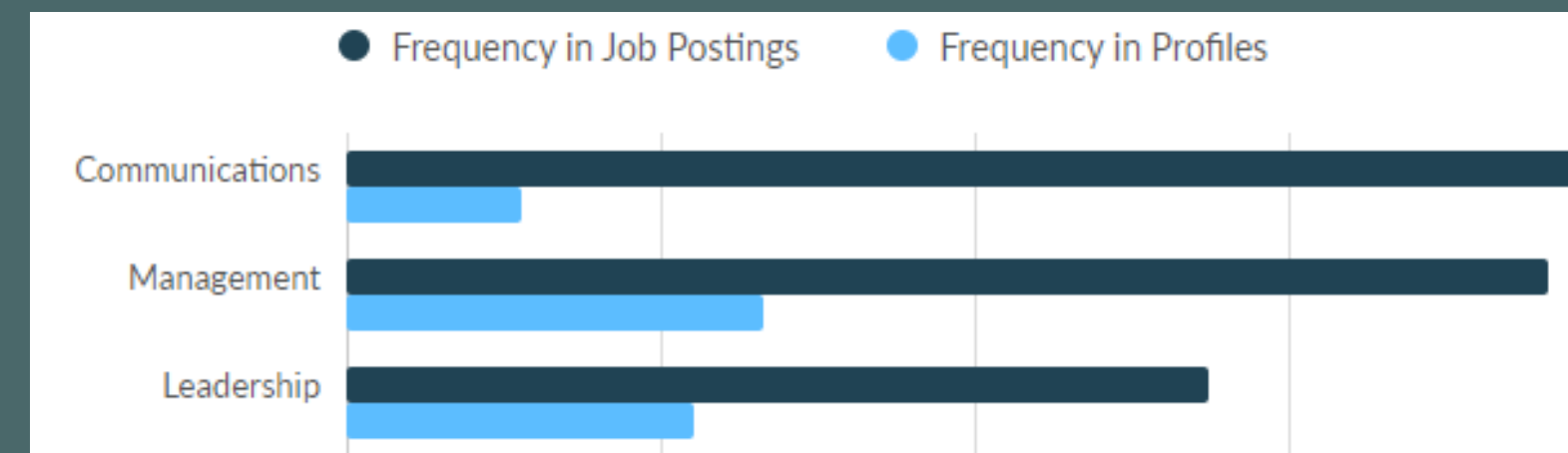
Explore different markets and be open minded about cross-collaboration!

2. Analyze and talk about skills gaps in your strategic planning and with your students

Skills Extractor!

3. Using skills gaps, identify opportunities for adapting course curriculum, adding new programs/tracks, or tailoring career/tutoring sessions for students.

Skills Gaps Example: Market for Human Resources Degree

● Frequency in Job Postings   ● Frequency in Profiles

- Communications
- Management
- Leadership

- Computer Science
- Data Analysis
- Process Improvement

THINKING AHEAD – A CHECKLIST

☐ **Labor market-informed Career Center to best guide students**

  ☐ Do Career Center advisors have access to labor market data on in-demand jobs and skills?
(e.g., [Lightcast](#))

  ☐ Are Career Center advisors aware of the skills/jobs related to different degree programs?
(e.g., [CIP-SOC Crosswalk](#), internal program-workforce mapping)

☐ **Skills-informed Tutoring/Mentoring Centers**

  ☐ Do tutors/mentors know how skills vary among students from different degree programs?
(e.g., marketable skills reporting)

  ☐ Are tutors/mentors aware of the 'skill goals' of a program or course's curriculum?
(e.g., program or catalog webpages)

SKILLS EXTRACTOR

https://lightcast.io/open-skills/extraction
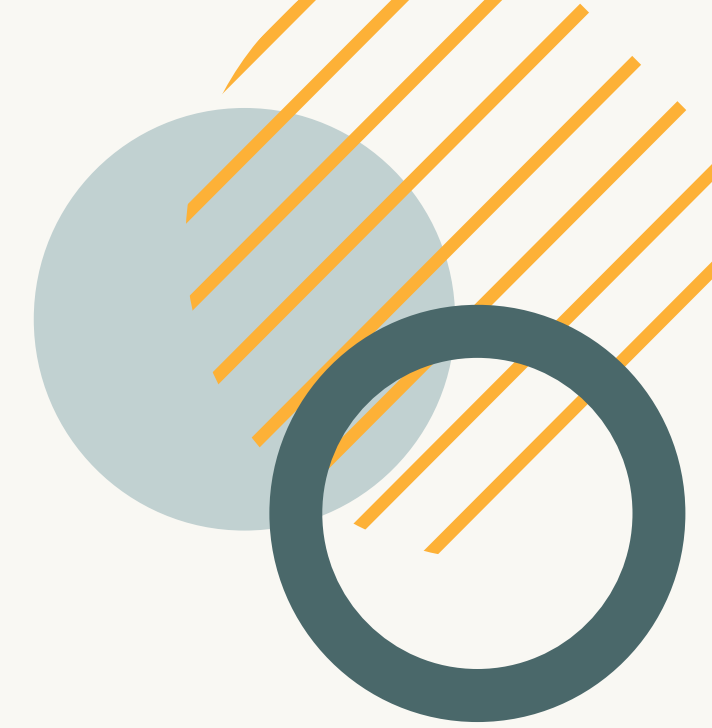
✓ **Course Syllabus, Catalog Entry, Program Description/Marketing**

✓ **Student Resume Builder**

✓ **Job Posting**

Thank you! Questions?

paige.mertz@shsu.edu