

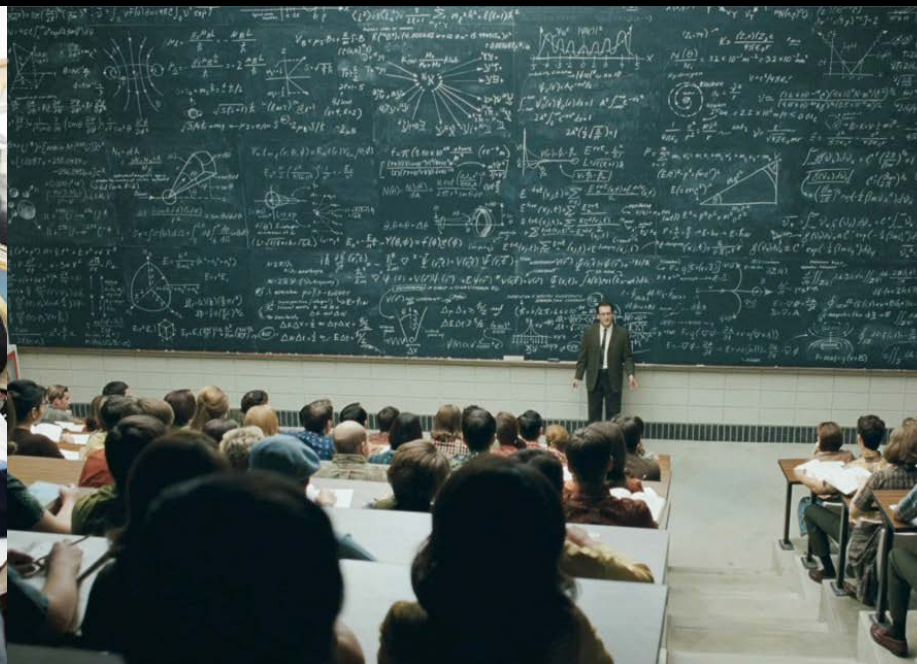
Leveraging Project-Based Learning and Employer Collaboration to Improve **Student Outcomes**

Christine E. Looser, PhD



MINERVA





**The world is changing fast.
The needs of students and
employers are changing too.**

**But educational systems are
failing to keep pace.**

Edge 2021





LIVING

College graduates are dreadfully unprepared to enter job

By Tyler Schmall, SWNS

fifths of high school graduates are

AN ASU KNOWLEDGE ENTERPRISE [CONNECTING PEOPLE TO ID](#)

THE TAKEAWAY

YOUR KID'S COLLEGE DEGREE MIGHT BE WORTHLESS

Nearly half of students u
reports Prospects at Jisc

USA

US College Students Feel Unprepared for

Sections

The Washington Post
Democracy Dies in Darkness

Get one year for \$40

Sign in

Grade Point

Why are so many college students failing to gain job skills before graduation?

Despite a low unemployment rate, many young adults lack job prospects that mesh with their idealized vision of the post-college world.

unprepared for work

by Neil Franklin • HR, News

Job Search | Two-Thirds of College Grads Struggle to Launch

Job Search

Two-Thirds of College Grads Struggle to Launch Their Careers

by Jeffrey J. Selingo

50%

**of hiring managers believed skills
shortages had worsened since 2017**

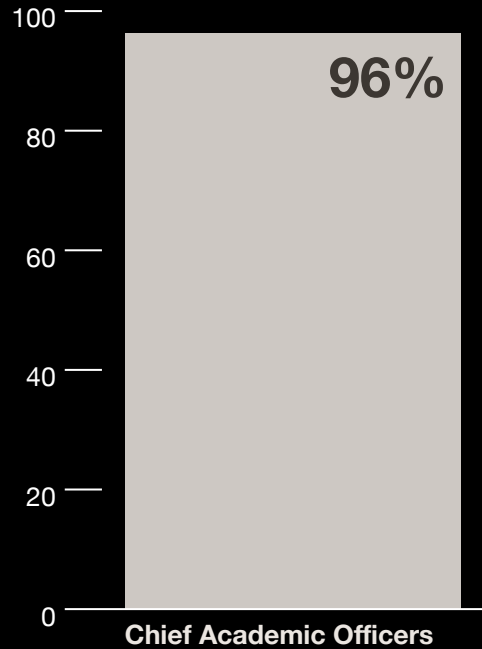
Source: Society for Human Resource Managers, 2019

51%

**of respondents said education
systems have done little or nothing
to address the talent gap**

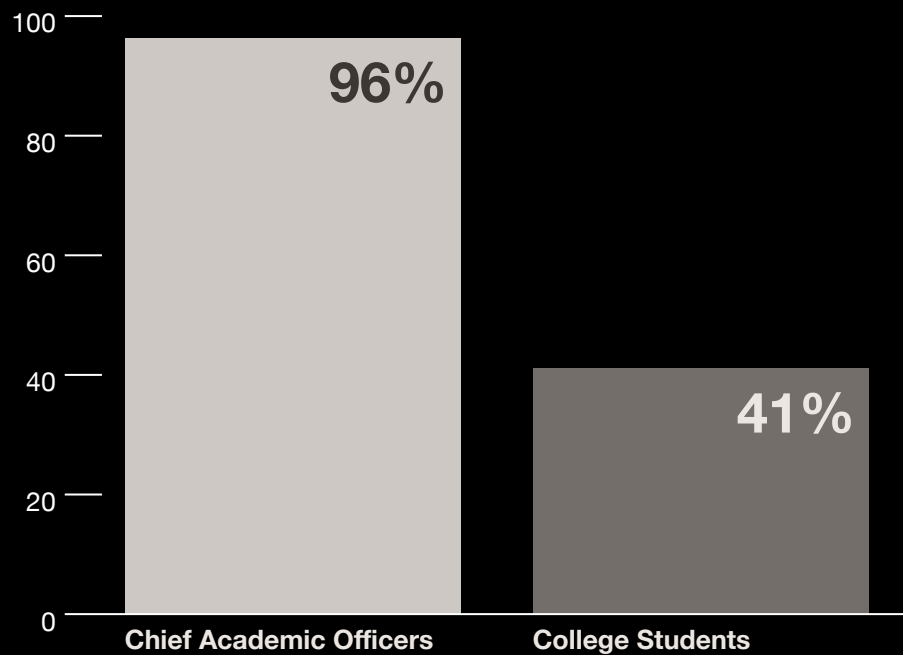
Source: Society for Human Resource Managers, 2019

Different Perceptions of Preparedness



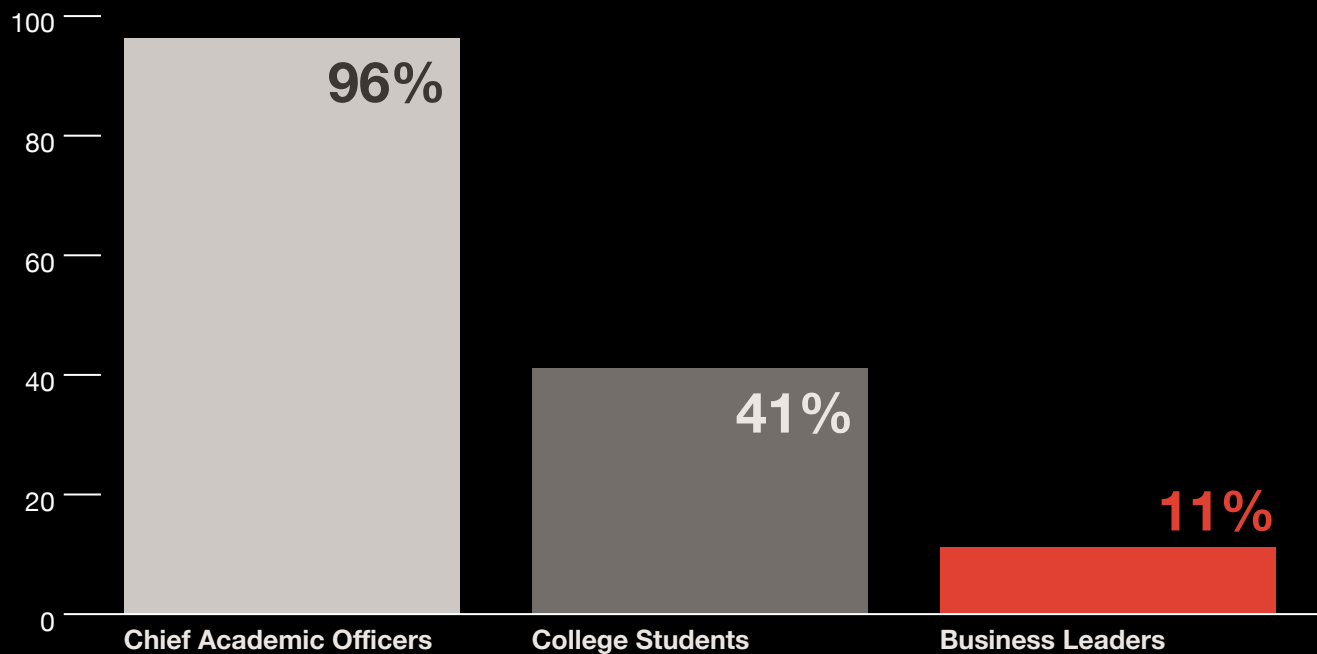
Source: Strada-Gallup, 2017

Different Perceptions of Preparedness




Source: Strada-Gallup, 2017

Different Perceptions of Preparedness



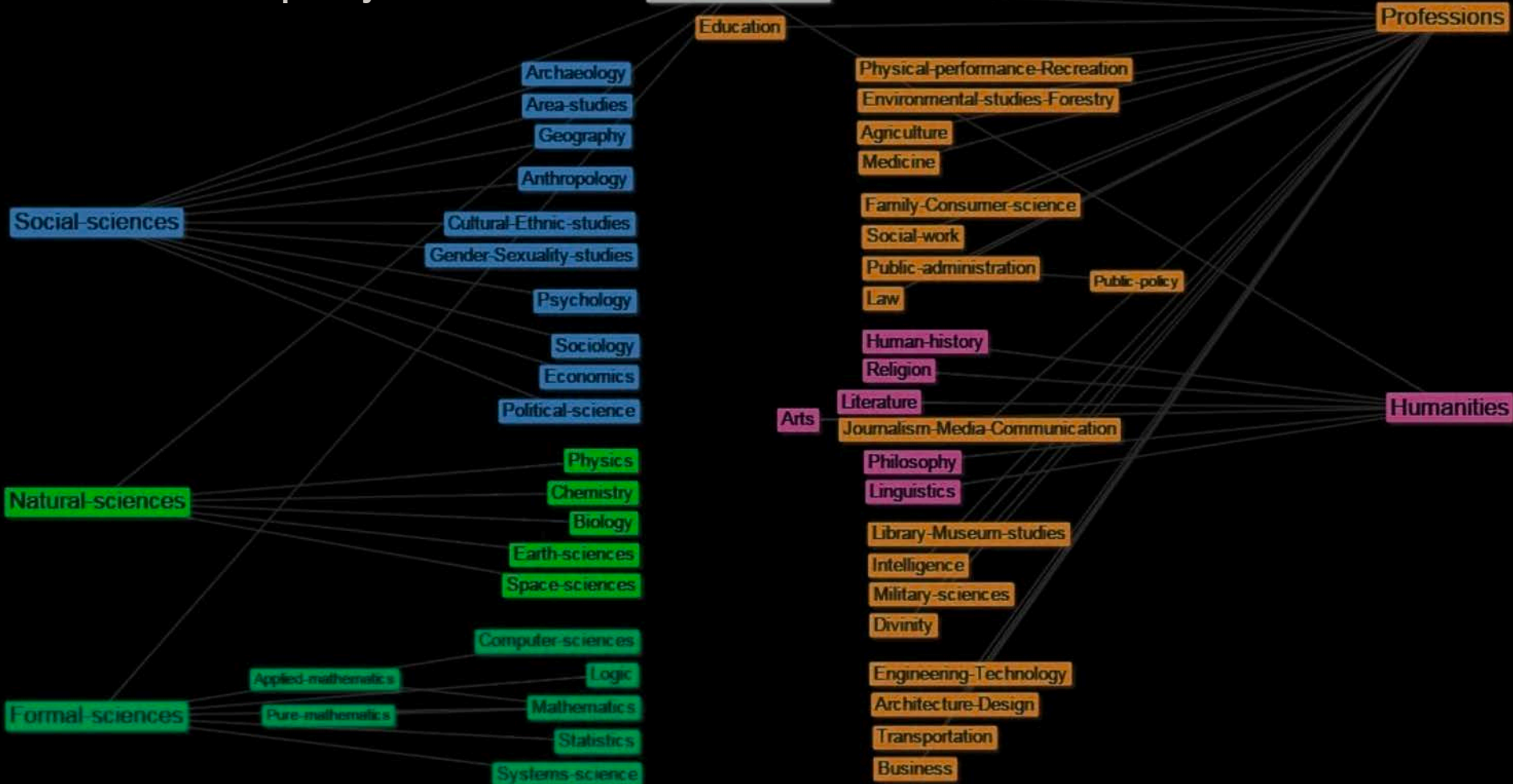
Source: Strada-Gallup, 2017



**There is a fundamental difference
between what we traditionally
teach and what students need.**

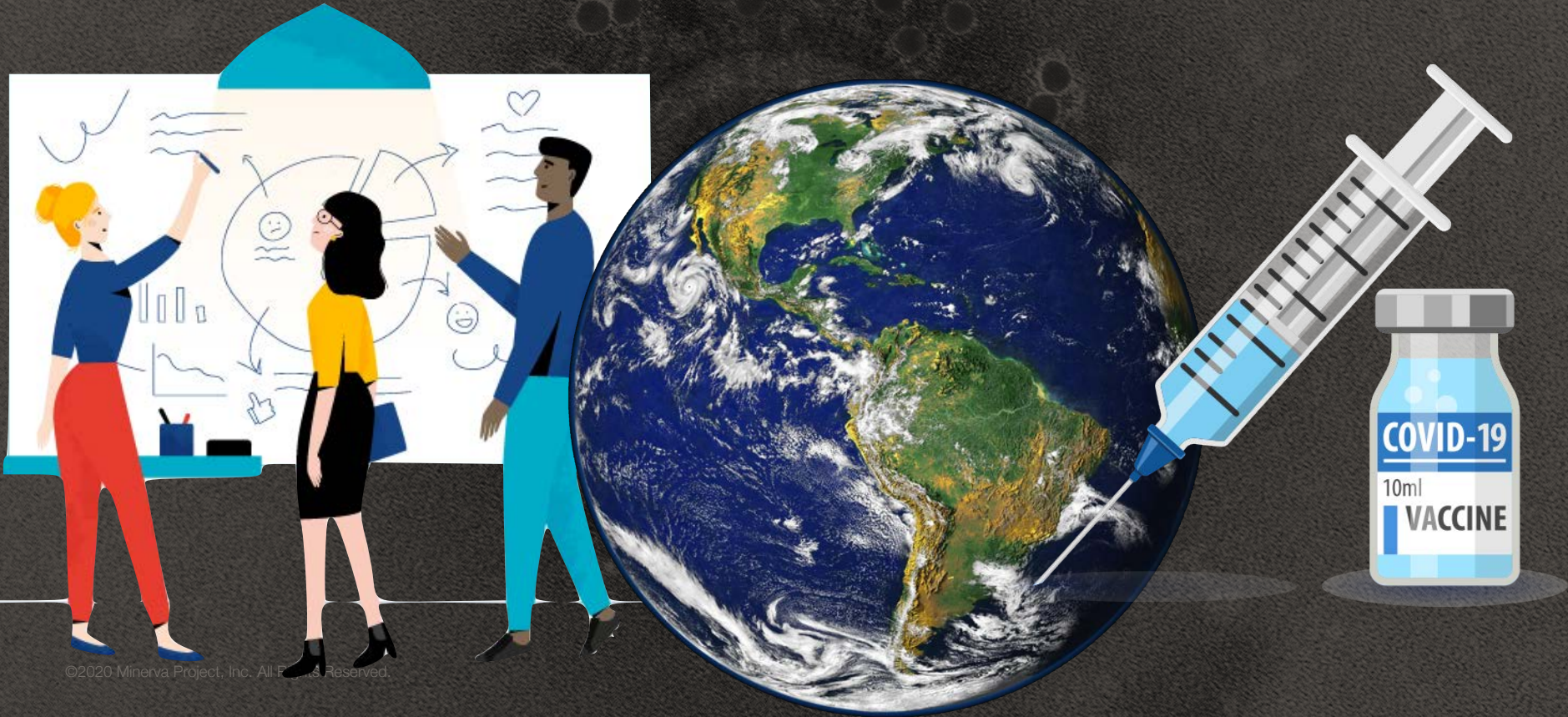
School is disciplinary

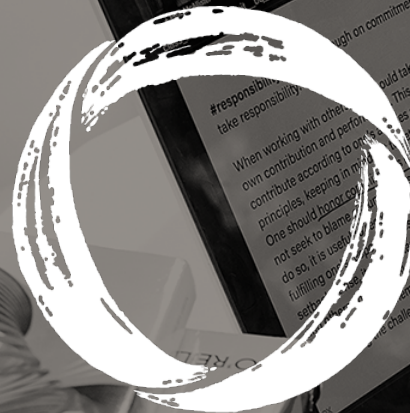
DISCIPLINES











MINERVA[®]

GLOBAL EXPERIENCE/

7 world cities 7 different worlds

Data visualization showing
global flight patterns

Credit: Michael Markieta

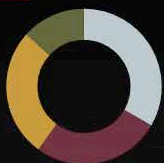
RESIDENTIAL LOCATIONS/

San Francisco
Seoul, Hyderabad
Berlin, Buenos Aires
London, Taipei

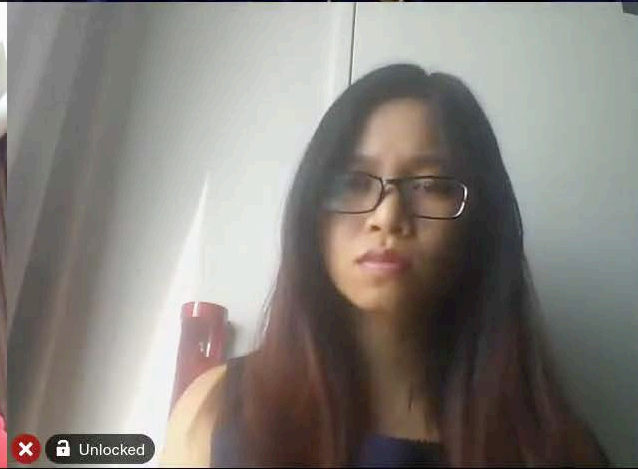


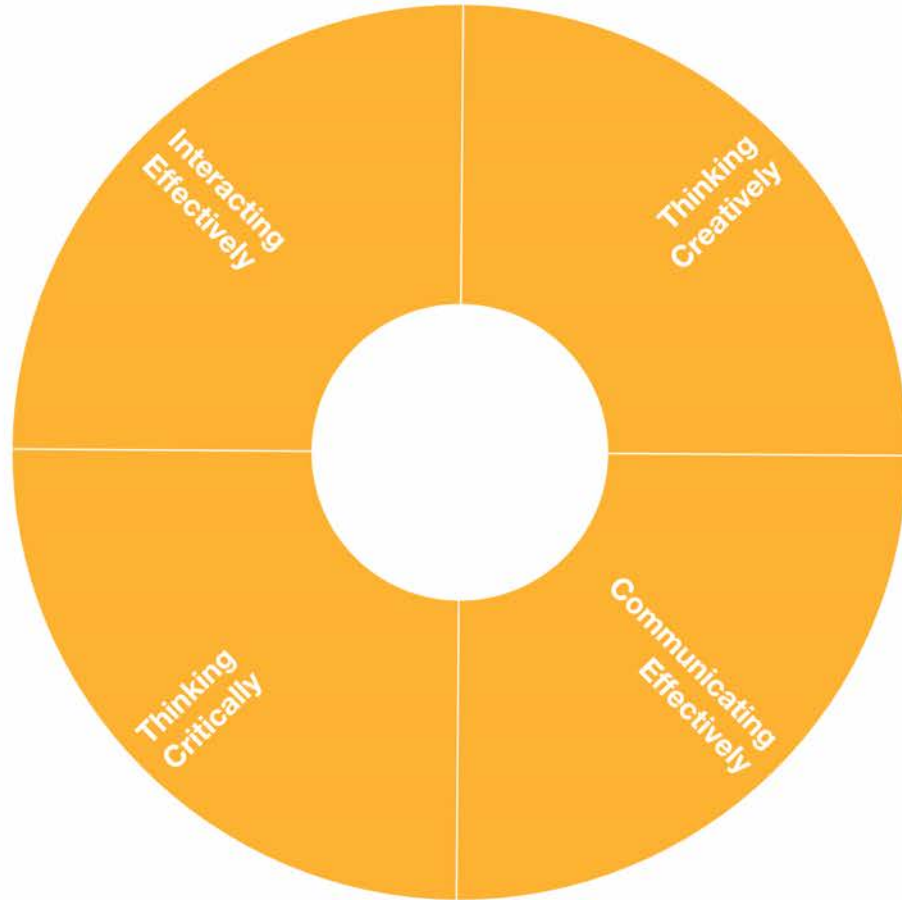
What do you think is the biggest cause for differences in late stage financing between the EU and the US?

Pie Chart Bar Chart Options

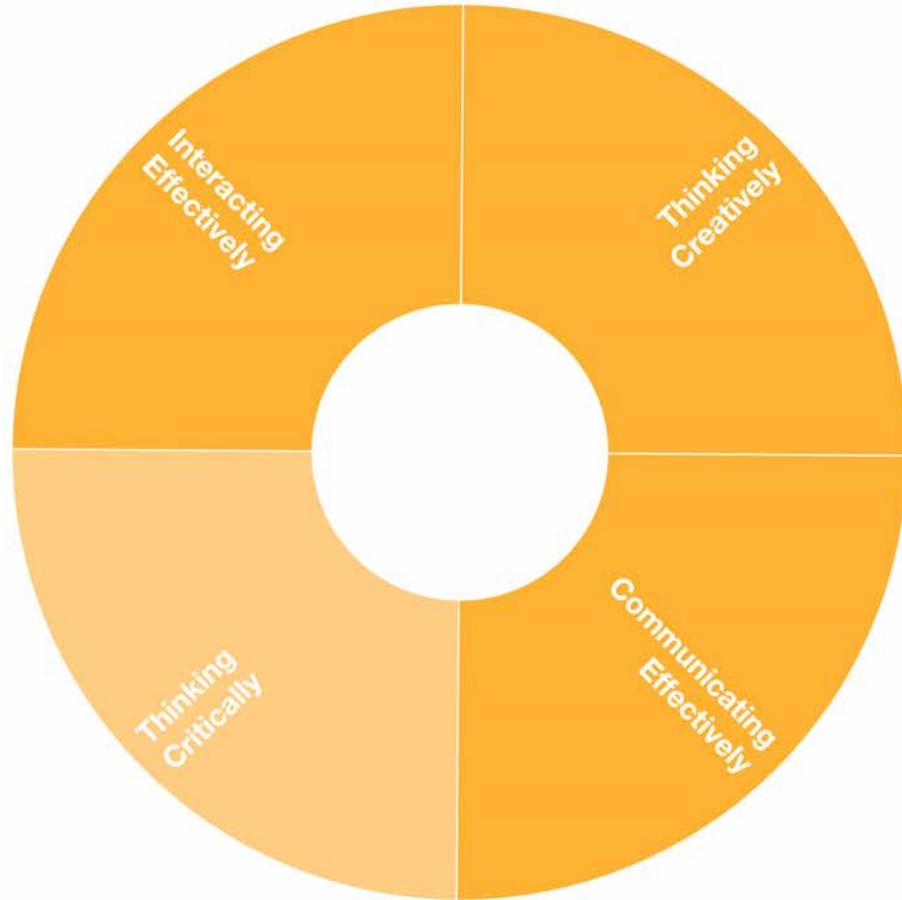


- Desire for smaller exits
- Dearth of companies to invest in
- Something else





HABITS OF MIND & FOUNDATIONAL CONCEPTS



HABITS OF MIND & FOUNDATIONAL CONCEPTS



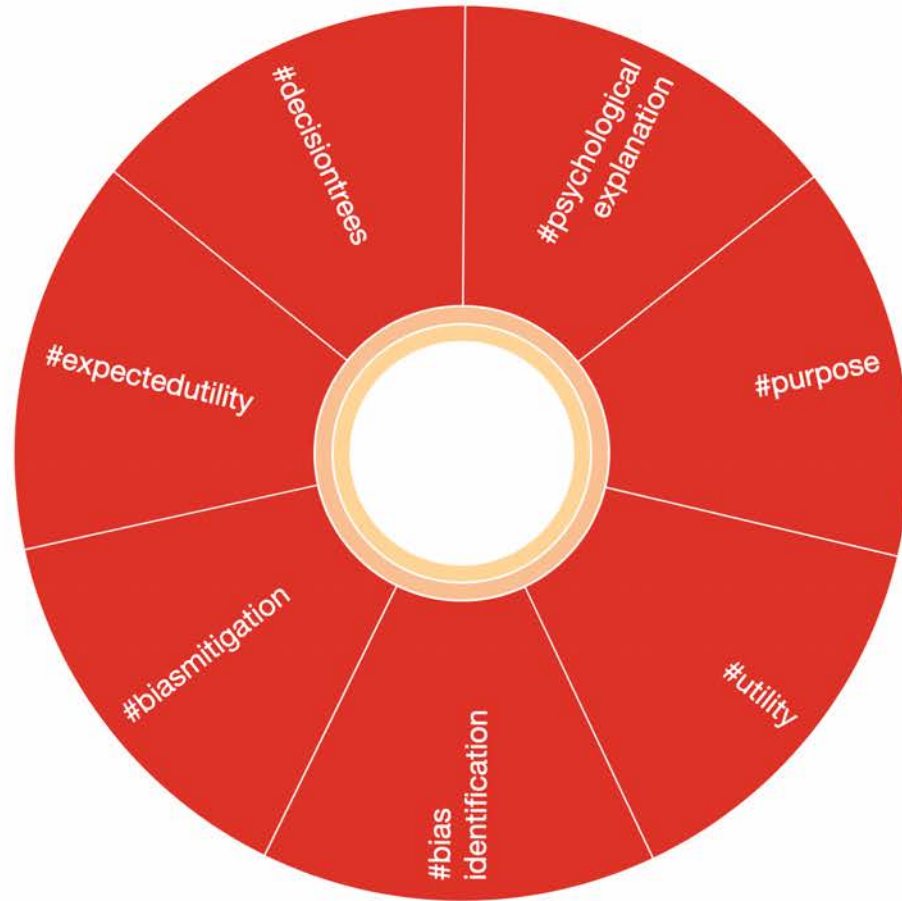
HABITS OF MIND & FOUNDATIONAL CONCEPTS

Thinking Critically



HABITS OF MIND & FOUNDATIONAL CONCEPTS

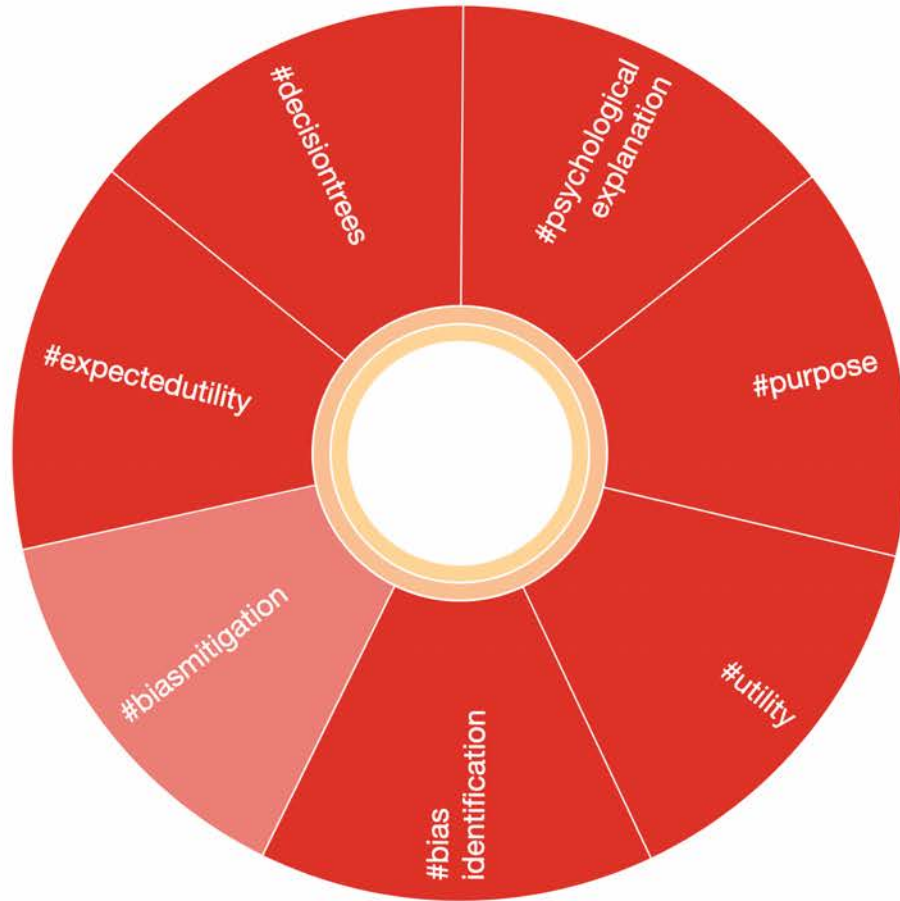
Thinking Critically



HABITS OF MIND & FOUNDATIONAL CONCEPTS

Thinking Critically

Analyzing Decisions



HABITS OF MIND & FOUNDATIONAL CONCEPTS

Thinking Critically

Analyzing Decisions

#biasmitigation

Biases can prevent us from considering important information when making decisions and drawing accurate conclusions. The key to minimizing the effects of bias is first to become aware of them and then determine how to reduce or eliminate their influence in a particular context. Learning to recognize common biases can help one to avoid them, but others may need to be mitigated by implementing specific processes. For this purpose, heuristics designed for preventing biases can be useful.

Project-Based Learning

“Working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge.”

- You can provide the situation
- Students define the problem
- Students break down the problem
- Students design a solution
- Students present their solution to an audience

“Working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge.”

- You can provide the situation
- **Students** define the problem
- **Students** break down the problem
- **Students** design a solution
- **Students** present their solution to an audience



The goal is the
application of
knowledge and
the practice of
enduring,
higher-level skills.





• Self-management

- **Self-management**
- **Problem-identification**

- **Self-management**
- **Problem-identification**
- **Collaboration**

- **Self-management**
- **Problem-identification**
- **Collaboration**
- **Presentation & communication skills**

- **Self-management**
- **Problem-identification**
- **Collaboration**
- **Presentation & communication skills**
- **Knowledge transfer**



• Work samples

- **Work samples**
- **A story about their project**

- **Work samples**
- **A story about their project**
- **Skills that employers want**



PBL INGREDIENTS

- **Situation**
- **Time**
- **Presentation**

- **Situation**
- Time
- Presentation

- **Situation**
- Time
- Presentation

- **Situation**
 - Chose your skills you want students to develop
- Time
- Presentation

- **Situation**
 - Time
 - Presentation
- Chose your skills you want students to develop
 - Find a rich environment that contains an ambiguous challenge

- **Situation**

- Time

- Presentation

- Chose your skills you want students to develop
- Find a rich environment that contains an ambiguous challenge
- Select a real situation from a collaboration with an employer

- Situation
- **Time**
- Presentation

- Situation
 - Time
 - Presentation
- Deliver content interleaved with project work

- Situation
 - Time
 - Presentation
- Deliver content interleaved with project work
 - Chunk time for multiple small deliverables

- **Situation**
 - **Time**
 - **Presentation**
- **Deliver content interleaved with project work**
 - **Chunk time for multiple small deliverables**
 - **Provide timely feedback with spaced out assessment**

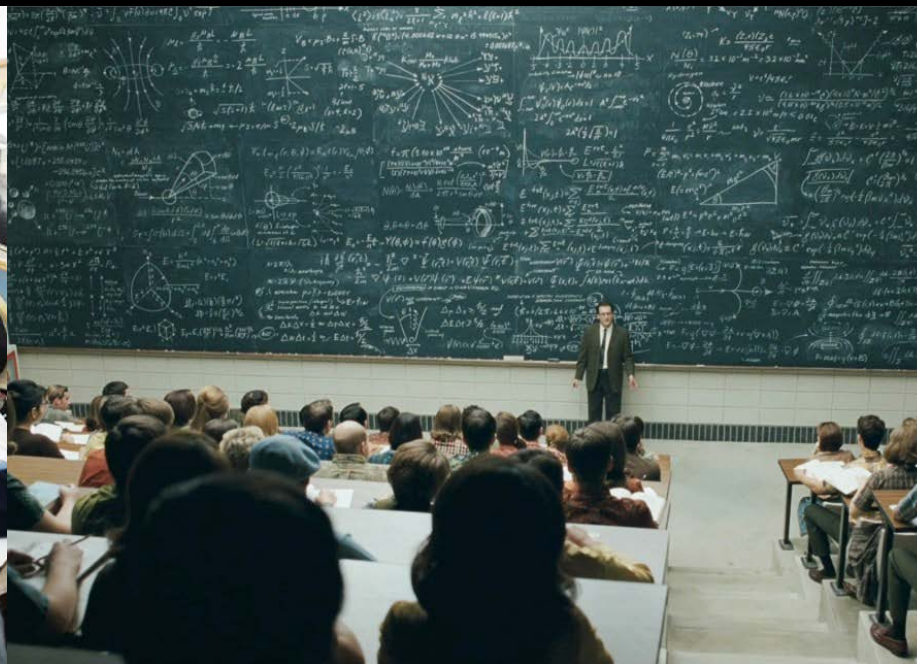
- Situation
- Time
- **Presentation**

- Situation
- Time
- **Presentation**
- Problem statement

- Situation
- Time
- **Presentation**
 - Problem statement
 - Process presentation

- Situation
- Time
- **Presentation**
 - Problem statement
 - Process presentation
 - Solution + Self-evaluation

- Situation
- Time
- **Presentation**
 - Problem statement
 - Process presentation
 - Solution + Self-evaluation
 - Active feedback from peers/
industry partners



The world needs problem solvers and project doers.

Appendix