



Pearson

CBE and Closing the Employment Gap: Research and Strategy

Flipped Session Presentation

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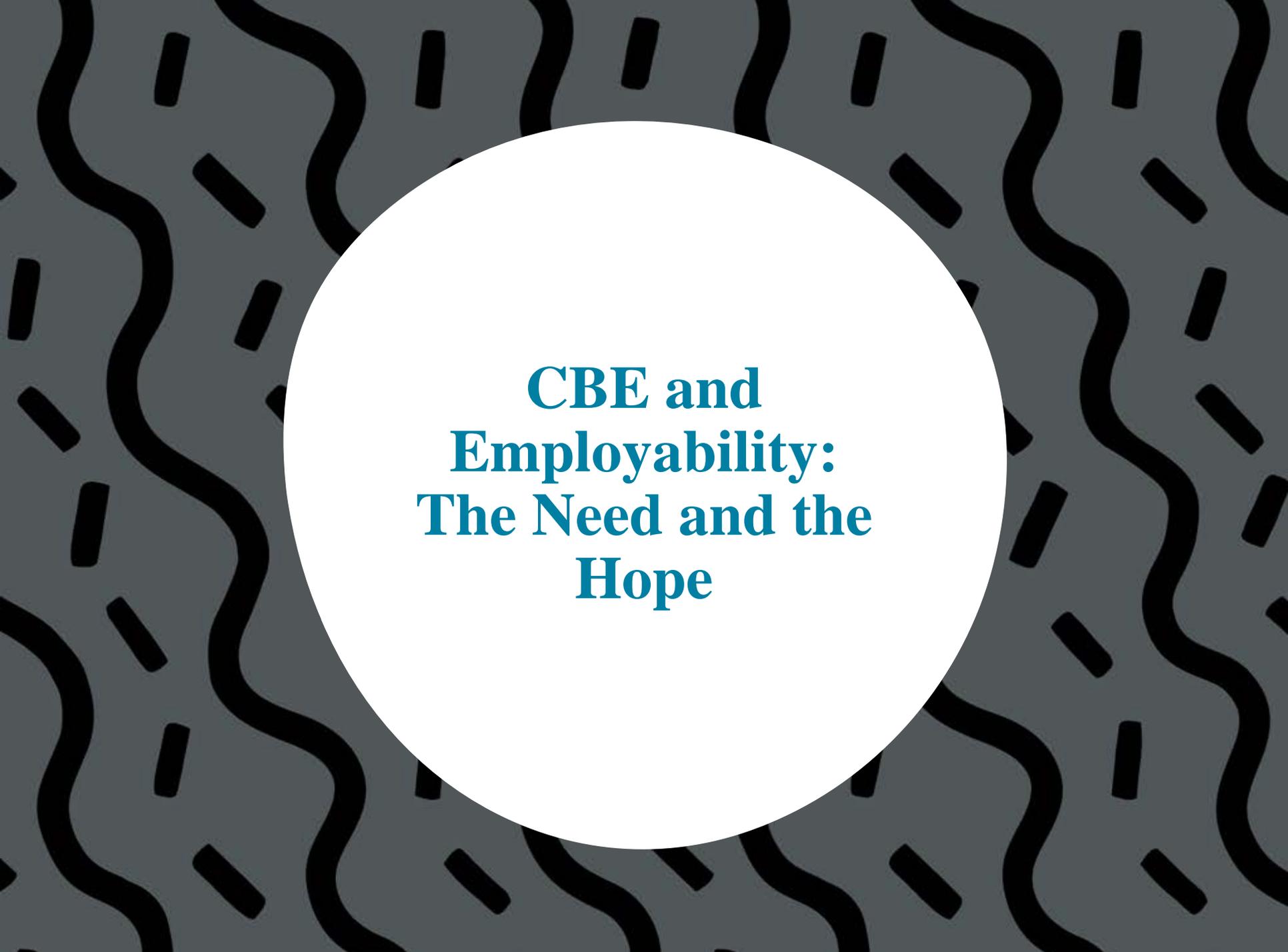
Flipped Session Agenda

Flipped Presentation

1. CBE and Employability: The need and the hope
2. Summary of Research Findings
3. Employability Strategy: A Framework

Conference Workshop

1. Case Examples
2. Discussion Exercise: Questions for the WCET Session



**CBE and
Employability:
The Need and the
Hope**

The Employability Challenge

PURSUING EDUCATION



90%

of potential students (US) say their top three reasons for pursuing further education are related to employability.

THE TALENT GAP



32%

of US employers who have difficulty filling job vacancies, especially for skilled workers

THE SKILLS GAP



95%

of top executives in the U.S. identify jobs skills gaps in technical and soft skills

EDUCATION GAP



DEGREE REQUIREMENTS

65%

of jobs will require postsecondary education and training beyond high school¹



LOW WAGE EARNERS

2/3

of wage earners who earned a high school diploma or dropped out earn \$25,000 or less per year



EDUCATION SHORTAGE

5M

jobs in the U.S. requiring post secondary education will remain unfilled in 2020 at the current production rate

ACCESSIBILITY



CORE SKILLS

80%

of jobs today are in the service sector requiring high levels of customer and personal support skills and English skills. 65% of jobs require digital/computer skills.¹



SOFT SKILLS

1 in 3

skills in a job posting is a "soft skill" with universal demand for oral and written communication, critical thinking and creativity



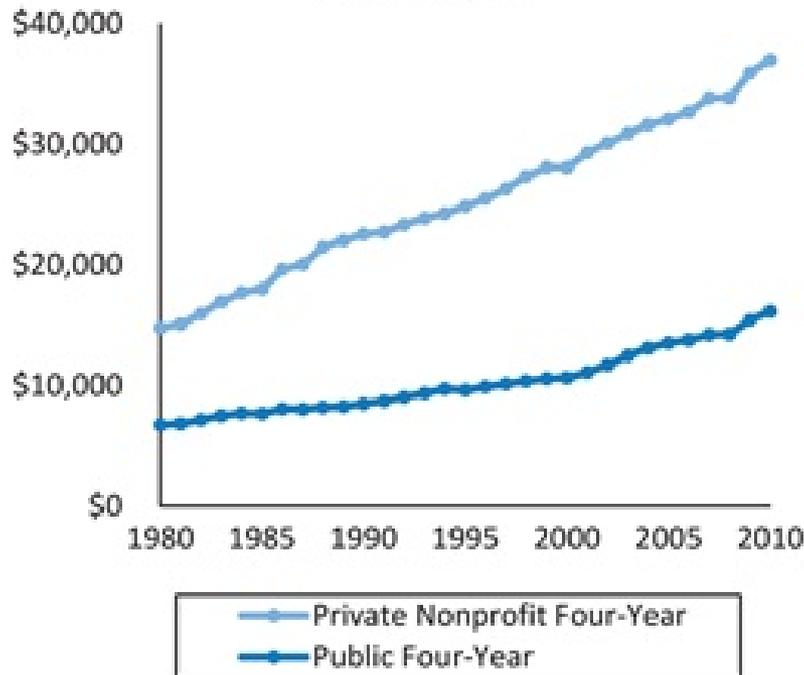
THE SKILLS GAP

92%

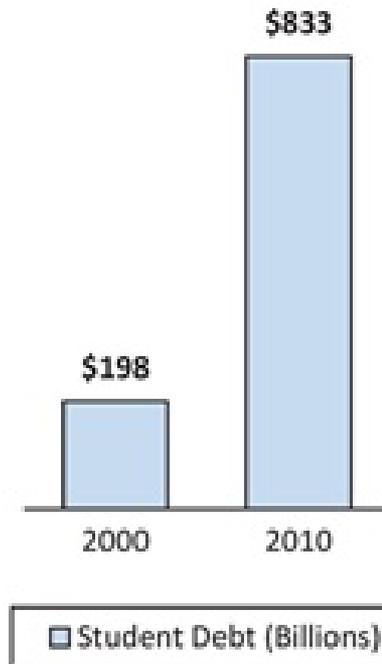
of top executives in the US identify job skills gap in technical and soft skills²

Rising Tuition – Climbing Debt

Average Tuition Plus Fees and Room-and-Board Charges at Four-Year Institutions (1980 - 2010)



Total US Student Loan Debt (2000 and 2010)



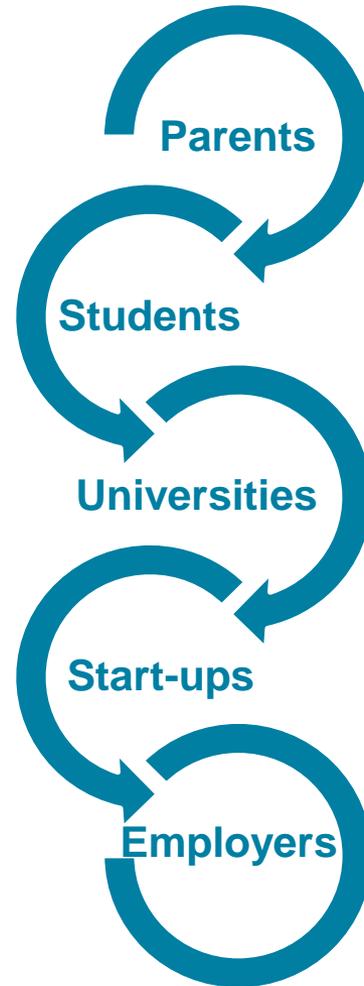
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Underemployment and the Skills Gap Are Driving Change

YET IT'S UNCLEAR WHO IN THE ECOSYSTEM IS RESPONSIBLE FOR ADDRESSING EMPLOYABILITY

Want career guidance and experiential learning opportunities both at the undergraduate and graduate levels

Want to connect students, mentors, and professionals, and provide other value-added services



Want their children to choose the right schools and the most rewarding majors

Want to provide rigorous academic instruction and relevant co-curricular experiences

Want talent that is ready to work in diverse teams and effectively problem solve

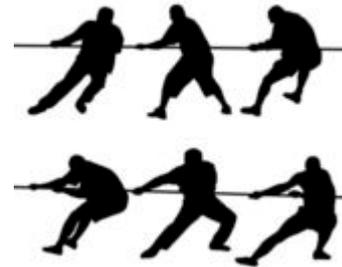
Source: Peter J. Stokes, author of Higher Education and Employability: New Models of Integrating Study and Work

Current Approaches Lack Coordination and Synergy



Institutions often just **PUSH** students into the job market and hope for the best

Employers are becoming frustrated with the talent pipeline and are attempting to **PULL** talent from the pool by collaborating with alternative providers



Service providers are creating **SOCIAL NETWORKS** to connect students, mentors, and recruiters while also delivering professional development services of their own

Competency-Based Education: A New Hope for Employability

CBE programs seek greater alignment between educational experience and demonstrable skills

Focus is often on working adults through more flexible, self-paced delivery and acknowledgement of prior-learning

Because CBE requires redesign of current curriculum and greater emphasis on assessment, the opportunity to align curriculum to work place skills and abilities is prominent

CBE tends to focus on learners outside of the educational space (i.e. learners currently in jobs seeking advancement) and that suggests new provider-employer partnerships

CBE is assessment driven, emphasizing demonstrable skills and competence, and hence should have more appeal to employers.

But none of this guarantees that CBE programs are necessarily more connected to employability or employer. It is still possible to repeat the limitations of current models



Law School Interviews Summary

Methodology

- Pearson's Consulting Services team is currently partnering with a prominent law school in the Mid-Atlantic region to develop a competency-based learning model.
- As part of this engagement Pearson conducted a number of interviews with legal professionals---managing partners, judges, federal prosecutors, and attorney recruiters---in August and September 2016 to gain employer insight into how law schools can enhance employability for their graduates.
- The following slides summarize key themes gained across these interviews and also explicate the skills participants believe lawyers must possess to be successful in their profession.

Key Themes

- New associates are evaluated almost immediately, so they need to be in a position to produce and hit the ground running. As a result, gaining practical experience in law school is critical.
 - There is a need to simulate the legal environment as closely as possible in law school--- encourage risk-taking and induce failure---to create practice ready graduates.
 - The third year of law school was cited as a period in which more emphasis should be placed on gaining practical instruction.
 - A wide array of “soft” and metacognitive skills were cited as important, but communication (verbal and written) skills stood out as being most critical to success.
 - Practical experience, combined with such skills, differentiate high academic performers and also help those with less stellar grades to potentially gain an opportunity at a big firm.
- New associates must also learn the business of law and gain a strong understanding of how to generate revenue for the firm to be considered for a partner role.
 - Relationship building and networking were cited as important for business development.
- Law schools should provide exposure to multiple areas of the legal profession (as opposed to the push towards big firms) as part of strategic career planning.
 - Mentorship with practicing attorneys is one way that such exposure can occur.
 - Ultimately, however, the individual law student (or associate) is responsible for driving his or her own career success.

Skills Summary

Metacognitive and “Soft” Skills

- Risk tolerance
- Interpersonal skills
- Relationship building
- Tenacity
- Self-awareness
- Soliciting feedback
- Listen and ask questions
- Assertiveness
- Aggressiveness
- Proactive (Active approach to career)
- Networking
- Resiliency
- Response to failure
- Hard work and persistence
- Leadership
- Teamwork
- Comfort under high pressure
- Enthusiasm
- Commitment
- Loyalty
- Persuasion
- Negotiation

Practical Legal Experience

- Legal writing
- Understanding of CJ and Court systems
- Exposure to various legal paths
- Litigation
- Investigation
- Thinking like a lawyer
- Simulate tasks of entry level attorneys
- Business of a law firm
- Cultivate new business
- Induce failure/learn through mistakes
- Oral advocacy



**Graduate Learner
Interviews Summary**

Methodology and Participant Overview

- Pearson conducted 36 interviews with advanced degree holders in the United States between July and October 2015 in order to learn more about their motivations for returning to school, experiences during school, and post-graduation outcomes.
- In addition to graduating with an advanced degree from a US-based institution, participants were required to have completed their education at least one year and no more than 10 years from the date of the interview.
- **Participant Demographic Summary**
 - Age- Median age when returning to school = 27; range from 22 to 55
 - Gender- 21 women, 15 men
 - Race- 31 White, three African American, one Asian, one Hispanic
 - Location- Participants reside in 12 different states; 15 relocated to pursue education
 - Student Status- 21 part-time, 15 full-time
 - Degree Types- Nine degree types were represented: MBA (11), MA (8), PhD (5), MS (3), EdM (3), JD (3), DMD (1), MPH (1), MSN (1)
- The following slides summarize a sub-section of the study most closely related to employability.

Key Themes

- Most participants were generally satisfied with their experience and many indicated that they would still return to school if they could re-write history.
- Participants also cited a wide variety of skills gained through their graduate and professional school experiences, mostly “soft” and metacognitive skills.
 - Please see subsequent slide for more details.
- However, results show that there is room for improvement as it relates to enhancing students’ employability. Specifically:
 - The majority of participants returned to earn an advanced degree for career-focused purposes, but several have not achieved their intended goals, nor are they on the path to achieving them.
 - Only a few participants viewed their Career Services office as strategic and consultative in nature. For others, Career Services provided only tactical advice, such as resume writing tips, and several found the office to be completely unhelpful.
 - Faculty were generally viewed by participants as allies in the job search process, but they tend to rely on informal networks over a structured system.
 - While metacognitive and soft skills are critical for career success, technical skills are also crucial. Such skills were not typically cited by participants in an explicit manner.
- Active employer engagement in the academic experience, regardless of program type, is one such strategy to enhancing employability. Through such an approach employers can collaborate with faculty and administration to create career planning roadmaps as well as explicate the skillset necessary to achieve career success.

Benefits, Feelings, and Skills Gained

Feelings and Benefits

- Improved confidence
- Sense of accomplishment/goal completion
- Persistence
- Determination/Grit
- More articulate
- Satisfaction
- Self-awareness/sense of self
- Self-direction
- Reputation/Status (of being advanced degree holder)
- Happiness

Technical Skills

- Practical business management skills
- Financial savvy
- Research skills

Soft Skills

- More effective communicator/writing skills
- Interpersonal connections
- Analytical skills
- Presentation skills
- Improved thought process
- Persuasion
- Public speaking
- Explaining complex topics simply
- Problem-solving
- Compartmentalization
- Networking
- Teamwork
- Presentation of self



**CRI, GRIT, and Soft
Skills**

Research shows that employers place high value in soft skills, but perceive a gap between candidates' soft skill competence and their organizational needs.

- Recent research by Hart Research Associates shows that hiring managers place great value on soft skill proficiency, such as critical thinking, communication, and problem solving. Yet, only about 38% of these hiring managers believe that college graduates actually possess soft skill proficiency.
- Monster's survey of over 2,000 businesses in Washington state similarly found that hiring managers believe entry-level workers are lacking critical soft skills. They argue that technical skills are likely to lead to an interview, but soft skills are more critical for attaining a job.
- Another recent study by LinkedIn, which surveyed 291 hiring managers in the US, found that hiring managers believe it is more difficult to find candidates with the right mix of soft skills than it is to find candidates with the desired technical skills for the job (59% vs 53%).

Sources: <https://www.aacu.org/leap/public-opinion-research/2015-survey-falling-short>
https://www.linkedin.com/pulse/soft-skills-increasingly-crucial-getting-your-dream-guy-berger-ph-d-?trk=li_corpblog_corp_EconomicGraphIntro
<http://www.monster.com/career-advice/article/six-soft-skills-everyone-needs-hot-jobs>

Students' college-level preparedness is also lacking, which is a contributor to the aforementioned employer skills gap.

- A 2016 study by The Center for Community College Student Engagement shows that 86% of incoming community college students believe they are prepared to succeed academically.
- However, 68% of these same students had to take at least one developmental education (remedial) course.
 - It is important to note that 40% of “A” high school students in this study were required to take at least one developmental course, showing that high school GPA should not be relied on too heavily to predict college level success.
- Further, 76% of students surveyed believe they are on track to achieve their academic goals, despite the fact that only 39% of postsecondary students earn a degree or certificate within six years.
- Less than half of student respondents said that an advisor helped them to set specific academic goals.

Source: https://www.ccsse.org/docs/Underprepared_Student.pdf

CRI is a tool that provides actionable objectives for achieving academic and career success, specific to a student's particular career and life goals.

- Dr. David Conley developed a readiness assessment tool, called the Conley Readiness Index (CRI), based on over a decade of research into what it takes to succeed in college through analyzing entry-level college courses as well as through exploring the opinions of thousands of secondary and postsecondary students and instructors.
- The CRI provides insight into what it takes to achieve academic and career success, and includes 42 actionable objectives to help students achieve success, organized into four key areas:
 - Cognitive Strategies
 - Content Knowledge
 - Learning Skills and Techniques
 - Transition Knowledge and Skills
- The CRI also frames readiness in the context of students' personal goals and ambitions which is critical to helping them understand skills and knowledge they need to attain
- Such a tool has the impact to not only improve preparedness and success for college and career, but also serves as a useful advising tool and can help an advisor to provide targeted feedback pertinent to a student's career ambitions.

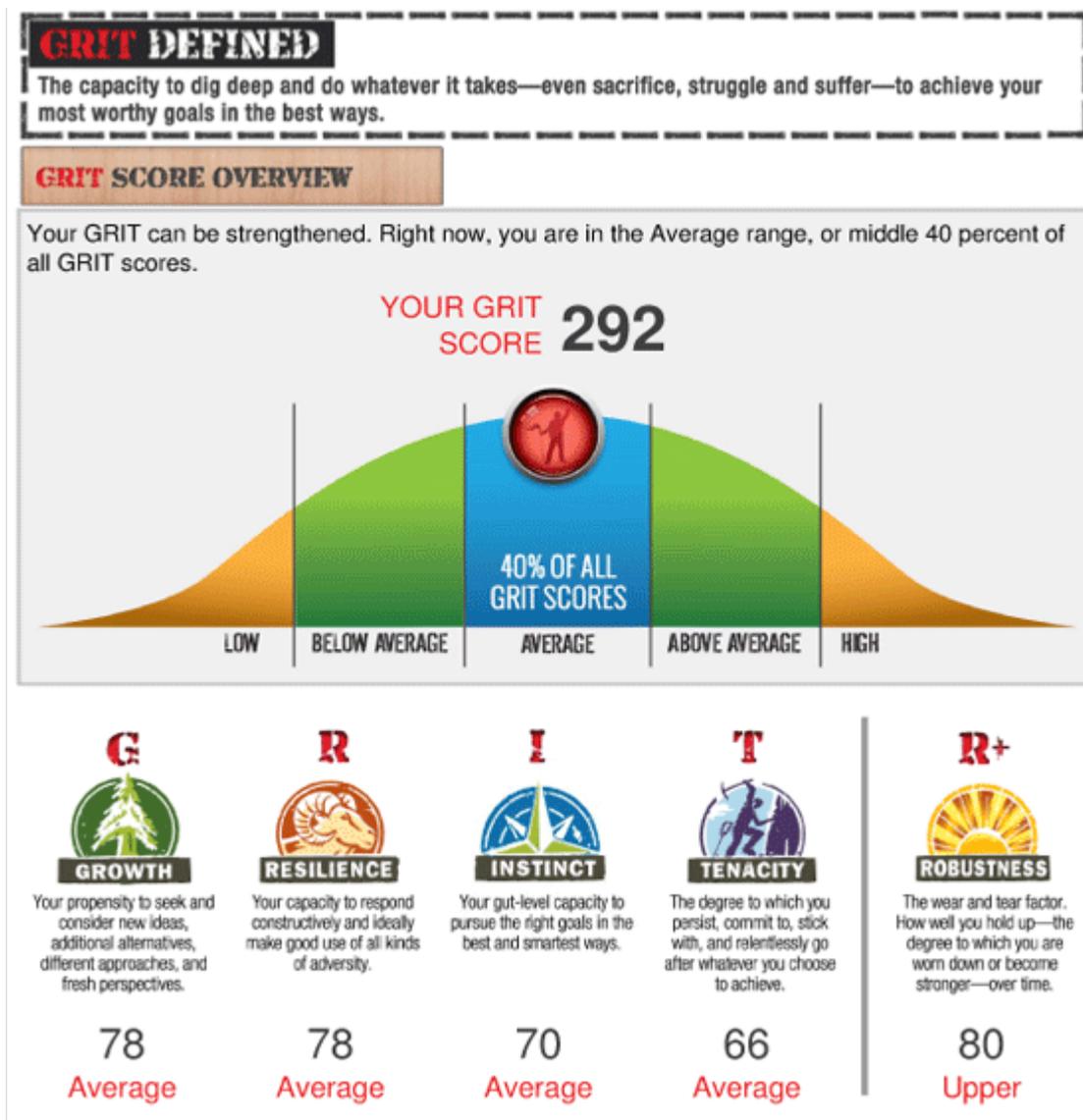
CRI pilot results highlight the power of the tool in guiding individual students as well as in influencing institutional student success strategies.

- Selected results from a CRI pilot study at Southern Illinois University demonstrate how the tool can be used to improve student outcomes while preparing individuals for career success.
 - 54% of students do not regularly break down complex assignments into smaller components to make the work more manageable
 - About half of students don't regularly read for understanding, but rather read just to complete the assignment
 - 55% don't employ proven strategies for writing essays, such as outlining
 - The majority of students struggle with self-control, such as completing homework before socializing
 - 94% say they have goals, but about one-third of those students are not diligent in tracking their progress and making adjustments
 - Most students don't regularly make connections to their field of interest
 - Over 60% have not participated in an internship or job search
 - Most students do not consistently give their best effort in the classroom and also have a tendency to avoid taking the most challenging courses

GRIT: Fostering Lifelong Readiness Skills

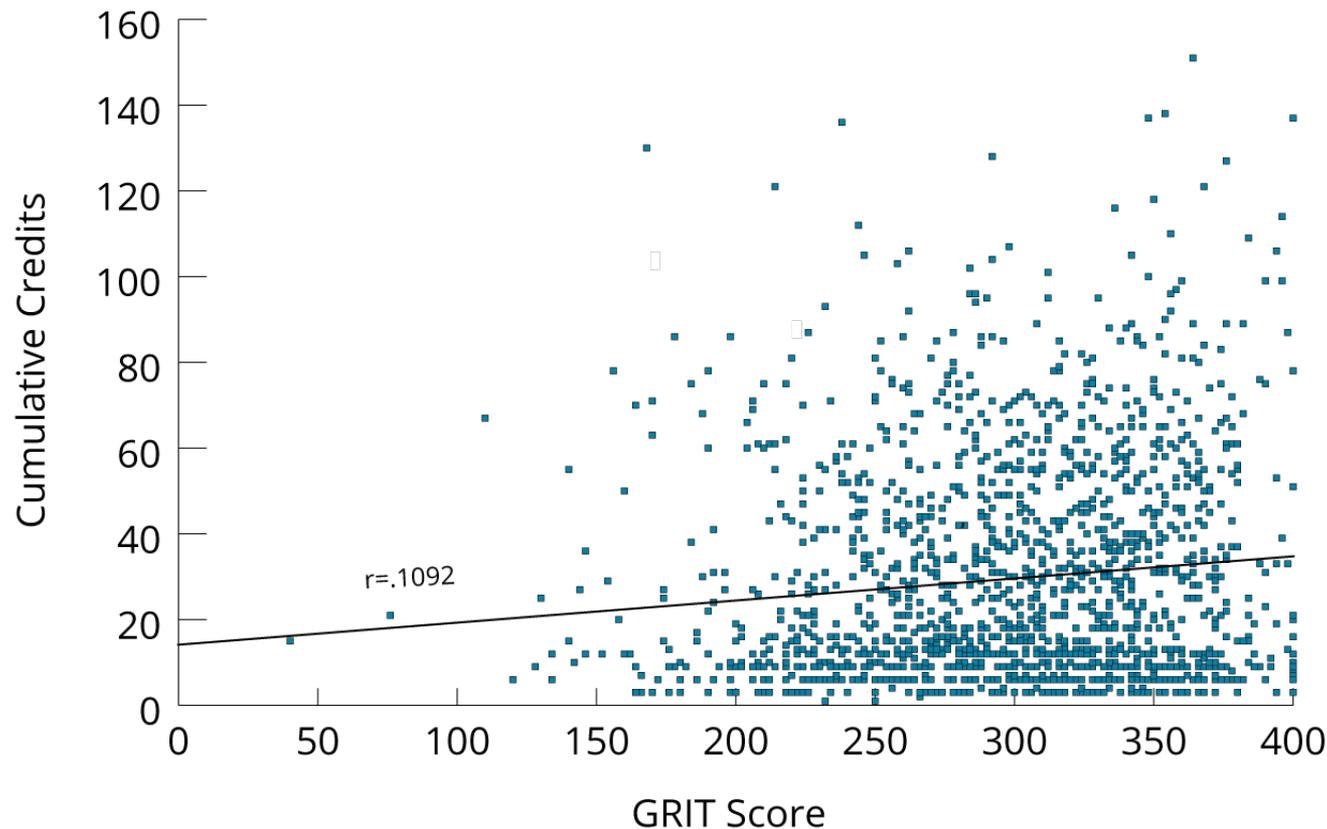
The GRIT GAUGE is a tool that assesses one's Growth, Resilience, Instinct, and Tenacity, as well as one's Robustness — considered the “bonus factor” when it comes to establishing sustainable, life-long GRIT.

Based on 35 years of general research, and 15 years of GRIT-specific research, the GRIT Gauge provides insights into both the quality and quantity of one's GRIT, along with personalized tips for improvement.



GRIT and Cumulative Credits

Preliminary Results from a Study at Lone Star State – Tomball Campus



GRIT Scores are significantly associated with student cumulative credits ($p < .0001$).

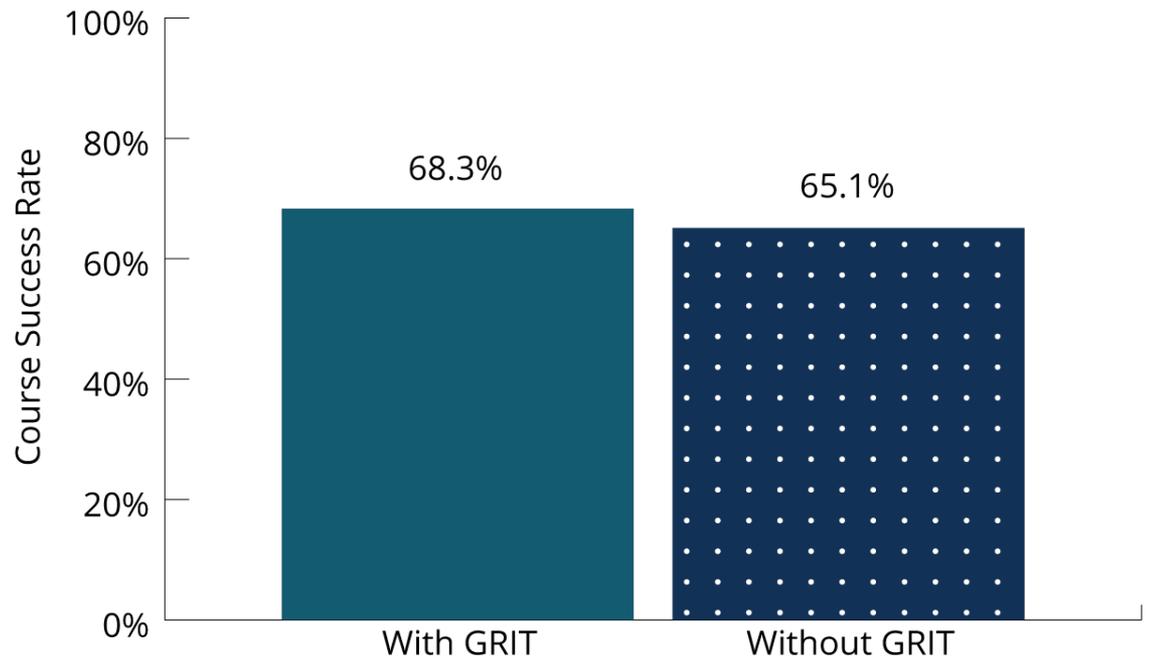
GRIT and Cumulative Credits

Preliminary Results from a Study at Lone Star State – Tomball Campus

Course success rates:

Students participating in a GRIT course had a higher success rate (3 percentage points) than those who took courses that did not include additional GRIT instruction.

- Persistence fall 2015 to spring 2016 was 4.2 percentage points higher than fall 2014 to spring 2015.
- Completion fall 2015 was 4 percentage points higher than 2014.
- Individual educators who infused GRIT beyond the minimum requirements reported improvements in engagement, persistence, and achievement.



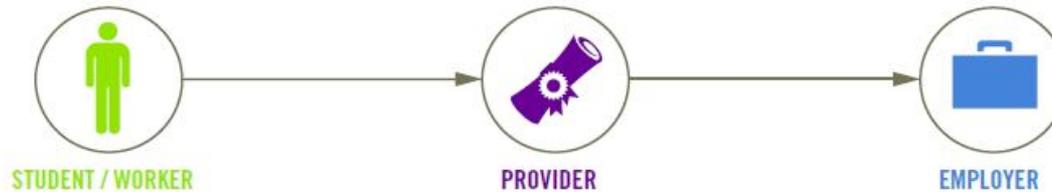


**Employer Engagement
Lit Search**

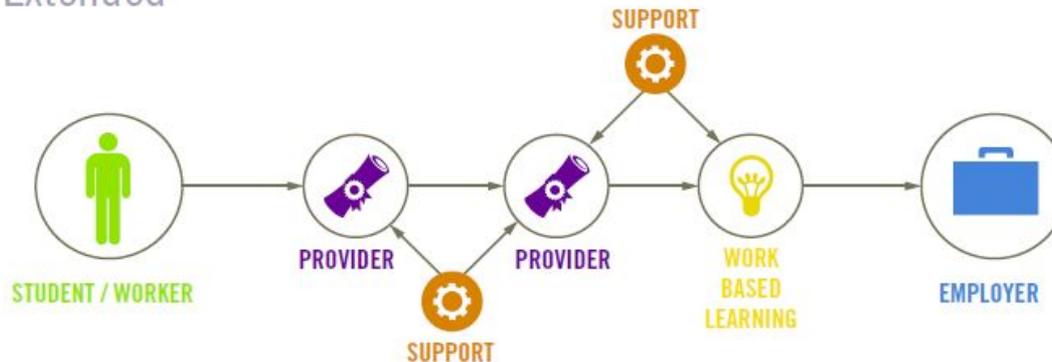
The U.S. Chamber of Commerce promotes a “demand-driven system.”

SIMPLE VS. EXTENDED VALUE CHAINS

Simple



Extended

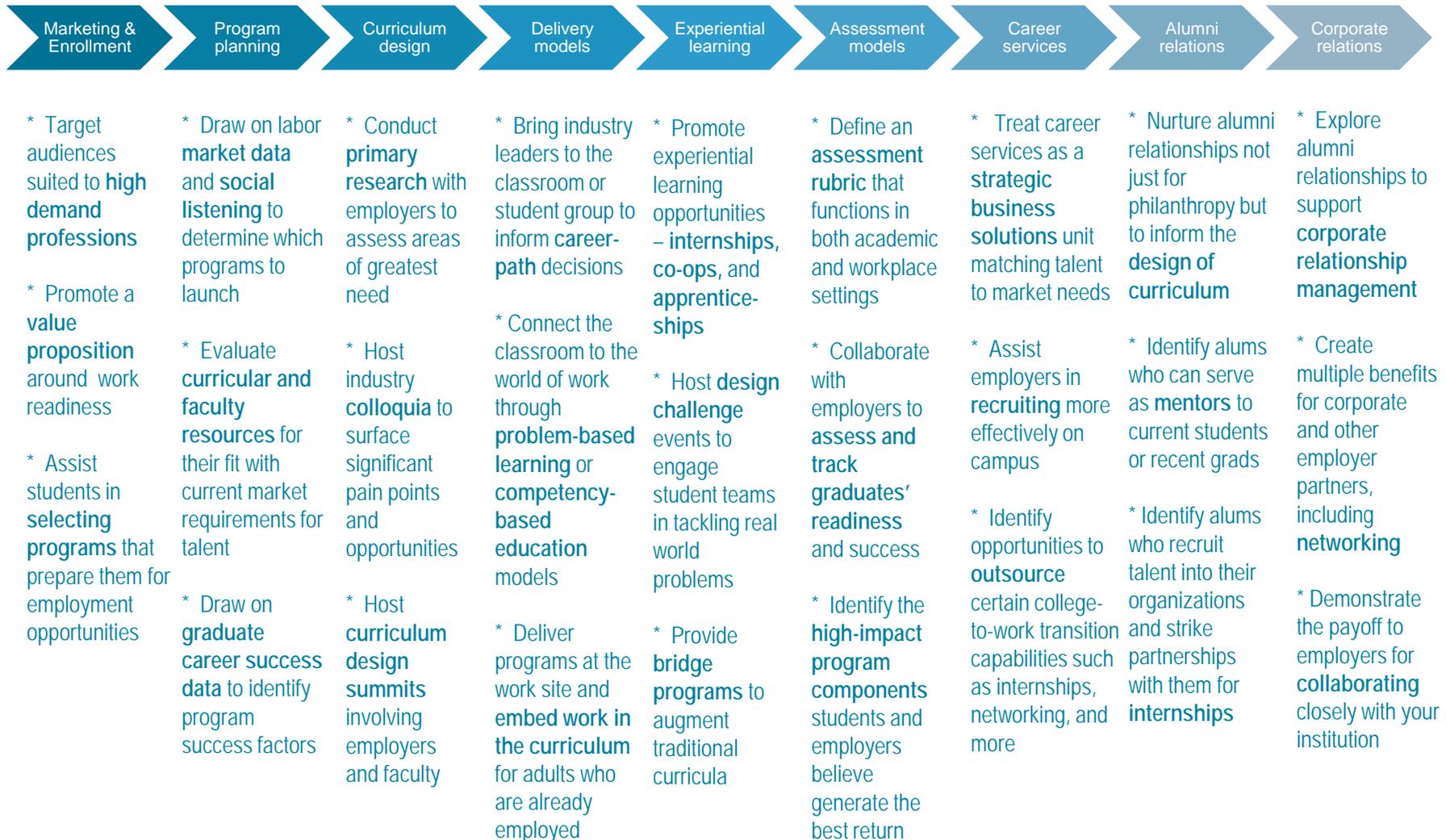


Employers, working independently or through collaboratives, must function as an end-customer and build flexible and responsive talent pipelines for new hires.

U.S. Chamber of Commerce, *Managing the Talent Pipeline*, November 2014

Collaboration May Be the Most Successful Strategy

OPPORTUNITIES FOR INSTITUTION-EMPLOYER COLLABORATION LIE ACROSS THE VALUE CHAIN



Pearson's CBE Playbook

CBE Program Development Framework

CBE programs require a more intention employer engagement strategy from the outset.

Locating **employer engagement points** in the STUDENT JOURNEY as well as the PROGRAM DEVELOPMENT PROCESS is a key ingredient to overall program success and scalability.



Additional Resources

- Strategic employer engagement model designed on Strategic Selling sales training methodology; emphasis on dynamic relationships at multiple levels of the organization: http://commcorp.org/wp-content/uploads/2016/07/resources_2013-04-strategic-employer-engagement-teen-employment-programs.pdf.
- Institutions should move from “spotty” to strategic partners: <http://evolution.com/opinions/employer-engagement-higher-educations-frontier/>
- EAB insight re: next gen Career Svcs strategies to increase employer engagement: <https://www.eab.com/research-and-insights/student-affairs-forum/studies/2012/developing-next-generation-career-services/customizing-recruiting-activities/practice-13-employer-engagement-strategies>
- Hanover report on employer engagement: <http://www.hanoverresearch.com/media/21st-Century-Recruiting-and-Placement-Strategies.pdf>



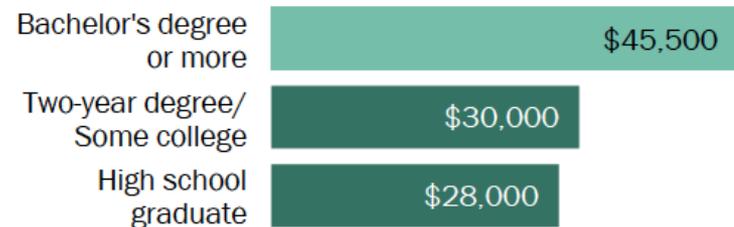
**Building an
Employability
Strategy: A
Framework**

Toward Institutional Employment Strategy: The Challenge

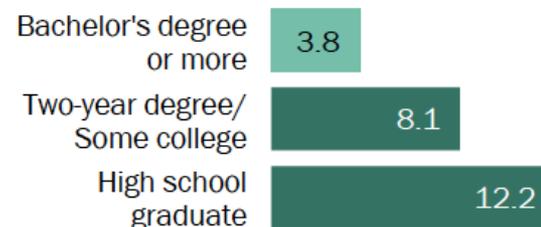
- Employability is not just about job skills, it is about other abilities and knowledge too
- Employability is complex – it involves a set of inputs, variables, and participants in the educational process
- Employability efforts are often scattered across separate units or areas of responsibility in the institution
- Higher education and the economy have always been closely linked, but the stakes are higher as more jobs require certificates or degrees
- Potential students are demanding more because of the rising costs of education have brought the value of a degree into question

Disparity among Millennials Ages 25-32 By Education Level in Terms of Annual Earnings ...

(median among full-time workers, in 2012 dollars)



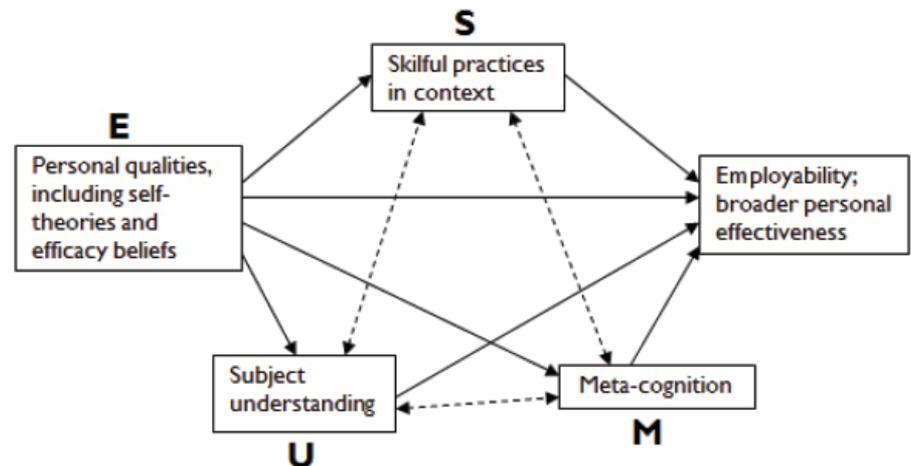
Unemployment Rate ...



Source: Pew Research,
The Rising Cost of Not Going to College, 2013

Toward Institutional Employment Strategy: Institutional Response

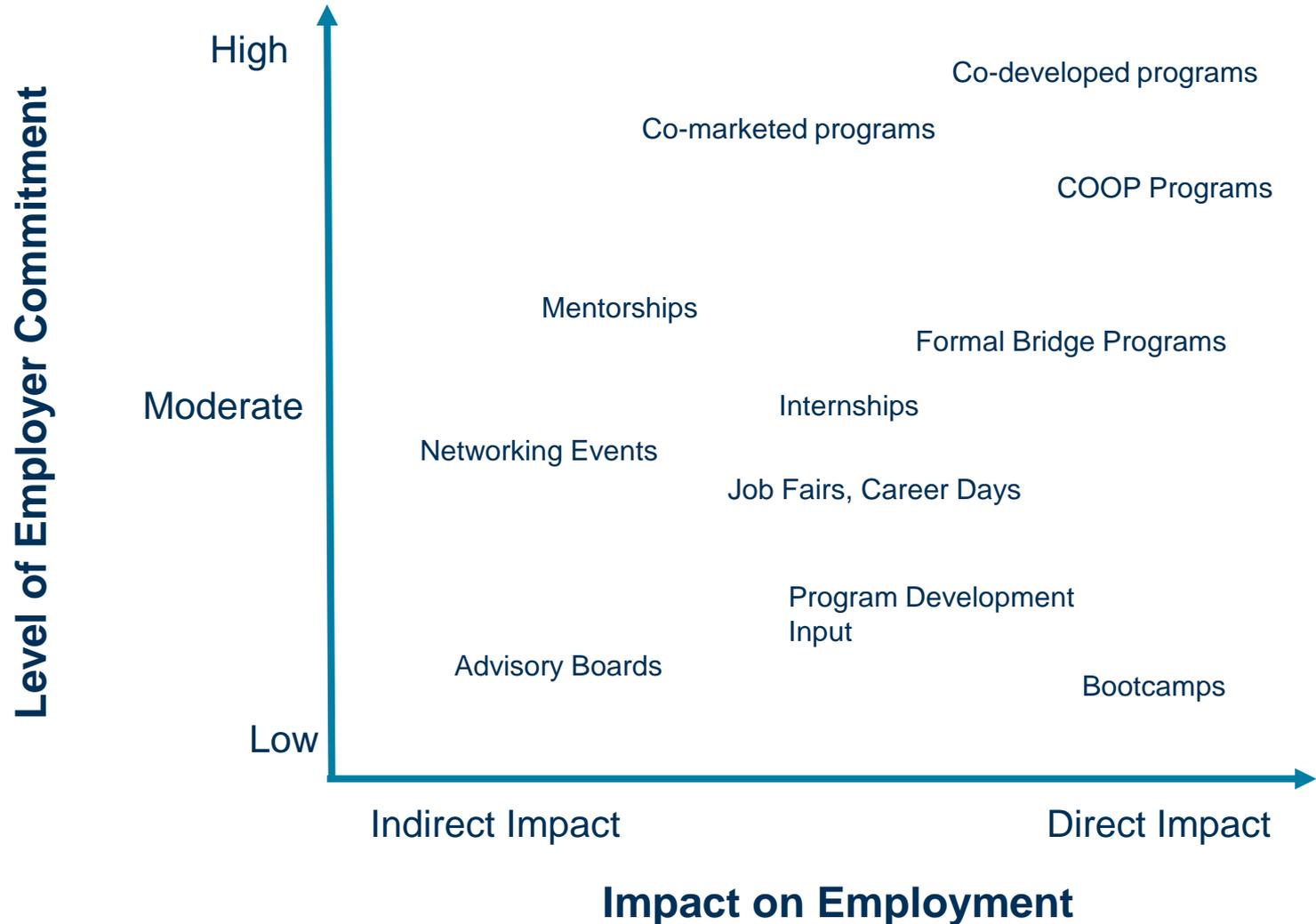
- Institutions need a more coordinated, strategic approach to employability supported by data
- Opportunities to engage partnerships with employers in deeper and more innovative ways are essential
- Greater emphasis needs to be placed on integrating employability within and across the curriculum and student experience
- A greater focus on a holistic view of student ability is needed, integrating cognitive and meta-cognitive with career specific skills
- Institutions require a set of strategies and frameworks to evaluate and improve innovation in employability efforts across the organization



Knight and Yorke, USEM Model of Employability, 2003

Employer Engagement Strategy:

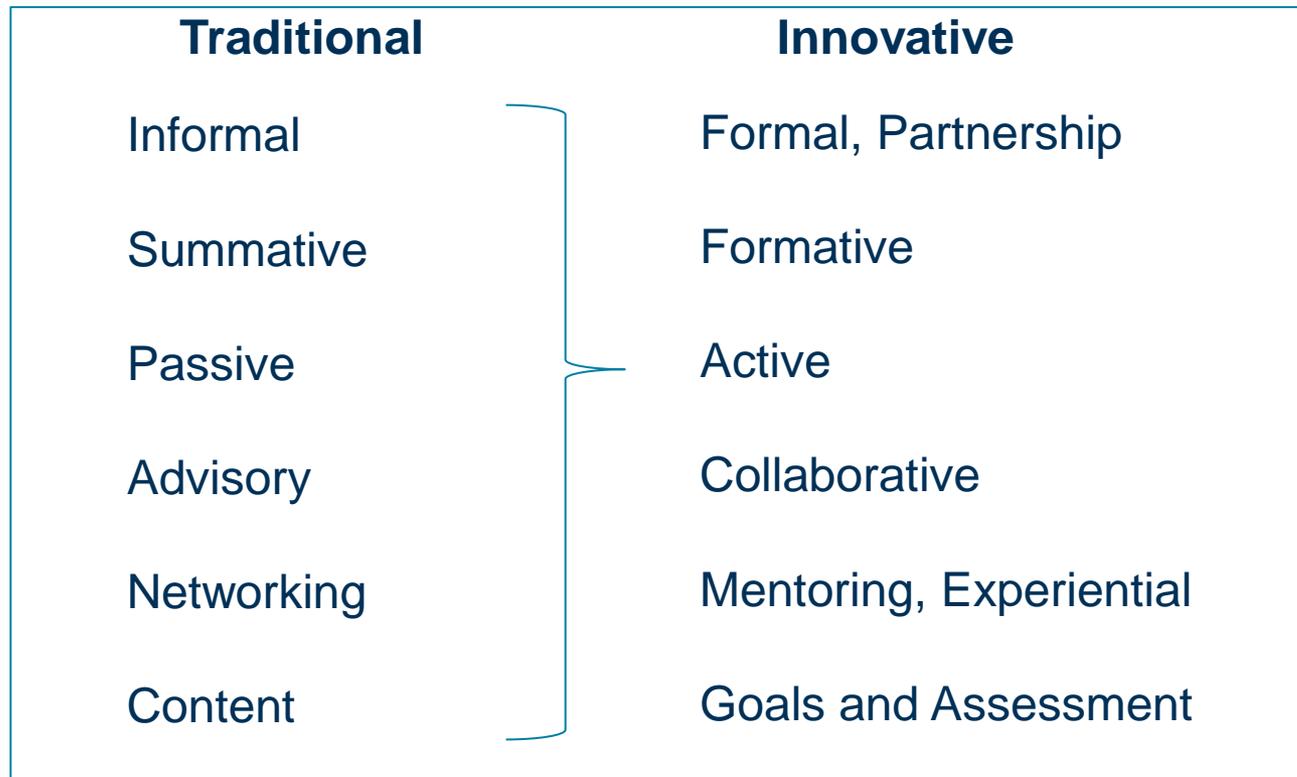
How are we enhancing engagement with key employers?



Education and Employment:

How are we engaging employers in our curriculum and programs?

Curriculum and Program Involvement



Employability Scorecard:

What are Employability Goals and Targets?

Student Development

Key Goals

Enhancing student preparation and competitiveness

Preparing students with in-demand skills

Equipping students with experiential career opportunities

Key Metrics

Measurement of cognitive abilities, meta-cognitive abilities, and skills

% of students participating in experiential career programs

Longitudinal assessment of student capabilities

Economic Impact

Key Goals

Institutional program choices responsive to Regional Economic Needs

Alignment of credentials to regional labor needs

Employer engagement and partnerships

Key Metrics

Post-completion student employment and advancement rates

Labor and employer data aligned to curriculum/program strategy

Evaluation and impact of employer relationships

Degree Attainment

Key Goals

Increasing quality of regional Workforce

Completion of needed credential programs

Student placed in pathway early for credential in desired career

Key Metrics

Retention and persistence rates, time to completion

Graduation and completion rates

Employer feedback and assessments

Alignment of completion rates with regional labor data

Employment in the Student Lifecycle:

How do we align the student experience to employment?

Career Preparation

First Year Milestones

Career Preparation Milestones



Placing students in appropriate pathways as early as possible is key to bridging career preparation and academic preparation

Academic Preparation

Pre-enrollment

Enrollment

First Year

Program Progress

Completion

Employment Search

Readiness Assessment
Career Exploration

Developmental Education
Advising

General Education
Foundational Skills
Career Pathways

Major/Career Courses
Advanced Skills
Experiential Learning

Capstone Experiences
Advanced Skills
Licensure/Portfolio

Post-Graduation Planning
Additional Education
Career Transition

Levels of Student Development

What kind of impact are we looking for in students?

Cognitive

Cognitive functioning is a term referring to a human's **ability** to process to (thoughts) that should not deplete on a large scale in healthy individuals.

Cognition mainly refers to things like memory, the **ability** to learn new information, speech, understanding of written material.

Meta-Cognitive

Metacognition refers to **awareness** of one's own knowledge—what one does and doesn't know—and one's ability to understand, control, and manipulate one's cognitive processes (Meichenbaum, 1985).

It involves self regulation, reflection upon an individual's performance strengths, weaknesses, learning and study strategies and leads to independent performance and ability

Career and Technical Skills

Career and Technical skills are those **abilities** acquired through learning and practice.

They are often job or task specific; in other words, a particular **skill** set or proficiency required to perform a specific job or task.

Career and Technical skills can apply to all professions and often require licensure or certification

Looking Ahead: Conference Session

At the Conference:

We will briefly present several example models to illustrate this presentation and engage participants in further discussion.

What are YOUR ideas on how to craft an Employability Strategy for your CBE program or your institution?

Comments or Questions?

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