

PROJECT PLAYBOOK

Bridging the Gap from Education to Employment

UNIVERSITY
INNOVATION
ALLIANCE



Table of Contents



I.	How to Use this Playbook	1
II.	Executive Summary.....	3
III.	Introduction	6
IV.	Designing for Transformative Change	11
V.	Barriers to Equitable Career Readiness	14
VI.	Robust Campus-Employer Partnerships	18
VII.	A New Model for Equitable Career Readiness.....	24
VIII.	Summary & Next Steps.....	31
	Appendix.....	32



I. HOW TO USE THIS PLAYBOOK



Audiences & Intended Uses

The following playbook is intended as a tool for higher education practitioners and employers who hope to make the college-to-career experience more equitable by improving career preparation, talent acquisition, and employer-university collaborations to better serve students from first-generation or low-income backgrounds, or students of color. This playbook offers partnerships for improving the college-to-career pathway, developed through the University Innovation Alliance's Bridging the Gap from Education to Employment project.

The *Bridging the Gap from Education to Employment* project, funded by Strada Education Network, brought together practitioners and leaders from seven University Innovation Alliance (UIA) member universities, along with employers from a range of fields and disciplines. This cross-sector group of stakeholders undertook a rigorous process to understand the needs of employers, universities, and – most of all – students on their paths to careers, and then worked together to develop innovative solutions to address those needs.

This playbook shares the story of that endeavor, along with key learnings gained throughout the project (Sections VI, VII, VIII). This playbook is intended to be a tool for institutions of higher education and employers who are interested in better understanding the barriers first-generation and low-income students face on their career paths, as well as strategies for improving relationships between universities and employers (VII & VIII). Finally, this playbook also provides recommendations for innovative approaches, programs, and resources that universities could incorporate to the campus community that are specifically designed to meet the needs of first-generation and low-income students (VIII).

Within this interactive playbook, each section includes synthesis of project work, learnings, and recommendations. In each section, there will be multiple opportunities to delve more deeply in the content through interactive elements.

This playbook will be particularly helpful to career services, student affairs, undergraduate education, and other student success practitioners interested in improving career preparation on their campuses. The information included below is meant to instigate conversations, offer inspiration, and provide a starting point for revising and redesigning career preparation on university campuses. In recognizing the importance of campus context, culture, and institution-specific needs, the information included in this playbook is not meant to be 'plug-and-play' but rather serve as a starting point and guided example. All practitioners who are interested in learning more about the specifics of the insights and interventions included in this playbook are encouraged to reach out to the [University Innovation Alliance](#).



Helpful Key Terms

Term	Definition
BGEE Campus Team	The team of career services and cross-campus collaborators who led the BGEE work on their respective campuses. These teams were initially given the title of “Career Readiness Assessment” teams during the first year of project activities, which focused on assessment and analysis of the current state of career readiness on each campus. During Phases II and III of the BGEE project, they were referred to as “campus teams”.
Career Readiness Assessment	
BGEE Core Team	Comprising the BGEE Design Lead and three regional fellows, the ‘core team’ was responsible for managing the ongoing strategy and day-to-day operations of the project.
Design	Commonly referred to as ‘design thinking’ or ‘human-centered design’, this refers to a combination of mindsets, methodologies, and facilitation techniques used to collaboratively solve complex problems. The BGEE Core Team adapted the Stanford Hassno Plattner Institute of Design’s Framework for Design Thinking , along with techniques from the Luma Institute and IDEO , to lead BGEE campus teams through an 18-month process to redesign the college-to-career pathway for first-generation and low-income students.
First-generation	The term used across higher education to denote undergraduate students who are the first in their family to attend college. The exact definition of first-generation varies across institutions; most commonly the term applies to students whose parents or legal guardians did not earn a four-year college degree.
Employer Working Group	A nationally representative and diverse advisory group of employers that provided insight into employer challenges and needs, as well as worked alongside BGEE campus teams to build and test solutions.
Institutional Capacity	Elements, resources, skills, structures, and support necessary for institutions to achieve an intended goal. In the case of the BGEE project, institutional capacity was defined as a core set of strategic practices and mindsets that enable institutions to prepare first-generation and low-income students for their careers.
Low-income	Within higher education contexts, low-income typically refers to students who are eligible to receive Federal Pell Grants (which are determined based on a formula that includes the student’s income, the parents’ income and assets, the family’s household size, and the number of family members (excluding parents) attending postsecondary institutions. Individual universities may have their own definitions of ‘low-income’ or high-financial need.
NACE Competencies	The National Association of Colleges and Employers (NACE) is a professional association of career services, university relations, and recruiting professionals. The NACE Competencies serve as a definition of career readiness that articulate the competencies that extensive research among employers indicate broadly prepare college graduates for a successful transition to the workplace. The Career Competencies are: critical thinking/problem solving, oral/written communications, teamwork/collaboration; digital technology, leadership, professionalism/work ethic, career management, and global/intercultural fluency.
Small-Scale Pilot Testing	In order to understand whether the programs and resources developed during the BGEE design process would be desirable, feasible, and viable within individual university contexts, BGEE campus team members developed small-scale program pilots. Teams implemented and evaluated small-scale versions of their interventions to understand whether the programs showed potential to achieve intended results.
BGEE portfolio	The BGEE portfolio refers to the seven piloted interventions – and corresponding learnings – developed through the BGEE project activities. Informed by best practices of human-centered design, the BGEE project embraced the portfolio approach in order to encourage risk-taking and promote cross-campus learning. The portfolio approach enabled campuses to learn from and adopt a range of interventions and initiatives beyond the work on their campus alone.

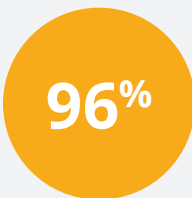
II. EXECUTIVE SUMMARY



Key Takeaways

- On paper, preparing for a career looks essential for students, but in practice, it feels like something extra.
- First-generation and low-income students are especially vulnerable to issues of career readiness access and opportunity.
- With financial support from Strada Education Network, the UIA facilitated a reimagining of the college-to-career pathway at seven large public research universities.
- The project strategically blended design thinking, change management, developmental evaluation, and effective collaboration to tap career services and employer expertise, while deeply understanding the career readiness needs of students.
- Innovative, co-created solutions to these needs culminated in the New Model for Equitable Career Readiness – the gold-standard for any university to graduate career-ready students, partner effectively with employers, and substantially increase the ROI of a degree from their institution.

Chief Academic Officers



Believed they were effectively preparing students for the workforce in 2018

Business Leaders



Career preparation is a core objective of a university education – and for many students, it's the primary goal. According to Strada Education Network's Institute for the Future of Work, 85% of freshman students say their main priority for attending college is to get a good job. Unfortunately, only 27% of college students report securing a good job before graduation, and 4 in 10 graduates are underemployed in their first job.

Why are so many graduates leaving college without adequate career readiness? A misalignment in perception exists between how campus leadership and business leaders view student career outcomes.

A lack of adequate career preparation can be especially harmful to students from low-income backgrounds who turn to higher education as a way to expand their career options and increase their lifelong earning potential. Career services offices – like higher education more broadly – have struggled

with issues of access and opportunity for first-generation students and low-income students. Many career services experts, especially those at institutions of higher education, note that while there are a few innovations and new practices aimed at helping these students, there has been a dearth of attention focused on, and best practices developed for, reaching these students in a robust manner.

Making access to career opportunities more equitable requires a significant redesign of current campus systems, as well as new solutions to address the challenges facing today's students. Rather than putting the burden of career readiness on students, colleges need to make themselves ready to support students into, and through, the college-to-career transition. This requires commitment from the university, robust partnership with employers, and input from students about what is most useful to them from a career preparation perspective.

Over a period of three years (2018–20), seven University Innovation Alliance (UIA) institutions utilized change management and human-centered design principles to identify and deconstruct barriers to successful career readiness for first-generation and low-income students. The Bridging the Gap from Education to Employment (BGEE) project, funded by Strada Education Network, aimed to improve career outcomes for the most vulnerable students by reimagining the college-to-career pathway. The project engaged teams on each campus in an intensive landscape analysis process, empathy work with student and employer stakeholders, and building and piloting innovative solutions.



Designing for Transformative Change

Creating meaningful, lasting change is complicated. To increase the odds that transformational changes to student career readiness would be adopted and produce desired outcomes, several popular methodologies were overlaid to create the Student Centered Collaborative Change, or SC3, integrated framework, which guided the BGEE work. This new UIA framework can be applied to any transformational change initiative and achieves collective impact by strategically blending methods of design thinking, change management principles, developmental evaluation, and effective collaboration.





Identifying Barriers to Equitable Career Readiness

BGEE campus team members spoke with more than 600 undergraduate students across seven institutions during foundational data-collection activities. Informal conversations served as empathy-building experiences to better understand student experiences with, and perceptions of, career services at their campuses and the transition from education to the workforce. BGEE identified that, in order to equitably prepare first-generation and low-income students for careers, career preparation must be prioritized early and often, accessible, and integrated into the university experience. These key student needs catalyzed innovative career readiness solutions that were pilot tested on each campus.



Building Robust Campus-Employer Partnerships

BGEE aimed to leverage the expertise of university leaders and employers to ensure stakeholders partnered meaningfully and effectively while reimagining the college-to-career pathway. To that end, a nationally representative and diverse Employer Working Group (EWG) was formed to provide insight into employer challenges and needs, and to work alongside BGEE campus teams to build and test solutions.

One result of this collaborative work was the definition of robust campus-employer partnerships, co-created by BGEE campus teams, EWG members, and students.



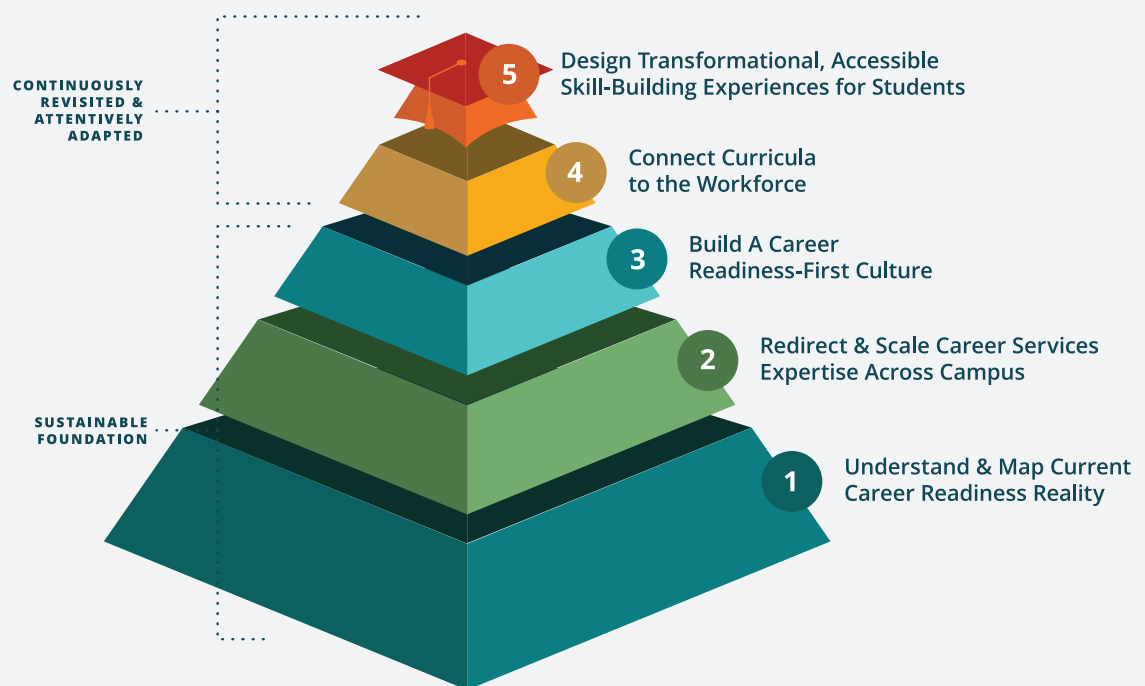
The New Model for Equitable Career Readiness

To identify the most promising and effective solutions, campus teams identified key elements, or “ingredients”, they deemed critical to the success of their innovative piloted solutions. These key ingredients, combined with a robust evaluation process of pilot outcomes, have culminated in determining recommendations for effective implementation and scale. Together, these recommendations form a new, adaptable and scalable, equitable model for career readiness.

The New Model for Equitable Career Readiness holistically integrates effective practices and solutions that, when layered upon one another, transform workforce preparedness from a responsibility that sits within one underfunded and understaffed campus unit, to a cultural linchpin for successful student outcomes.

Effective practices and solutions were defined as innovations that (a) demonstrate potential to address barriers to first-generation and low-income students’ career readiness, and (b) are adaptable across the UIA and beyond.

Prospective students are increasingly paying attention to job placement rates upon graduation before choosing which college to attend. We must see career readiness as equally important as graduation rates – in fact – increased student confidence could lead to improved retention and graduation rates.



This model involves the following tiered phases, which build upon one another:

1 Understand and Map the Current Career Readiness Reality

Institutions do not know how students experience career readiness on their campus because they don't have access to, or even track, student career outcomes or career-related activities data.

2 Redirect and Infuse Career Services Expertise Across Campus

Career services professionals yearn for the chance to not spend their time in transactional interactions with students, such as reviewing resumes for grammatical errors. They want to provide career readiness in a deep, meaningful way, especially to the students who need it most. Their critical expertise has been siloed at the institution due to continuous underfunding and understaffing. It must be recognized, leveraged, and scaled across the institution.

3 Build A Career Readiness-First Culture

If career readiness feels like "something extra" to a student, it feels like something "no one has time for" to faculty and staff. The expectation to serve students in this way doesn't yet exist. By demonstrating the importance good career outcomes have for institutional ROI, and communicating that career readiness is an expectation of service to students and profession, career readiness becomes "how we do things around here".

4 Connect Curricula to the Workforce

The most efficient and effective way to scale career readiness across campus is through the classroom. It's the one place on campus students are required to go. We can't expect every student to, by chance, find their way to a career center. We must bring it to them, where they are, and partner with faculty and employers to do so. The first three levels of the model build the necessary foundation to earn faculty buy-in and support for this level's activities.

5 Design Transformational, Accessible Skill-Building Experiences for Students

Just as career readiness must be delivered to students in the classroom, skill-building experiences for students must be provided more intentionally, and at a larger scale. This level of the model is the pinnacle of successful career readiness at an institution, and should be measured as the ultimate goal for setting students up for post-graduation employment. Once this level of the model is achieved, students will no longer feel as though being job-ready is "something extra", and will enter the workforce with confidence and competence upon graduation.

Robust university-employer partnerships exist when campuses and employers ensure a seamless college-to-career transition for all students at the university.

These relationships move beyond recruiting transactions to deeply collaborative endeavors that center the student's development as a priority.

- Universities and employers establish partnership strategies that align with shared priorities.
- Universities and employers strategically communicate with clear points of contact, a single coordinator, regular meaningful check-ins, and ongoing formal opportunities to engage in two-way critical feedback, direction, and co-led initiatives.
- Career readiness competencies and employers are infused throughout the entire university experience, in the classroom, curricular, co-curricular, and extra-curricular engagements on- and off-campus.
- There is equitable access between employers and students, so that employers have access across campus, regardless of ability to pay, and students have access to employers, regardless of major or academic department.



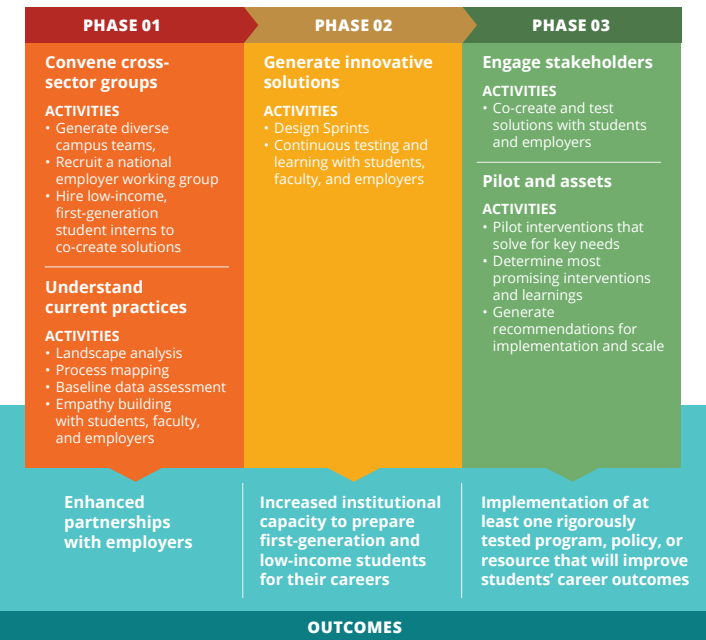
III. INTRODUCTION



Project Description

Rather than putting the burden of career readiness on students, colleges need to make themselves ready to support students into, and through, the college to career transition. Improving career outcomes for graduates and making them more equitable requires a significant redesign of current campus systems as well as new solutions to address the challenges facing today's students. A significant [misalignment in perception](#) exists between how campus leadership and business leaders viewed student career outcomes. In 2018, 96% of chief academic officers believed they were effectively preparing students for the workforce, compared to just 11% of business leaders who agreed. In addition, according to [Strada Education Network's Institute for the Future of Work](#) research, 85% of freshman students say their main priority for attending college is to get a good job, however, only 27% report securing a good job before graduation, and 4 in 10 college graduates are underemployed in their first job.

Over a period of three years (2018 – 2020), University Innovation Alliance (UIA) institutions utilized change management and human centered design principles to identify and deconstruct barriers to successful career readiness for first-generation and low-income students. The 2018 – 2020 Bridging the Gap from Education to Employment initiative aimed to improve career outcomes for the most vulnerable students by reimagining the college-to-career pathway. The initiative engaged career readiness teams on seven UIA campuses in an intensive landscape analysis process, empathy work with student and employer stakeholders, and building and piloting innovative solutions. This initiative occurred over three phases:



As the culmination of this creative and collaborative process, all seven participating campuses developed and launched pilot tested interventions, in partnership with employers, to address the discovered needs of today's students. These pilot projects included paid cohort-based internships, faculty programs focused on career development for historically marginalized students, incorporating career competencies into curricula, new experiential learning projects, and scalable career exploration courses. The rigorous assessment, learnings, and outcomes of these interventions provided proven recommendations for the most promising practices and career readiness solutions.

To sustain impact and progress, campus teams selected the most promising practices and interventions from all participating campuses for implementation beginning in January 2021. These selections were required to work in concert, and be thoughtfully included in a robust implementation plan.



Participating Campuses

Due to a higher-than-anticipated interest in the BGEE project, participating campuses were expanded from three to seven UIA institutions. In order to accommodate this expansion, a regional implementation and coordination model was developed. Each region received management, support, and day-to-day facilitation from a BGEE project fellow. The BGEE Design Lead provided oversight to all campus and project-specific activities.

- Ohio State University
- Purdue University
- Georgia State University
- University of Central Florida
- Arizona State University
- Oregon State University
- University of California, Riverside



Composition, Diversity of Campus Teams

Each participating campus was charged with identifying a "Team Lead", preferably a career services professional, who in turn was given the responsibility of recruiting and forming a cross-campus team of diverse professionals who spanned roles and departments within the institution.

An example of BGEE campus team composition from a participating campus:

- Director, Career Services (team lead)
- Director, Career Services, College of Arts and Sciences
- Director, Career Services, College of Engineering
- Director, Career Services, College of Business
- Faculty member
- Research Associate
- Career Services staff
- UIA Campus Fellow
- Undergraduate student(s) (for temporary periods throughout the project)



UNDERSTANDING CURRENT PRACTICES

Gap Analysis Across the Fields of Higher Education and Workforce Development

During Phase I foundational activities in 2018, the UIA completed a Gap Analysis to provide a comprehensive overview of the education-to-employment landscape, across higher education. This analysis identified three major trends:

- 1 A growing number of institutions struggle to help their graduates translate educational experiences into economic opportunity.
- 2 Campus-employer connection tools, such as [VMock](#) and [Handshake](#) provide opportunities for scaling access and information to students.
- 3 Most campuses are overlooking additional tools and platforms, including LinkedIn, that can be beneficial to students. Employers are using these tools to bypass higher education and career services and connect more directly with students.

The report's findings concluded with five promising practices for engaging first-generation and low-income students in career preparation:

- 1 Intentionally utilize student employment on campus as a career readiness and skill-building opportunity, which is often critical to low-income students.
- 2 Integrate career preparation throughout students' university experience, increasing access so that all students engage with these activities early and often.
- 3 Collaborate with other support services, such as academic advising and office that maintain critical student data on campus (such as first-destination surveys, Pell grant recipients, etc.).
- 4 Expand students' horizons by exposing them to new jobs and connecting them with networks and professionals.
- 5 Don't forget about the bare essentials, such as mentorship and career closet resources for interview preparation.



UNDERSTANDING CURRENT PRACTICES

Landscape Analysis & Baseline Data

Completed during Phase I activities, the Landscape Analysis and Baseline Data reports summarized key findings and promising practices on each participating campus. Each campus team gathered baseline data, completed introductory process mapping workshops, and conducted a career-related activity inventory. These activities complemented the broad Gap Analysis Report, providing a narrower description of the BGEE project's baseline for participating institutions. They also served as a building block to highlight pain points captured during the foundational assessment period of the project.

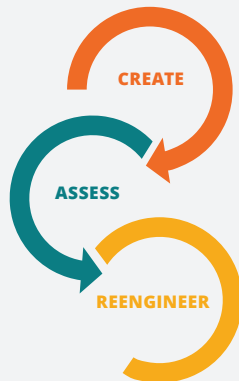
PROCESS MAPPING FRAMEWORK

UIA Fellows facilitated introductory process mapping workshops to understand the current landscape of career services offerings on each participating campus. These workshops documented current strengths, areas in need of improvement, promising practices, and services specifically offered to low-income, first-generation college students. They also drew on the findings of the Gap Analysis Report to provide broader context to the career readiness challenges facing students, universities, and employers.

WHAT IS PROCESS MAPPING?

Process mapping involves **creating visual workflow diagrams** to facilitate a clearer understanding of a process.

Process Mapping allows a team or individual to **streamline and reengineer** processes via **assessment of the current process** and determination of where improvements can be made.



PROCESS MAPPING WORKSHOP TOPICS

1. Defining Career Related Activities for Your Campus
2. Gathering Campus Career Activities
3. Building a Strengths Model via a Campus Landscape Analysis Summary

KEY FINDINGS

Four themes emerged from the baseline and inventory data:

- 1 Reimagining Career Services
- 2 Employer Engagement
- 3 Communicating Marketable Skills
- 4 Activities Designed Specifically for Low-Income, First-Generation Students

REIMAGINING CAREER SERVICES

The Gap Analysis Report noted that campus career services have a critical role to play in closing the gap that currently exists for many students between education and employment. They stand at the forefront of the transformation that is needed to break down barriers that prevent students from finding meaningful work. Campuses must embrace new technologies and create new innovative ways to ensure students enjoy a bright and rewarding future after graduation. This call to action required a reimagining and redesign of traditional “career services” activities and experiences.

PROMISING PRACTICES

- Campuses were leveraging technology to increase high-touch programs and meaningful student engagements such as chatbots and virtual resume review tools to scale and increase access.
- Campuses were utilizing an integrative approach such as creating cross-campus career advising councils and ongoing coaching of professional staff.
- Campuses were involving faculty and integrating experiential learning into the curriculum.

CHALLENGES

Gaps and variances exist in career-services related data, creating barriers to collective metrics and methods of assessment.

EMPLOYER ENGAGEMENT

In 2018, campuses were beginning to think more broadly about creating truly robust partnerships with employers. While employer connection tools such as Handshake are utilized on many campuses, some employers are bypassing career services connections by using tools that connect them directly to students. Reimagining employer engagement beyond traditional activities such as career fairs, interviews, and networking events were necessary to provide employers with the robust relationship and reliable pipeline of skilled graduates they crave.

COMMUNICATING MARKETABLE SKILLS

Students continue to struggle with communicating the non-tangible skills they gain during their college experience. This challenge is accentuated by a lack of consistency in the way universities and employers describe similar skills, or even which skills businesses are looking for in today's ever-changing job market.

CHALLENGES

A lack of targeted services related to specific careers exists across many participating institutions. While generalization of offerings can be a good practice, it also generates challenges for scale and sustainability.

LOW-INCOME, FIRST-GENERATION COLLEGE STUDENTS

Career preparation and readiness – like higher education more broadly – has struggled with issues of access and opportunity for those from traditionally disadvantaged backgrounds, including first-generation and low-income students. Many career services experts, especially those at institutions of higher education, note that while there are a few innovations and new practices aimed at helping these populations, there has been a dearth of attention focused on, and best practices developed for, reaching these students in a robust manner. Many participating campuses called attention to this area as providing an opportunity for improvement.

PROMISING PRACTICES

Programs and initiatives focused specifically on disadvantaged populations, including disabled students, student veterans and service members, first-generation and undocumented students. Programs providing weeks of professional development and mentorship opportunities, or internship experiences, show the most promising results.

CHALLENGES

- Career Services departments and professionals often do not have access to the data they need to track student engagement and needs, and do not know how to reach students. This is especially true for low-income, first-generation students.
- Variation in student diversity leads to even greater variations in student needs on different campuses. This creates both challenges and opportunities, and makes creation of shared metrics more difficult.

MOVING BEYOND UNDERSTANDING CURRENT PRACTICES

This initial assessment of college-to-career pathways across all seven participating UIA institutions was a critical step in the BGEE initiative. Institutions developed a deeper understanding of the career-related work happening on their campuses, identified several promising practices, and noted areas for both individual improvement and collective action.

Continued challenges highlighted in the landscape analysis and baseline data reporting were:

- Adopting best practices for streamlined data collection and tracking
- Developing collective metrics
- Establishing and fostering on-campus collaboration
- Collaborating directly with students to create innovative solutions

The second phase of the BGEE initiative involved iterating the project evaluation plan based upon foundational findings. Campuses solicited input from employers to strengthen the college-to-career pathway. They also identified, built, and facilitated a realistic framework to address the challenges the project faced, with a goal of building upon promising practices to advance career readiness solutions from transactional to meaningful and to progress from incremental innovation to transformational.



Evaluation Methodology/Approach

The initial phases of the BGEE project's metrics of success tied to campuses' current career readiness activities (such as career fairs, engagement at career centers, and job placement rates). Within the first year of the project, the BGEE team recognized several limitations with these metrics:

- 1 There was no baseline data to use for comparison.**
For example, it was discovered that most campuses did not have data on the number of students who participated in career services activities and services nor did they disaggregate data by student demographics. Furthermore, campus teams did not have the capacity to collect the necessary data.
- 2 The BGEE project aimed to generate new solutions.**
For these reasons, the BGEE UIA team needed metrics of success that would not presuppose solutions, but instead allow for the iteration and flexibility that would yield game-changing innovations. Specific metrics of success would depend on the innovations that the teams generated.
- 3 The length and focus of the project necessitated being able to measure impact in the short-term.**
Because the BGEE project was committed to testing solutions before implementation and scale, all testing was to occur within very short time-frames and build upon itself, while interventions would not be expected to immediately show campus-wide results.
- 4 Transformational impact requires culture change.** The original project metrics provided no structure to understand and measure the impact on the teams and institutions themselves, such as improvement in collective impact or institutional capacity to improve career readiness and student career outcomes, thus missing a key opportunity to understand and learn from the impact of the project.

For these reasons, the BGEE project created a new measurement and evaluation plan based on **developmental evaluation**, an emerging approach tailored to social innovation, to guide strategic learning throughout and beyond the project.^{1,2} Rather than traditional evaluation methods that assess adherence to planned program activities and the degree those activities lead to expected outcomes, developmental evaluation allows for the agility needed to identify and test innovative solutions in complex systems.

BGEE developmental evaluation was designed with the following goals: (1) understand the impact of the BGEE project on participating institutions; (2) identify innovative solutions to improve career preparation for first-generation and low-income students through intervention-specific metrics; and (3) guide other institutions hoping to use design thinking to develop collective impact solutions.

To achieve these three objectives, the BGEE project answered five research questions. See below for research questions and methodology used for each.

¹ Patton, M.Q. (2011). Developmental evaluation: Applying complexity concepts to enhance innovation and use. New York: Guilford Press; cited from Preskill, Hallie & Tanya Beer, Evaluation Social Innovation, Center for Evaluation Innovation, FSG, 2012.

² For more information about developmental evaluation, see Preskill, Hallie & Tanya Beer, Evaluation Social Innovation, Center for Evaluation Innovation, FSG, 2012.

Research Question	Methodology
What programs, policies, or resources have shown the greatest potential to improve career outcomes for first-generation, low-income students?	All campuses implemented a developmental evaluation plan for their small-scale pilots, building logic models, identifying short-term outcomes, and developing data collection plans to determine the extent to which pilots yielded expected outcomes. Teams reported pilot outcomes in final reports and presentations [link to playbook sections or artifacts] In collaboration with the design firm IDEO, the UIA developed an assessment rubric to identify which interventions demonstrated potential to improve career outcomes for first-generation and low-income students. Based on project learnings, the UIA defined “potential to improve career outcomes for first-generation and low-income students” as interventions that (1) Foster collaborative change across campus; (2) demonstrate early evidence of transformative impact on target populations; and (3) are likely to be sustainable across multiple universities
What did we learn from the concepts prototyped, tested, incubated, and piloted on each participating BGEE campuses?	Campus teams used human-centered design techniques including empathy interviewing and rapid prototyping and testing. Learnings were synthesized in various artifacts throughout the project, including (1) concept posters at the November 2019 Retreat; (2) pilot proposals; and (3) pilot report & presentations. These learnings are synthesized in the ‘key ingredients’ described in Section VIII.
To what extent did the BGEE Project increase campuses’ capacity to prepare low-income, first-generation students for their careers?	To measure the impact of the project on campuses’ institutional capacity, the BGEE team conducted surveys to measure campuses’ capacity to prepare first-generation and low-income students for their careers. Impact was measured based on comparison between surveys conducted at the middle and end of the project for ~about 30 BGEE participants involved in the project for its duration. In addition, responses from program participants involved in the last year of the project were analyzed to understand the project’s impact. The UIA defined institutional capacity as a core set of strategic practices and mindsets that would enable institutions to prepare first-generation and low-income students for their careers. Institutional capacity was first defined as strategic practices that aligned to five elements of institutional capacity, as defined in Achieving the Dream’s [tool]: leadership & vision, data & technology, equity, engagement & communication, and policies and practices. For the full description of metrics and survey questions. In partnership with the design firm IDEO, the UIA also articulated “creative change mindsets” during the last year of the project. While the timing of these metrics prohibited pre/post comparison, the team facilitated group reflection exercises to identify each campus’ strengths and areas of improvement.
To what extent and in what ways do the participating campuses fulfill conditions of successful collective impact initiatives?	Project surveys and audits of project activities were used to assess the BGEE project on a series of metrics that correspond to conditions necessary for collective impact: common agenda, backbone infrastructure, shared measurement system, mutually reinforcing activities, and continuous communication.
What are effective principles of practice in implementing design thinking to develop collective impact solutions within and between institutions of higher education?	Based on project activities and survey results, the UIA developed a model for Student-Centered Collaborative Change, outlined in Section 13

In alignment with the principles of developmental evaluation, the UIA adapted and updated project evaluation as needed to ensure meaningful measurement and learning throughout the course of the grant. To see the original evaluation plan, please [refer to this link](#).

IV. DESIGNING FOR TRANSFORMATIVE CHANGE



Basics of Human-Centered Design

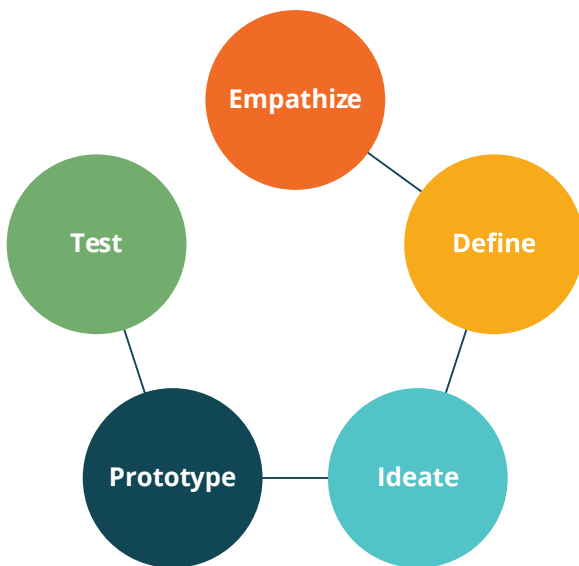
The design process developed and utilized for the BGEE project can be broken down into three components: 1) Design Thinking Sprints; 2) Ongoing Iteration Workshops; and 3) Pilot Testing. This process strategically developed well-thought-out, feedback-driven pilot tests to collect initial data that may show evidence of potential larger-scale impact. While the overall process was implemented in a mainly linear fashion, campus teams often revisited various phases non-linearly to increase opportunities for learning, collaboration, and evidence of effectively solving for student career readiness needs.

DESIGN THINKING SPRINTS

The UIA conducted a four-day [Design Thinking Sprint](#) on each participating campus. Each campus brought together a [cross-disciplinary team of 12 – 18 staff and faculty](#) to participate in the experience. The campus teams:

- 1 [Interviewed first-generation, low-income students](#)
- 2 [Defined student unmet needs](#)
- 3 Brainstormed creative solutions
- 4 Developed interactive, testable solution concepts
- 5 Tested those concepts with students

The experience was modeled on the [Stanford Hasso Plattner Institute of Design's Framework for Design Thinking](#).



The initial design challenge for each campus Design Thinking Sprint was, “How might we reimagine the college-to-career pathway for low-income, first generation college students?” Working through a series of structured, facilitated activities, the teams developed creative ways to address student needs. At the end of the Sprint, teams were asked to reflect on which concepts they wanted to continue into the Ongoing Iteration Workshops.

ONGOING ITERATION WORKSHOPS

Recognizing the limitations of focusing on one design methodology, national design leaders such as the [Luma Institute](#) and [IDEO](#) joined the BGEE project in partnership to provide additional training and tools. In post-sprint workshops, the BGEE project team focused on helping campus teams continue to develop and learn from their concepts. These workshops were typically held once per month for 3 – 4 hours. In general, the workshops were designed to help the teams continue to iterate and test their concepts; however, the project fellow would work with the team lead for each campus to tailor each workshop according to team needs.

The Ongoing Iteration Workshops helped teams learn and iterate, eventually leading to the development of a logic model as part of the Pilot Test process. Occurring alongside the Ongoing Iteration Workshops were a series of incubation activities.

INCUBATION

While designs were focused on students, the complexities of higher education systems required a more broad and robust understanding of how different stakeholder groups perceive an intervention. In order to better understand elements of feasibility and viability, campus teams engaged in a series of incubation activities. This varied from campus to campus, including activities such as:

- Focus groups with faculty members to understand their reaction to potential interventions
- Meetings with higher-level campus administration to understand how potential interventions fit within currently existing initiatives
- Inter-campus concept sharing to test concepts in a different campus cultural climate
- [Vetting ideas with employers across different industries](#) to test for alignment to workforce needs

PILOT TESTING

Due to limited campus team capacity and the BGEE project timeline, the major outcome of the design process was the development and launch of small-scale piloted career readiness interventions. These pilot tests were intended to determine the extent to which interventions yielded expected outcomes.

Each campus developed their own logic model and evaluation plan, focusing on collecting the data they would need to highlight the piloted intervention's impact on student career readiness needs and career outcomes. This pilot testing process was core to the BGEE project's design process for transformational change, as it provided data to validate assumptions, continued to place focus on learning over execution, and provided additional opportunities for iteration and improvement.

Please visit section VIII: The New Model for Equitable Career Readiness for an overview of campus piloted interventions, their outcomes, and evaluation processes.

IMPLEMENTATION PLANNING

The final stage of the BGEE design process prepared interventions for larger scale implementation. To ensure fidelity to the BGEE cross-campus portfolio approach, campuses considered learnings and key elements to piloted intervention success, or "key ingredients" across the entire BGEE portfolio that could enhance success and outcomes of implemented and scaled BGEE work. Campuses then completed a series of structured activities designed to imagine different scenarios, during which their piloted interventions intersected with various key ingredients from across the BGEE portfolio. This series of activities organically emphasized a holistic integration of most successful elements of each intervention, rather than simply implementing and scaling a single intervention. As a result, all BGEE campuses adopted additional key ingredients to enhance their interventions during implementation, while also iterating their interventions based on their evaluation results. Campuses then developed initial plans for post-BGEE project implementation and scale, to occur over a period of six months.



Student-Centered Collaborative Change Integrated Framework

Creating meaningful, lasting change is complicated. From beginning with building a coalition and coaching executive sponsors, to initiating the change itself, change projects are taxing work. The UIA sought to create change on participating campuses through designing new solutions to [the age-old problem](#) of helping students learn effective skills and transition into the world of work. To increase the odds of transformational change adoption and outcomes, several popular methodologies were overlaid to create the Student-Centered Collaborative Change, or "SC3", integrated framework. This new framework achieves collective impact by blending methods of design thinking, change management principles, developmental evaluation, and effective collaboration to produce innovative, impactful results.



In the SC3 framework, the core elements of the design thinking process are intentionally mapped to components of change management allowing design thinking to serve as a vehicle for a collaborative team to effectively move through stages of change, while also innovatively solving problems. For example, the early "Empathy" and "Define" stages of design thinking can create a common understanding of the need for change, as well as assist in forming a strategic vision for the work by deeply understanding the needs and perspectives of students. For example, when interviewed about their experiences with the empathy stage of the BGEE project design process, one participating campus staff member shared:

“This project has made me aware of my blind spots. It’s helped me be more empathetic. It made me aware of where students are coming from. I was probably operating under the assumption that students were more like me, but that’s obviously not the case.”

Combining the power of several methodologies, the SC3 allows collaborative teams to solve complex, ambiguous problems while sustaining the momentum needed for both incremental and disruptive solutions to stick once fully developed. The UIA has developed an internal, intensive training for UIA fellows to learn and guide implementation of the SC3 for any transformative initiative that aims to solve a complex challenge within the field of higher education. In addition, the UIA has already begun implementing the SC3 in new scale initiatives, such as the Black Student Success Initiative (BSSI) in 2021.

To see culminating outcomes of the utilization of the SC3 framework during the BGEE project, visit section VIII: The New Model for Equitable Career Readiness.



Principles of Design

Throughout the BGEE project, the core team developed a mature understanding of design and design principles. After beginning the project with general design principles of desirability, feasibility, and viability, the core team partnered with national design leaders to deepen and specify these principles further. To robustly evaluate BGEE campus teams' initial concepts that solved for student career readiness needs and later, piloted inventions, the core team formalized the project's design principles into three categories. These design principles outline conditions that three years of project learning (based on an industry gap analysis, campus-specific landscape analyses, qualitative research with other 600 students from seven campuses, and rigorous pilot testing) indicated were critical to student-centered change in the college to career pathway.

These design principles serve as a framework for assessing the potential of career readiness interventions to benefit students across many institutions. These principles provide guideposts in order to identify strengths and areas of improvement for an emerging or piloted intervention. These principles also provide a framework to assess the relative potential of a range of possible interventions. The BGEE team transformed these principles into a rubric in order to assess the BGEE campus team piloted intervention in Fall 2020. For more information about the BGEE Design Principles Rubric and Assessment process, see Section VIII below.

Each category can be further broken down into three additional considerations.

1 Collaborative Change & Innovation

- Designs include roles for faculty, staff, students, and external stakeholders outside of just one unit.
- Designs are iterative in nature, giving time and space to test assumptions and adapt from ongoing learning.
- Designs challenge the status quo of operations, often introducing new operational models and service opportunities.

2 Potential for Impact

- Designs have a highly-specific, well-defined user base and intended outcomes for that user base.
- Designs have a data collection component that allows informed decision-making about iterations.
- Designs are highly accessible and seek to either deepen intended outcomes and/or reach larger, more diverse groups

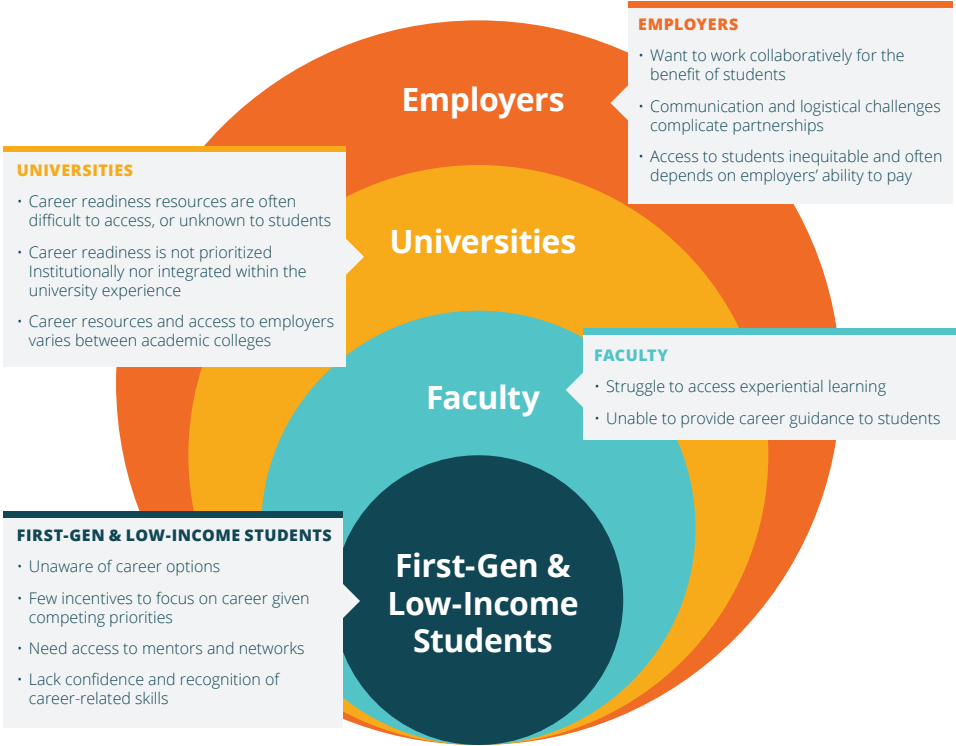
3 Sustainability

- Designs take into account the capital (social, human, monetary) needs to sustain ongoing implementation.
- Designs are aligned to the institutional mission and garner buy-in from leadership.
- Designs are widely desirable, not just by the intended user base, but by necessary institutional collaborators.



V. BARRIERS TO EQUITABLE CAREER READINESS

BGEE campus team members spoke with over 600 undergraduate students across seven institutions during initial design process and foundational data-collection activities. These informal conversations served as empathy-building experiences to better understand student experiences with, and perceptions of, career services at their campuses and the transition from education to the workforce. Based on these conversations, and the landscape analysis of best practices in university career preparation, the UIA identified that, in order to equitably prepare first-generation and low-income students for careers, career preparation needed to be early, often, accessible, and integrated into the university experience. Specifically universities need to address the following needs and barriers:



STUDENT INTRINSIC BARRIER

Students Lack Confidence and Recognition of Career Related Skills



[My fear is] not having a successful career because of my lack of communication and social skills. I'm afraid that I am always going to be afraid and hold myself back from opportunities just because I am scared of communicating and asking questions."

- Often first-generation and low-income students have skills (such as being bilingual) or experiences (developed through previous jobs or by meeting family obligations) that are assets in the workforce, but are not explicitly valued within the academic environment. This gap creates a sense of imposter syndrome for students with marginalized identities.
- Students gain valuable career-related skills in coursework and co-curricular experiences, but they don't recognize those skills, nor do they know how to communicate those to employers.

STUDENT EXTRINSIC BARRIER

Students Struggle to Access Experiential Learning



I am scared for my future because I have not yet felt that I have gained professionalism or mentorship by others. I hate my job, but I somehow have to pay the rent. Most internships are non-profits or don't get paid minimum wage."

- Students struggle to secure meaningful experiential learning opportunities, due to a variety of barriers including: the time demands of classwork and part-time jobs, the need for steady income, or difficulty securing transportation.

STUDENT EXTRINSIC BARRIER

Challenging to Gain Meaningful Access to Mentors



There is no one to lead me through this journey. My parents were in the military so they didn't have to look for a job. [I] don't know where to look or the whole timeline. Not only can I not ask my parents for advice on college, I can't ask them for advice on a job either."

- Social and familial capital (network and/or wealth) is often an asset in gaining access to internship and job opportunities. Students whose families or social networks are not already connected to their fields of interest need relationships with people and networks that can help them access employment opportunities.
- Students from first-generation and low-income backgrounds may not know how to navigate job search or workplace norms, and would benefit from mentors to support them as they pursue their career goals.
- Students are eager for mentors but are not quite sure where to look, particularly when they do not have the social/familial capital to connect them to mentors in their fields of interest.

STUDENT EXTRINSIC BARRIER

Students are Unaware of Career Options



Being a Political Science major, it wasn't until I registered for the exit course that I saw a list of possible jobs outside of law. If this [campus team's career social media campaign idea] happens, it needs to be focused on people who are outside of what we normally think of when it comes to careers."

- Understanding of career options is often tied to familial/social capital (the professions and professionals to which students were exposed). For students who lack such capital, career exploration often occurs through personal experience, or happenstance. This more limited outlook, combined with familial expectations or pressure to find financial security, means that first-gen and low-income students often lack awareness of career options.
- There is limited guidance on what skills and experiences are necessary to achieve career goals, and how to secure those experiences while in college.

FACULTY BARRIER

Faculty are Not Incentivized Within the Tenure and Promotion Process to Incorporate and Prioritize Career and Personal Mentorship



We experience enormous job creep, [it] feels like things are offloaded onto us. There are things we are evaluated for but additional things get added on over and over again. Things by themselves seem tiny but add up . . . Time does not expand. The task creep is a major barrier.”

- The many demands on faculty time and the undervaluing of career preparation within the academic institution (where helping students with career preparation is often not recognized in the tenure and promotion process) creates barriers to faculty prioritizing and incorporating career mentorship in their work.

FACULTY BARRIER

Faculty are Unprepared to Provide Career Guidance that Students are Eager for and Expect



When responding to the question “What do you see as your role in helping students navigate their career?” a faculty member responded “To be as helpful as possible, but there is not strong clarity on how to do that except helping navigate college years while talking about goals.”

- Faculty are often unprepared to provide the career guidance that students expect and are eager for, both in terms of individual support, and in helping students to understand connections between course material and career skills.
- Faculty’s professional experience is often specific to an academic career track, thus limiting their understanding of career options related to their field, job application processes, and their understanding of how academic skill sets translates to the workforce.

UNIVERSITY BARRIER

Career Readiness Resources are Often Difficult to Access or Unknown to Students

- [Student empathy interview video](#): min 3:53 – end (lack of promotion – need to be a part of certain orgs/majors to understand the vast majority of what’s available)
- Nicole described being intimidated as a new student to go into spaces and ask for help, specifically because spaces are predominantly white, she felt like she should have done better, and the people helping students looked flustered (too busy).
- Resources are difficult to access: career services offices have limited hours
- Students are often unaware of career services, centers, and resources available on campus. Students are bombarded with messages about notices about academics, student life, university policies and announcements; career preparation resources are often missed.
- Lack of representation within student support offices, including career services offices, can create a lack of sense of belonging for students of color.

STUDENT EXTRINSIC BARRIER

Career Readiness Resources and Access to Employers Vary Between Academic Colleges



An engineering student at this institution has a much more enriching career readiness experience compared to a student in our college of education – only due to the major they selected. We have to figure out how to make career readiness more equitable across our campus.”

- Career preparation is often unequal across colleges. Depending on a students’ home college they may have different access to career services and/or different exposure to employers.
- Employers will seek out specific colleges or majors, even when recruiting for roles that could be filled by students within a range of academic programs.
- Certain academic colleges may have additional or better integrated career resources, leading to inequitable access based on a students’ chosen field of study.

UNIVERSITY BARRIER

Career Readiness is often Siloed and Deprioritized within Campus Administration – and Within a Students' Academic Journey



Nathan Hatch, president of Wake Forest, recently told the *New York Times*, that career services offices rank “somewhere just below parking” as an administrative priority.^{vi} Other higher education leaders have described career services as “literally and figuratively buried on campus,” or as “an island.”

- Career is the primary driver for students' decision to pursue higher education, but it is not prioritized institutionally. As a key example, career services are often underfunded within campus budgets.
- Career is not integrated within the university experience, and instead is treated as ancillary to the university mission and students' academic lives.

EMPLOYER BARRIER

Access to Campuses and Students is often Inequitable, and Based on Employers' Ability to Pay



I understand that everyone needs to keep the lights on, but when relationships are led with money, and ‘what are you going to do for us’ . . . we wonder ‘where do the students get involved?’ Financial barrier to entry does not really align with our model.”

- Access may depend on a university's revenue model. Career services offices that depend on employers for revenue need to prioritize the employers who can pay for their exposure
- In these cases, employers who can afford sponsorships, tables at career fairs, etc., have the greatest access to students. Correspondingly, students may not be exposed to a range of employers because of the employers' inability to pay.

EMPLOYER BARRIER

University Bureaucracy Hampers Employers' Ability to Work Collaboratively for the Benefit of Students



We have a partnership right now where we're trying to work with a school and internships, and they have a strict, rigid expectation around what interns should have to do.”

“[Universities] are as slow as molasses. The redundancy is absurd . . . It's important, but we aren't curing cancer!”

“We want to be part of the puzzle and part of the solution.”

- Employers are eager to work collaboratively and creatively in service of students, but university bureaucracies and regulations create barriers to implementing new ideas.

EMPLOYER BARRIER

Communication and Logistical Challenges Complicate Partnerships



Once you get in touch with the partner, it's usually positive, but holding a sustainable relationship does not seem possible – partly due to retention rates from career advising group, or instructors have the tyranny of the urgent and I respect that because it's not really their job”

- The decentralized structure of universities makes it challenging for employers to identify the best person to speak with, and often employers need to maintain many relationships at a single institution. This can lead to employer fatigue and frustration.
- Even when employers establish good lines of communication, frequent staff turnover can disrupt and delay partnerships.



VI. ROBUST CAMPUS-EMPLOYER PARTNERSHIPS



Employer Working Group Overview & Participating Organizations

Bridging the Gap from Education to Employment aimed to leverage the expertise of university leaders and employers to ensure stakeholders [partnered meaningfully and effectively](#) while reimagining the college-to-career pathway. To that end, a nationally representative and diverse [Employer Working Group](#) (EWG) was formed to provide insight into employer challenges and needs, as well as work alongside BGEE campus teams to build and test solutions.

The EWG recruitment process provided critical learnings into both campus-employer partnership challenges and opportunities for improvement. Campus career services leadership, as well as campus team members (faculty, staff) who had formal standing partnerships with employers, were asked to recommend EWG members for recruitment. More than 90 total recommendations were received from the seven BGEE campuses. However, the majority of recommended individuals were campus recruiters – a position which exhibits frequent turnover and did not represent the experiences or knowledge that was required to provide insight into recruitment, talent, and hiring needs for the organization. Additionally, while more than 20 recommended individuals were contacted as a part of EWG recruitment efforts, only a handful responded.

In order to recruit a more diverse working group, which included individuals with the knowledge needed for BGEE goals, the University Innovation Alliance partnered with the Society for Human Resource Management (SHRM).

Participating Companies & Organizations	Sector & Industry
<u>ADP</u>	Tech & Cloud Computing
<u>Alorica</u>	Customer Experience
<u>Aramark</u>	Food Service & Facilities
<u>Bechtel</u>	Engineering & Construction
<u>City of Phoenix</u>	Local Government
<u>COSI Science Center</u>	Museums & Institutions
<u>General Electric (GE)</u>	Digital Industry
<u>HonorHealth</u>	Healthcare
<u>Humareso</u>	HR Consulting
<u>Parker Dewey</u>	Internship Experience & Education
<u>SKIM</u>	Market Research
<u>Staples</u>	Office Retail
<u>U.S. Environmental Protection Agency</u>	Federal Government
<u>Universal Orlando Parks & Resorts</u>	Hospitality & Entertainment



KEY LEARNINGS FROM EMPLOYER NEEDS

Through empathy-building interview sessions and retreat activities between Employer Working Group members and campus team members, the following common themes arose related to employer pain points and needs. Many of these needs, however, were not unique to employers, and were frequently mentioned by campus stakeholders as well:

Employers acknowledge they have work to do to internally bring new employees into the workforce

- “Companies do not do enough work tilling their own ground to get employees into the company.”
- “I think there's excitement about hiring young, bright minds, but there's a larger population that are more in the mindset of 'I don't want to hire young people because I don't have the time to train them and hand-hold them.'”

Employers are frustrated by the difficulty communicating with universities

- “You almost prep yourself to be frustrated – I go in with a little bit of a level of frustration already – it's probably not healthy in the first place. Walking in knowing you're going to fail is probably not healthy.”
- “A single point of contact who is paying attention to the partnership is really important.”
- “Flexibility, empathy – they understood our perspective as an employer and wanted to do everything they could to make our experience better.”

Employers see a significant soft skill gap, especially in communication and professionalism in the workplace

- “It's hard when we have someone we're bringing in the door and want to give them a promotion, but they aren't ready and aren't going to be ready for some time.”
- “It has gotten to the place of being unbelievable some of the things that are happening, I've never seen it before.”

Employers feel restricted by funding requests and policies

- “I understand that everyone needs to keep the lights on, but when relationships are led with money, and 'what are you going to do for us' . . . we wonder 'where do the students get involved?'”
- “We want to do what is best for the student, but [job offer timelines] also limit our ability to effectively plan and manage our own hiring.”
- “We have a partnership right now where we're trying to work with a school and internships, and they have a strict, rigid expectation around what interns should have to do.”
- “Sometimes it's about the money. If we end up not being a partner at a particular financial level, we might not have access to have a strategy in place to be as supportive as we want to be.”
- “Is the university just not willing to have flexibility in their program to allow us to be good partners?”
- “[Universities] are as slow as molasses. The redundancy is absurd . . . It's important, but we aren't curing cancer!”

Employers want to work together for the benefit of students

- “Talk about campus pain points, then offer companies opportunities to solve them.”
- “We want to be part of the puzzle and part of the solution.”
- “Are we at a place where the university asks us to collaborate on curriculum?”

DEFINING ROBUST PARTNERSHIPS TO SOLVE FOR EMPLOYER NEEDS

In winter 2020, participating universities and members of the project's EWG collaboratively identified the qualities of robust campus-employer partnerships. Their co-created definition is as follows:

Robust university-employer partnerships exist when campuses and employers ensure a seamless college-to-career transition for all students at the university. These relationships move beyond recruiting transactions to deeply collaborative endeavors that centers the student's development as a priority. Qualities of robust partnerships are:

- Universities and employers establish partnership strategies that align with shared priorities.
- Universities and employers strategically communicate with clear points of contact, a single coordinator, regular meaningful check-ins, and ongoing formal opportunities to engage in two-way critical feedback, direction, and co-led initiatives.
- Career readiness competencies and employers are infused throughout the entire university experience, in the classroom, curricular, co-curricular, and extra-curricular engagements on- and off-campus.
- There is equitable access between employers and students, so that employers have access across campus, regardless of ability to pay, and students have access to employers, regardless of major or academic department.

**Within the context of the BGEE project, robust-university partnerships enable both employers and universities to meet the needs of first-generation and low-income students.

EXAMPLES

- An employer explained that their partnerships exemplifies this definition in the following ways: Transparency, at the table together, working toward common goals, deep relationships, helping each other achieve our goals and successfully achieving our priorities. And ultimately having the best outcomes for the students.
- Multiple campus team members mentioned that the BGEE project highlighted the value of convening employers and faculty together to learn from one another and work together to improve the college-to-career pathway: Another shared: "This pilot, it brings together an employer, faculty and grad students career center and students, and we haven't really done a lot of that, especially with bringing in the faculty side." As another team member shared: "this [BGEE pilot] project also helped us bring employers to faculty. With the addition of a mid-semester check-in meeting we included employers discussing the importance of competencies with faculty. This way faculty are not just hearing from us but from employers directly and they have an opportunity to ask questions and engage with them at least once. Employer and faculty connections have always been difficult to achieve, however, this program allows faculty to see the value in hearing from employers."





Applying the Definition in Practice

COLLABORATIVE CHANGE: ENGAGEMENT IN PILOT WORK

These employer pain points were aggregated into collective project learnings, which were considered during campus team decision-making activities to determine which specific college-to-career interventions would be pilot tested on each campus. Employer Working Group members engaged in providing feedback and recommendations for refining initial pilot proposals to improve alignment with employer, and student, needs.

Several EWG members expressed interest in collaborating directly with the campus pilot projects and were matched accordingly.

Campus	EWG Member	Examples of Engagement
Oregon State	Workforce Development Director, HonorHealth	• Consulted on, and informed, the composition of the panel
	Campus Talent Acquisition Business Partner, ADP	• Served on panel for faculty listening session to share current practices for hiring and DEI
	Associate VP, Diversity & Early Talent Development, Aramark	
	Representative from the U.S. Environmental Protection Agency	
Georgia State	President, Humareso	• Assisted with evaluation of student projects
UC Riverside	U.S. Environmental Protection Agency:	• The EPA worked directly with the UCR BGEE team to scope the piloted internship experience
	• Equal Employment & Diversity Manager • EPA Research • Tribal Waste Program • Green Waste Program	• EPA staff served as mentors for the intern cohort

EWG members who engaged with campus pilot projects shared:

- “ I have been working with interns and intern programs for over 25 years and this is by far the best internship program I have ever participated in as a mentor.”
- “ I want to express my gratitude to the program participants, funders, organizers for making this program possible. It [the pilot program] should be shared as a model with other colleges and universities, and targeted work should be done to develop similar programs with HBCUs and tribal colleges and universities.”

OUTCOMES OF NEW PARTNERSHIPS

New campus-employer partnerships were formed through BGEE collaborative engagement activities between EWG members and campus teams. Although due to a limited project timeline, partnership outcomes were not expected to occur, some new relationships were formed, with employers, universities, and students being positively impacted.

- As a result of their EWG membership, the SKIMgroup hired their first graduate of Georgia State University. The SKIMgroup had not recruited students from, or engaged with, Georgia State University prior to the BGEE project.
- The EPA and UC-Riverside enhanced their standing partnership to collaboratively develop and implement the BGEE Bridge Experience pilot internship program. While doing so, the experience increased channels of communication across the university, and strengthened the longstanding partnership even further.



Employer Recommendations for Enhancing Career Services

In summer of 2020, the BGEE project engaged Employer Working Group members to co-create solutions for common pain points expressed in prior project activities. During previously held interviews, focus groups, and retreat activities, the project team heard repeated concerns about how current revenue models for career services disadvantages employers, and how institutions often make it challenging to recruit diverse students from different academic backgrounds. Taking these pain points into account, the BGEE core team facilitated two virtual workshops to address the following questions, which were outside the scope of piloted campus interventions:

- How might we create a revenue model for career services that evens the playing field between small businesses and large organizations?
- How might career services ensure that first-generation, low-income students have more access to employers than a “traditional” student?

The BGEE core team led intimate groups of Employer Working Group members through structured activities to explore possibilities, as well as begin to build out real concepts within the larger idea in a “[business canvas](#)” format. Below you will find a summary of employer’s thoughts, as well as some implications for career services departments based upon workshop outcomes.

Revenue Models

CONVERSATION THEMES

Employers feel that an all-virtual, globally-focused recruitment model best benefits all employers and students.

- Employers quickly realized during COVID-19 that having to recruit outside of physical campus environments allowed for a larger pool of more diverse applicants from institutions both within, and outside of, their campus partner networks.
- For example, one organization reported that they began hosting virtual socials for students that were open-access, and not advertised through their campus partners. This employer said that they had incredible attendance, and many of the attendees were outside of their pre-COVID recruiting network.

Creating more free opportunities for employers to engage with students directly is key, and the access should be mostly equitable.

- Most current revenue models advantage large organizations with the financial capital to purchase career services sponsorships, high-dollar tables at career fairs, and regional brand recognition.
- New revenue models should have a certain-level of baseline access and services provided at no-cost (e.g. tables at career fairs, ability to recruit on-campus [either physically or virtually] throughout the year, regular messaging to students), while organizations can pay to be highlighted in specific ways as a “premium” (ability to give stage presentations at career fairs, special highlighting to students within CRMs, classroom/faculty access, recording videos to send to students, etc.)

The models should seek to connect students directly with employers as often as possible. This means moving away from planning one or two large-scale career fairs a year, and creating smaller, more intentional opportunities for employers to get face-time with students in informal ways.

- Employers feel very strongly that universities need to provide frictionless, accessible opportunities to engage directly with students in the future. One of the strongest conversation themes was around ensuring that students had access to employers at many touch points so they could easily access information when they wanted it, versus waiting for certain milestone events during the year.

WHAT THIS MEANS FOR CAREER SERVICES

- In the short-term, career services should start investigating whether small businesses, in particular, have equitable access to students. EWG members who either are from small businesses, or consult with small businesses, are adamant that current revenue models crowd out small businesses who desperately need to get a foothold with students to fill job needs.
- As COVID-19 continues to impact in-person events, impose travel restrictions, and reduce budgets from all stakeholders, career services should evaluate what an all-virtual employer engagement model looks like. As virtual engagements become more normalized in multiple industries, embracing all-virtual strategies may allow for increasing the diversity and depth of employer engagements across industries.
- As talent acquisition units continue to face challenging budget, personnel, and strategy decisions, crafty universities can assist by creating clearer, fairer employer engagement opportunities that can create a competitive advantage.

First-Generation, Low-Income Student Engagement

CONVERSATION THEMES

Employers are, currently, only able to recruit students that elect into seeking career information. To quote one of our employers," Currently, certain academic programs pay attention to job outcomes while others ignore this all together. Students often choose majors before understanding this."

- This can be a particular burden for first-generation and low-income students, who often rely on the formal structures of the institution to provide the needed guidance to navigate college and beyond.

Employers emphasized the need to have students engage with different employers, long before the engagement becomes high stakes at career fairs and interviews. Employers often see that only certain colleges and programs, often business and engineering, provide these kinds of engagements to students.

- Employers often leverage their alumni of specific institutions in recruiting efforts at that institution. Alumni can be a powerful tool that institutions can also utilize to get students less formal face time with professionals in different fields of interest.

Employers see that the most common place for students to be is the classroom, however, employers often feel blocked from that space. Employers feel that they could assist in providing perspective and opportunities to more diverse students if they simply had increased access to where students are.

WHAT THIS MEANS FOR CAREER SERVICES

- Alone, career services is unable to connect employers to all students, especially due to the "opt-in" nature of career services events and resources. It is critical that Career Services serve as a connector to help employers access diverse groups of students.
- Employers are not well-versed in institutional politics. One of the more interesting conversations between two employers was about resistance that some faculty and programs have to career information. Helping employers deftly navigate these complexities to ensure they are connecting across the institution is an important service responsibility for career services.
- Creating regular, low-stakes engagements with employers is key for students, but of particular importance for first-generation, low-income students.
- Career services needs to lay the groundwork for breaking down barriers for students to access career information across disciplines, and clear the pathway for employers. Determining ways to help programs and faculty understand how their program contributes to both internal learning outcomes and career development outcomes is crucial, as often students may not know how their skills relate to employability until it is too late.



VII. THE NEW MODEL FOR EQUITABLE CAREER READINESS

In summer of 2020, each BGEE campus conducted small-scale pilot testing of interventions that had shown the most promise after months of low-risk iterative testing with students, as well as incubation activities testing for viability and feasibility with internal and external stakeholders. Campus pilots were designed in a way that encouraged each campus to test unique innovations – solving for student needs that were identified during Phase I of the project. No two campuses piloted duplicative interventions. This strategy organically increased learnings and created the opportunity for collaborative learning and sharing across campuses. It also ensured a more holistic and effective blending of the most promising solution elements, rather than scaling individual interventions. While the piloted interventions were necessary, they were insufficient to transform career readiness by themselves.

To identify the most promising and effective solutions, campus teams were asked to identify key elements, or “ingredients”, they deemed critical to the success of their piloted interventions. These key ingredients, combined with a robust evaluation process of the pilot work and outcomes of the project’s institutional capacity assessment, have culminated in determining recommendations for effective implementation and scale. Together, these recommendations form a new, adaptable and scalable, equitable model for career readiness.



Piloted Interventions

BGEE campus pilot projects intentionally tested unique aspects of new, innovative college-to-career models to increase collective learning opportunities for implementation and scale.

- **Oregon State University**
Faculty program w. focus on career development for **students with historically marginalized identities**
- **Purdue University**
Multiple simple methods for faculty to utilize in and out of classroom to encourage student engagement in career development conversations and actions
- **University of Central Florida**
Faculty-incentive program to **incorporate career competencies into syllabi and course assignments**
- **Arizona State University**
Career exploration + experiential learning planning in **a scalable course**
- **Ohio State University**
A **six-week cohort of first-generation students**, providing virtual future planning, career development and exploration. Intended for students with paid summer employment needs.
- **UC-Riverside**
Paid, cohort internship + **employer-scoped project**
- **Georgia State University**
Collaborative employer-student innovation + experiential learning projects

KEY PILOT OUTCOMES

Substantial increases* were shown in:

- Sense of belonging and community
- Intrinsic motivation to begin career readiness early in their student experience
- Confidence in improving career skills – most notably oral & written communication and teamwork
- Ability to articulate career skills gained in the classroom
- Ability to identify which career skills needed improvement
- Discovery of new careers and majors (6+ switched majors or added minors as a direct result of a BGEE pilot)
- Direct engagement with employers and a larger network of mentors and employers
- Confidence in applying to jobs and internships (4+ obtained as a direct result of a BGEE pilot)

*Substantial Increase is defined as at least a 10% reported increase or exhibited growth by all participating and survey-responding students and a 20% reported increase or exhibited growth by first-generation, low-income or students of color (when identifiable).

STUDENT & FACULTY TESTIMONIALS

- [UCF Pilot Vignette Video](#)
- [UCR Pilot Vignette Video](#)



Most Promising Elements from Piloted Interventions

The following are key elements or “ingredients” campus teams determined to be critical to success during their BGEE pilot work. These key ingredients should be considered seriously by any campus looking to ensure career readiness meets the needs of low-income and first-generation students. Included below are campus pilot exemplars for each category. Exemplars are based on the evaluation results of each piloted intervention. Scroll over each category to see the work behind identification of the key ingredients.

Meaningfully Engage with Faculty

- Create and facilitate an interdisciplinary faculty cohort.
- Provide a mutual understanding of career competencies.
- Create professional development opportunities for faculty to best understand first-gen and low-income student needs and strengths.
- Align career concepts to classroom experiences.
- Pre-package resources, tools, and curricula.
- Intentionally create and facilitate opportunities for faculty sharing and learning.
- Connect faculty with employers to foster learning and engagement from one another.

Understand Faculty & Staff Incentives

- Frame as, and provide, meaningful professional development opportunities for faculty and staff.
- Provide faculty and staff stipends.
- Determine and offer inherently motivating rewards and recognition for doing the work.
- Seek out and secure executive sponsorship.
- Develop opportunities for national and field-level recognition.

Infuse Career Readiness with Diversity, Equity, and Inclusion Efforts

- Create mechanisms for identifying and prioritizing historically marginalized students.
- Intentionally assist students in recognizing their cultural capital, building their networks, and increasing social capital.
- Train faculty and staff to use an assets-based framework when working with BIPOC & first-generation students.
- Prepare faculty to use inclusive and affirming language, recognizing individuals’ and groups’ historical and contemporary experiences with power, privilege and oppression.
- Provide readings, reflections, and discussions that enable faculty and staff to understand their own identities, as well as reflect and acknowledge institutional barriers, inequities, and disparities.
- Create and facilitate real-world career situations in ways that center students with marginalized identities.
- Develop mechanisms to disaggregate engagement and outcomes based on demographics.

Prioritize Efforts that Increase Student Confidence & Overcome Imposter Syndrome

- Create and facilitate identity-based student cohorts.
- Create professional opportunities for giving students ownership of the work.
- Develop mentorships tied to project-based internships to coach students to address a problem.
- Integrate reflection exercises and prompted planning for the future.
- Provide opportunities for students to reflect and debrief as a group.
- Develop structures that require engagement with first and second year students in career exploration and readiness.
- Help mentors (faculty, employers, mentors) to understand the power of sharing their career journeys with students.

Design Inclusively

- Include students in design process.
- Design and prioritize regular, consistent engagement with students and stakeholders.
- Create virtual engagement opportunities to increase equitable access for students and employers.
- Create mechanisms to consistently listen to students and document their feedback.
- Practice a willingness to iterate based on real-time student needs and feedback.
- Develop meaningful evaluation processes to understand effectiveness and career outcomes.
- Expand and share responsibility across the facilitation team and stakeholders.

Build & Maintain Robust Collaboration & Partnerships

- Recruit dedicated employer mentors.
- Expand beyond advisory roles to cross-collaborate and co-create with students and employers.
- Practice qualities of robust campus-employer partnerships as defined by BGEE stakeholders:
 - Universities and employers establish partnership strategies that align with shared priorities.
 - Universities and employers strategically communicate with clear points of contact, a single coordinator, regular meaningful check-ins, and ongoing formal opportunities to engage in two-way critical feedback, direction, and co-led initiatives.
 - Career readiness competencies and employers are infused throughout the entire university experience, in the classroom, curricular, co-curricular, and extra-curricular engagements on- and off-campus.
 - There is equitable access between employers and students, so that employers have access across campus, regardless of ability to pay, and students have access to employers, regardless of major or academic department.

Build Institutional Capacity to Prepare Students for their Careers

- Secure a university leader to sponsor and champion the work.
- Convene career services, student affairs, and academic affairs practitioners to collaborate on a specific project in service of student success.
- Ensure team members understand the needs of first-generation and low-income students, and incorporate those needs into career readiness across campus.
- Use data and technology to drive decisions and strategies for improving career readiness.
- Encourage exploration and small-scale testing of a variety of ideas to foster innovative problem-solving.
- Apply the fundamentals of program evaluation and assessment to strategically design interventions.
- Identify measurable indicators and assess progress toward outcomes to inform decision-making and program improvement.
- Foster mindsets of human centeredness, experimentation, collaboration, and metacognition to enable ongoing creative problem-solving.



Evaluation of Piloted Interventions

In addition to the key ingredients identified through the pilot process, the BGEE core team developed a robust evaluation process to identify career readiness interventions that exhibited high potential for impact.

The pilot evaluation process consisted of two main components: first, as mentioned in the pilot vignettes, all campus teams articulated intended outcomes, designed data collection instruments, measured outcomes, and reported results. Second, these evaluation results, as well as a lengthy report and recorded presentation, were used to identify high-potential career readiness interventions, defined as innovations that (a) demonstrate potential to address barriers to first-generation and low-income students' career readiness (b) are adaptable across the UIA and beyond.

To provide rigorous and objective assessment of each piloted intervention, the BGEE Core Team partnered with the design firm IDEO to develop the BGEE Design Principles Rubric. The BGEE Design Principles were based on three years of work during the project – including an industry gap analysis, campus-specific landscape analyses, qualitative research with other 600 students from seven campuses, and rigorous pilot testing. The UIA identified that, to be best situated to eliminate barriers within a variety of higher education contexts, career readiness interventions will demonstrate three qualities:

- **Collaborative Change & Innovation**
Involve cross-stakeholder collaboration; be the result of iteration and improvement; and lead to change in practice
- **Potential for Impact**
Demonstrate early evidence of transformative impact for the target audience
- **Sustainability**
Be viable given potential investments (now and in the future), politically feasible, and desired within and across campuses

The rubric enables the UIA and others to assess to what extent the interventions align to these design principles. For more information about the purpose and design of the rubric, as well as design principle descriptions, please download and view the playbook [toolkit](#).

The BGEE Core Team drew upon each campus teams' evaluation results, a lengthy final report, and recorded presentations to assess each intervention along the criteria in the Design Principles Rubric. As a result of this assessment, the BGEE Core Team identified the elements of each intervention that best fulfilled the design principles. These elements are synthesized into the new model for equitable career readiness below.



Concept Evaluation Rubric

Beyond its specific use in the BGEE project, the Design Principles Rubric is a resource for identifying high-potential career readiness interventions. It provides a structure and guidance to:

- Rigorously and objectively assess whether a new program, policy, resource, or initiative demonstrates potential to benefit first-generation and low-income students within universities.
- Identify strengths and areas of improvement for a new initiative, based on three years of learning within the BGEE project.

Main Categories	Collaborative Change & Innovation		
TOTAL Weighted Score	0.6		
Subcategory	Cross-Stakeholder Collaboration	Iteration & Improvement	Change in Practice
Subcategory Description	Meaningful change requires intentional and authentic collaboration. This intervention forges partnerships across the many stakeholders that shape students' career readiness (career services, faculty, student affairs, academic affairs, and employers)	Input and iteration is necessary to ensure desirability of a new idea. Interventions have been tested, and have been iterated based on feedback received	The intervention does more than create a one-time change but instead transforms the way work is done. Change ripples beyond this single intervention to impact policies, practices, and structures
Weights	10%	10%	10%
Selection and Count	Level 2	Level 2	Level 2

Main Categories	Potential for Impact		
TOTAL Weighted Score	0.9		
Subcategory	Target Audience	Early Evidence of Impact	Potential for Transformative Impact
Subcategory Description	Interventions designed for all students perpetuate inequities in career preparation and fail to address critical barriers created and perpetuated – however unintentionally – by institutions and employers. To correct these inequities, the intervention is intentionally designed to benefit students from first-generation and low-income backgrounds	Concept pilot findings indicate (supported by quantitative and qualitative data) the intervention is promising and desirable by intended audience	Transformative impact occurs when interventions will benefit a significant number of students or will impact a small number of students significantly. Transformative impact can occur through breadth (impacting many aspects of development) or through depth (impacting one aspect deeply)
Weights	15%	15%	10%
Selection and Count	Level 3	Level 3	Level 2

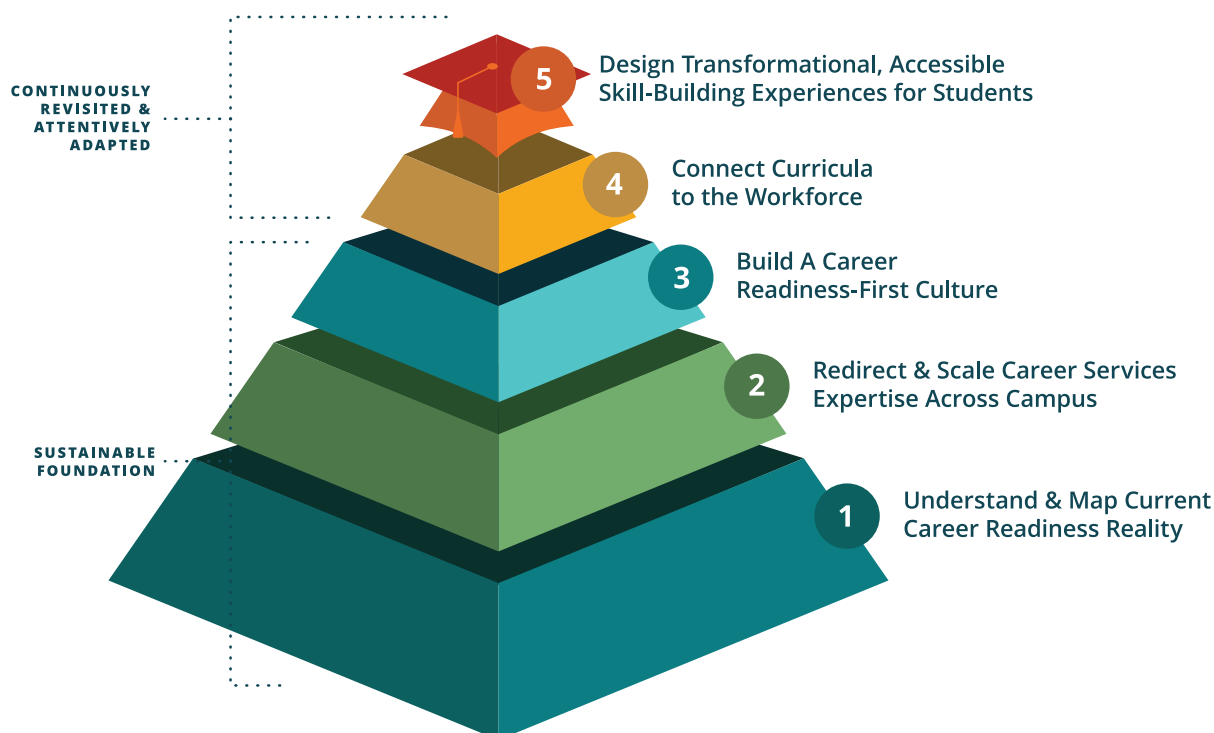
Main Categories	Sustainability		
TOTAL Weighted Score	0.7		
Subcategory	Viability of Needed Investment	Political Feasibility	Campus Desirability
Subcategory Description	Anticipated resources required for the intervention correlates with expected impact (worthwhile return on investment). There is demonstrated interest from founders that would increase the viability of this intervention in the long-term	The intervention aligns to the mission and priorities of the university, and there will be support for this practice from campus leadership and necessary stakeholders	Campuses across the UIA and others express interest and excitement about this intervention.
Weights	10%	10%	10%
Selection and Count	Level 2	Level 2	Level 3

Furthermore, because the qualities of effective career readiness interventions are transferable to other student success efforts, the structure can be adapted to any student success effort or initiative. Student success practitioners that are considering, designing, and/or piloting can use the rubric to assess the potential of new interventions.



RECOMMENDATIONS

A New Model for Equitable Career Readiness



“It’s important for colleges . . . to really be designing solutions that are going to work for workers in this moment. Our country and its higher education system lack a comprehensive career navigation system that can help students, parents and workers make well-informed choices. The solution to our career services woes is not to find a quick fix to a broken system, but to develop a new and better one. Modernizing the career development function of higher education requires us to stop and appreciate the vital role that colleges play – not just as places of learning, but also as brokers of the sort of connections, social capital and networks that are still preconditions for economic mobility.”

– Maria Flynn, Jobs for the Future President & CEO

Leaders in the fields of higher education and workforce development have long been calling for an overhaul to career readiness within higher education. This call has included the need to work together to address the research and insights [Strada Education Network](#) and others have gained and begin to move toward generating solutions and into action. Universities who adapt to students' career readiness needs in this critical moment in our nation's history will be best positioned for future success.

The New Model for Equitable Career Readiness holistically integrates effective practices and solutions that when layered upon one another, transform workforce preparedness from a responsibility that sits within one underfunded and understaffed campus unit, to a cultural linchpin for successful student outcomes. While it may be tempting for an institution to selectively choose which levels or activities of the model to implement, the outcomes and learnings of the BGEE project have shown the most promising results come from the strategic, gradual application of change management and capacity building practices. By beginning at Level 1 of the model, aiming for the gold star standard of Level 5, universities, and thoughtfully working through the levels in-between, institutions will create a career readiness-first culture, organically secure faculty and employer buy-in, and exponentially scale the positive impact of student engagement with career services expertise. The thoughtful and effective implementation of this model will likely result in better career outcomes for students, more robust campus-employer partnerships, and an increased ROI for the institution.

UNDERSTAND & MAP CURRENT CAREER READINESS REALITY

Institutions do not know how students experience career readiness on their campus because they don't have access to, or even track, student career outcomes or career-related activities data.

- Apply the Student-Centered Collaborative Change integrated framework to first understand: 1) the reality of college-to-career experiences for students at the institution, 2) build institutional capacity, and 3) guide the implementation process
- Discover duplicative services, gaps in offerings, and number of career readiness activities specifically serving first-generation, low-income, and students of color
- Invest in and utilize a strategic suite of tools and platforms to more meaningfully scale student career readiness and track long-term career outcomes. This suite of tools should include:
 - AI/Machine Learning Alumni Career Outcome Tracking Tool
 - Resume Development Tool
 - Skill Translation Tool
 - Job Posting Analytics Tool
- Understand the particular experience of first-generation students and students from low-income backgrounds on their career paths
- Understand faculty and staff incentives by assessing formal and inherent reward structures and collaborating with leadership
- Build and maintain robust collaboration and partnerships internally and externally by applying the BGEE robust partnership definition in practice
- Redesign inclusively by prioritizing and regularly engaging with stakeholders and students

REDIRECT & INFUSE CAREER SERVICES EXPERTISE ACROSS CAMPUS

Career services professionals yearn for the chance to not spend their time in transactional interactions with students, such as reviewing resumes for grammatical errors. They want to provide career readiness in a deep, meaningful way, especially to the students who need it most. Their critical expertise has been siloed at the institution due to continuous underfunding and understaffing. It must be recognized, leveraged, and scaled across the institution.

- Prioritize career services professionals as the centralized source for career readiness expertise.
- Scale resources, effectiveness, and impact by building a collaborative cross-campus career readiness coalition,
- Prioritize offerings for first and second-year students
- Prioritize career readiness efforts that increase student confidence and overcome imposter syndrome
- Infuse career readiness with diversity, equity, and inclusion best practices – and align efforts for synergy
- Assess and retire career-related activities not clearly leading to quality career outcomes for students
- Create plug-and-play resources for faculty training or exploratory course for students, complete with cohort model for faculty and student engagement
- Scale equitable access to, and direct engagement between, student and employer

BUILD A CAREER READINESS-FIRST CULTURE

If career readiness feels like “something extra” to a student, it feels like something “no one has time for” to faculty and staff. The expectation to serve students in this way doesn't yet exist. By demonstrating the importance good career outcomes have for institutional ROI, and communicating that career readiness is an expectation of service to students and profession, career readiness becomes “how we do things around here”.

- Meaningfully engage with faculty by providing information and resources that scale career services expertise and meet faculty needs
- Collaborating with the campus coalition, along with internal and external stakeholders, develop career readiness-focused professional development for leadership, faculty, and staff
- Update incentive structures to expect and reward faculty for participating in, and championing, career readiness professional development and activities
- Provide cohort-based professional development for faculty and staff to understand the unique strengths and needs of first-gen, low-income, students of color

CONNECT CURRICULA TO THE WORKFORCE

The most efficient and effective way to scale career readiness across campus is through the classroom. It's the one place on campus students are required to go. We can't expect every student to, by chance, find their way to a career center. We must bring it to them, where they are, and partner with faculty and employers to do so. The first three levels of the model build the necessary foundation to earn faculty buy-in and support for this level's activities.

- With faculty and employers, redesign classroom experiences and curricula with the following embedded:
 - Informal mentoring moments for simple, yet powerful, career readiness interventions in and out of the classroom
 - [NACE competency](#) integration into curricula, with assignments specifically devoted to skill development
 - Skills and competencies listed on assignments and syllabi
 - Robust employer engagement in and out of the classroom
- Ensure that career content is integrated in ways that are inclusive to all student identities.

DESIGN TRANSFORMATIONAL, ACCESSIBLE SKILL-BUILDING EXPERIENCES FOR STUDENTS

Just as career readiness must be delivered to students in the classroom, skill-building experiences for students must be provided more intentionally, and at a larger scale. This level of the model is the pinnacle of successful career readiness at an institution, and should be measured as the ultimate goal for setting students up for post-graduation employment. Once this level of the model is achieved, students will no longer feel as though being job-ready is "something extra", and will enter the workforce with confidence and competence upon graduation.

- New or redesigned, intentional internships and other skill-building experiences specifically designed for first-generation, low-income, and/or students of color and includes:
 - Robust employer engagement and mentorship opportunities
 - Mentorship opportunities that center around projects or other real-world application of skills
 - Professionally-scoped projects that empower and provide agency
 - NACE competency integration and assessment
 - Virtual cohorts and connections to build students' confidence and sense of belonging
 - Organic expansion of student networks and social capital



VIII. SUMMARY AND NEXT STEPS

The BGEE project helped seven UIA institutions take a closer look at their career-readiness practices, identify gaps that have led to reduced career preparation access and unequal outcomes for first-generation and low-income students, and design and pilot potential solutions. The pilot phase was not the end of the BGEE project on each campus, but rather the end of the beginning. BGEE universities will continue to share what they learn from their pilot projects and help inform each other about promising practices moving forward.

Using the Student-Centered Collaborative Change integrated framework and the New Model for Equitable Career Readiness, BGEE campuses will continue to work with cross-campus stakeholders and employer partners to improve career readiness practices and outcomes. By laying the groundwork for sustained support among campus leaders, faculty, and career services staff, BGEE participants have increased momentum toward helping more students graduate prepared for the workforce. We look forward to reporting additional learning and outcomes in 2021 and beyond, as the New Model for Equitable Career Readiness is applied across the UIA.

To begin your institutional journey applying the New Model for Equitable Career Readiness, we recommend the following initial action steps:

- 1 Complete the initial self-assessment included in the BGEE Playbook [Toolkit](#) to determine how your institution might prioritize action steps, and if your institution is ready to transform the current status quo into a career readiness-first culture.
- 2 Build or refresh a diverse guiding coalition across internal campus units and external stakeholders which includes:
 - Career Service Professionals
 - Advisors
 - Employer Partners
 - Administrators
 - Faculty
- 3 Map the current landscape of career readiness on your campus to understand how students come to receive career development at key milestones
- 4 Build data capacity to understand which students participate in career readiness activities, and track alumni career outcomes, by partnering with institutional data teams
- 5 Authentically empathize with students and understand their unique needs through conducting:
 - 1:1 interviews
 - Focus groups
 - Using customer experience surveying techniques
- 6 Intentionally involve students in the process of designing and adopting solutions via collaborative workshops that address specific problems – identified through your institution's empathy research.

Advice from BGEE participating institutions:

<https://vimeo.com/livewildfilms/review/499831824/fee15e31ca>

Interested in learning even more about the BGEE project or how to implement the New Model for Equitable Career Readiness? Contact central@theuia.org.

APPENDIX

PROMISING OUTCOMES OF OBSERVED WORK

While the focus of the BGEE project was on designing new solutions, the BGEE core team held unique positionality within the UIA institutions, allowing the team to witness and support other college-to-career work occurring on participating campuses. Due to the cross-institutional nature of the project's work, core team members had a unique, birds-eye perspective of the potential of different programs, technologies, services, and initiatives that showed promise.

Micro-internships

Micro-internships are short-term paid, remote, project-based work experiences for students. These projects are typically between 20 and 40 hours total, completed over an average of a few days or weeks, and focus on providing a discrete deliverable to the employer. Applications and hiring decisions are typically quick for these kinds of projects, due to the low-risk, low-time commitment nature of the work. Students can apply to as many, or as few, as they would like. There are two major providers of micro-internships, [Parker Dewey](#) and [Riipen](#).

The BGEE core team hired student micro-interns through Parker Dewey to assist with the project's collaborative activities. Micro-internships are pitched to employers as a way to quickly add value by hiring skilled short-term employees, and the core team found this to be the case. These students added valuable capacity to BGEE campus teams as they attended national retreats, conducted qualitative research, and served as subject matter experts. The UIA subsequently hired two BGEE micro-interns for the Summer 2020 cycle to work on digital content creation.

Additionally, one of the BGEE campuses engaged in a micro-internship pilot with Parker Dewey, led by one of the BGEE fellows. The pilot sought to test student interest in micro-internships. The initial findings suggest high desirability, evidenced by bringing over 700 students from a limited pilot pool onto the platform in just three months. Other pilot results highlight quality student learning through their experiences and student appreciation for the opportunity to test different jobs in a low-stakes environment.

Building Data Capacity

As evidenced by conducting the baseline data assessment in Phase I, collecting student career outcome data can be cost prohibitive and challenging. Throughout this project, UIA campuses obtained access to data tools that allow for deeper understanding of job markets, in-demand skills, and alumni career outcomes. The below tools have been used on a UIA campus at some point during the project.

[Emsi](#)

Emsi combines data sets from various government sources, job postings, online worker profiles, and resumes, and uses a skill taxonomy to connect people, education, and the workforce. At one campus, staff used the Emsi Analyst tool to identify industries that were hiring during the COVID-19 pandemic, and help guide students to those industries. The Dean of an Interdisciplinary Studies program at one university used worker profile data to understand the industries, employers, job titles, and skills accessed by the university's graduates.

[Burning Glass](#)

Burning Glass Technologies focuses on real-time labor market data to provide critical, actionable insights into the current labor markets. Burning Glass offers a number of solutions focused on different industries. BGEE participating campuses found the Program Insight and Career Insight tools most useful. At one institution, staff began using this tool to help students understand career paths, related job titles, and opportunities in a given geographic area of interest.

[SteppingBlocks](#)

SteppingBlocks is a data and analytics engine that provides workforce and education outcome insights on over 100 million people in the U.S. SteppingBlocks offers two different products, a Student Platform and a Graduates Insights dashboard. One campus is using SteppingBlocks Graduate Insights to highlight alumni career pathways to students in different programs, so that students can see the different pathways prior students with their degree have taken. Another campus is using the Student Platform to help students understand different career paths based on either job goals or current major.

[AstrumU](#)

AstrumU focuses on translating educational experiences into economic opportunities via their skills translation engine. Offering an array of products, AstrumU focuses on helping students, institutions, and employers better understand in-demand skills and job pathways. AstrumU offers a learner application that helps students understand how their current skills align to different career pathways. A BGEE institution is currently in a contracting process with AstrumU to understand the career pathways and skill utilization of graduates from the last 10 years.

Digital Tools

In recent years, over \$3 billion in venture capital has been invested in startups dedicated to addressing career development needs. UIA campuses were able to trial and test some of these solutions during the project.

[Upkey](#)

At least two BGEE campuses elected to use Upkey during the project. Upkey offers virtual career development opportunities for students, focusing on the experiences of underrepresented students. The platform currently has two different modules; a resume development module and an elevator pitch module. In these modules, students will participate in a series of activities intended to increase their understanding of key career development milestones, and then produce a strong draft of either a resume or elevator pitch. BGEE campuses have been using this technology to increase capacity and scaling of resume development.

[Roadtrip Nation](#)

Resulting from their work with the BGEE project, the Center for Career opportunities at Purdue acquired the use of Roadtrip Nation. Roadtrip Nation has enhanced the career exploration tools and guidance, Purdue provides students. In addition to making this available to all students with their Purdue email address, the CCO teamed up with Academic Advising to include this as a resource for students who receive academic probation notices. The BGEE team's summer pilot included providing resource slide decks that classroom faculty might share with their students. Roadtrip Nation was one of the resources featured in the deck for students beginning their Purdue career during the Early/Summer Start programs.

Georgia State University's College-to-Career Quality Enhancement Program

The Georgia State University College-to-Career (CTC) initiative's primary strategic goals is to develop a systematic approach that allows students to identify and articulate the career readiness competencies they learn in their coursework. This was born out of research showing that students listen to faculty as their primary source of career guidance and information. However, faculty members traditionally have been hesitant to embrace the concept of "teaching" specific career competencies in class. GSU had to determine how to help faculty become collaborators in preparing students for careers. The resulting model is based on the premise that faculty are already, in fact, transferring knowledge and providing experiential learning within the curriculum. The disconnect was that students did not understand how certain assignments furthered their career aspirations, and faculty were not specifically explaining how classroom knowledge and lessons translated to career skills. GSU decided to provide comprehensive support to make it easy for faculty to include career concepts in their teaching and to promote connections between coursework and career preparation.

It is important to help students begin to think about their career goals from the time they entered the university. CTC has three learning objectives: 1) that students will become **aware** of their career option and the actions needed to pursue them; 2) that students will make the **connection** between what they are learning in the classroom and how that makes them career ready; and 3) that they will be able to **demonstrate** their career readiness to potential employers. The Awareness objective is undertaken in the freshman orientation course that all students are required to take in their first semester. The Connection objective is undertaken in the core of their major and designated by that academic department. For the Demonstration objective, every student is given an eportfolio and encouraged to post artifacts that highlight their career competencies.

Since the implementation of CTC in Fall 2018, engagement with Career Services has increased by almost 300%. In addition, the use of technology that supports career resources has increased to almost 2/3 of the student population.

Arizona State University's Working Learners Program

The Working Learners Program at Arizona State University is an integration of work into the university experience by facilitating work opportunities for program participants, and is a part of ASU's commitment to transforming the university work experience. ASU graduates will be able to address the growing mismatch between employee skills and job requirements in a post-industrial world.

The Working Learners Program prepares learners to be workforce-ready by providing opportunities to develop soft skills, technical skills, and entrepreneurial mindsets. It embraces an integrated model of work and learning, by helping working learners earn income and be successful in their future workplace.

Under the Working Learners Program, supervisors expand their roles to act as career guides and mentors to their working learners. Working learners meet with their supervisors to discuss their work and goals, and, acting as mentors, they'll help students' design their job to prioritize the skills they will need to be successful when they leave college.

Working learners can take the "Life by Design" course and discover what their priorities in work, school, and life are, so they can design their personal working and learning journey. They can also choose from a variety of micro-courses, which are half a credit each, and consist of a hands-on experience and a reflective activity. These courses develop core competencies in areas like understanding data, communicating effectively at the workplace, and navigating ethical decisions.

Working learners are provided the unique opportunity to capture their transformative work through badging and a blockchain-based transcript that records all of their work and learning experiences. This new methodology provides students the ability to describe their work and learning experiences to potential employers and is a powerful, proven method of discovering your identity and purpose, making the most of each experience by using them as opportunities for growth.

COVID-19 AND ITS IMPACT ON CAREER SERVICES

The BGEE core team observed and supported campus Career Services offices during the disruption of the Spring 2020 semester due to COVID-19. The core team sought to provide opportunities for Career Services leaders to share best practices, ask challenging questions, and provide mutual support during an uncertain time. Below are a few of the key learnings and observations made by the core team about these pivots:

Employers Look to Universities for Leadership

Both campus teams and Employer Working Group members report that employers rely on universities to lead the conversation when it comes to the job market and students. The Career Services Director on one BGEE campus quickly pulled together its Employer Advisory Board to discuss ways to continue commitments made to students for internships, how to recruit virtually, what they are hearing from students, and how they will continue to support employer recruiting during these uncertain times. These discussions led Employer Advisory Board members to have similar conversations with other partner institutions.

"We Can Do It Virtually"

Many Career Services units resisted offering virtual career advising appointments, workshops, and recruiting events prior to COVID-19. The necessary pivot to virtual solutions highlighted that not only could institutions offer this kind of service, that it often led to higher engagement numbers and increased access for various kinds of students. One BGEE campus saw an increase in student demand and attendance at events that were hosted on Zoom and live streamed to social media platforms, leading to higher semester-to-semester student engagement with Career Services events, even during the pandemic.

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