SPANNING THE WORKFORCE SKILLS COMMUNICATION GAP

A PLAYBOOK FOR EDUCATORS, EMPLOYERS, AND STUDENTS

ONLINE LEARNING CONSORTIUM

HP
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About Our Organizations

The Online Learning Consortium (OLC) is a collaborative community of education leaders and innovators dedicated to advancing quality digital teaching and learning experiences designed to reach and engage the modern learner—anyone, anywhere, anytime. OLC inspires innovation and quality through an extensive set of resources, including best-practice publications, quality benchmarking, leading-edge instruction, community-driven conferences, practitioner-based and empirical research, and expert guidance. The growing OLC community includes faculty members, administrators, trainers, instructional designers, and other learning professionals, as well as educational institutions, professional societies, and corporate enterprises. Learn more at onlinelearningconsortium.org.

HP Inc. creates technology that makes life better for everyone, everywhere—every person, every organization, and every community around the globe. For higher education, HP combines instructional innovation, applied research, data science, extended realities, 3D additive manufacturing, esports, and advanced cybersecurity to empower the Campus of the Future. Learn more at http://www.hp.com/education.
EXECUTIVE SUMMARY

The core element binding the synergistic relationship between HP and the OLC is a commitment to examining how institutions of higher education are meeting the needs of their students. This yearlong qualitative research project examined the perspectives, experiences, and expertise of academic leaders, program directors, and faculty in tying learning outcomes to workforce skills at a variety of public and private two-year and four-year institutions across the United States. This research centered on students’ workforce skills development, which is particularly important at this critical juncture in time as workforce needs and student aspirations have rapidly shifted due to the global pandemic.

Through the deep examination of these academic leaders, program directors, and faculty perspectives, the findings of this exploratory study can catalyze further investigation into the focus on workforce skills development. By capturing innovative strategies for teaching workforce skills and training students to communicate their workplace skill proficiencies, this study provides new perspectives for institutions working to foster student success by integrating workforce trends in alignment with their institutional, program, and course outcomes.

The purpose of this qualitative study was to examine whether, or to what extent, institutions are using workforce trends to align and measure learning outcomes and help students communicate their level of workplace skill proficiencies to potential employers. If students can’t effectively communicate their level of workforce skill development across different areas and articulate their strengths using language that aligns with employers’ and industry experts’ expectations, a perceived skills gap will continue to exist.

“If everyone stands still and does nothing, employers and educators will continue to develop on parallel tracks, speaking two very different languages. We must work toward a modern-day Rosetta Stone to decode the skills needed for the future. With a better understanding of jobs, talent readiness, and educational pathways, we can begin to connect our workforce with our postsecondary education and training system and build promising pathways for the future of work”

(EMSI, 2018, p. 31).
ABOUT THIS PLAYBOOK

A playbook provides context and actionable strategies to challenges being experienced in institutions of higher education. This playbook has been developed from the key findings of a study conducted through a research partnership between the Online Learning Consortium (OLC) and HP Inc (HP). This playbook has been designed to serve as a succinct guide for faculty to address the workforce skills gap.

This playbook is designed for institutions and employers looking to amplify their collaborative efforts to graduate qualified and skilled workforce talent. *Spanning the Workforce Skills Communication Gap* presents key findings from a study conducted through a research partnership between the Online Learning Consortium and HP, and will help educators create a cohesive learning experience for students that incorporates awareness, knowledge, and skill building. For students, this playbook offers strategies for developing a professional narrative that tells the story of the strengths they've gained throughout their academic and career experience. No matter where one serves students – a public university, private college, community college, or technical college – this playbook will help design, enhance, and optimize courses by providing strategies for aligning teaching and design principles with workforce trends.
INTRODUCTION

Much has been written about a persistent skills gap between what employers want and what students and new professionals have to offer (Coen & Killian, 2019; Weise et al., 2019; Wolff & Booth, 2017). A less explored angle for examining this skills gap, and the central finding of this study, is the prevalence of a workforce skills communication gap where students actually have relevant workforce skills but lack the skills to effectively communicate these to potential employers. Accordingly, the purpose of this qualitative study was to explore the workforce skills communication gap by addressing the following research questions:

• How is your institution using workforce trends to align and measure learning outcomes?
• How is your institution utilizing workforce trends to design and measure learning experiences connected to learning outcomes?
• What methods are used at your institution to teach students to communicate their level of skill proficiencies?

Data was collected from 18 academic leaders, program directors, and faculty at public and private institutions, including two-year technical and community colleges, four-year institutions, and graduate schools across the United States. Each study participant engaged in a one-hour, semi-structured interview with a member of the research team. The research team gathered deep insights through an exploration of data collected from participants’ in-depth responses and an analysis of interview transcripts, recordings, and researcher notes. Data was coded and analyzed to reveal themes in responses. The findings of this study, situated in the context of the study sample, provide compelling perspectives through which to explore the workforce skills communication gap, a major theme that emerged from the data.

“We’re making lists and brainstorming what skills we want them to have when they cross that stage. I think it’s called backward course design. You’re taking that skill that you want them to know and you’re picking it apart and saying, if we want them to know how to create a brochure we need to talk about how visual design influences reception. But we also need to talk about how to summarize information. Well, now we also need to talk about how to use images and graphics to tell our story. Each of these skills are embedded in other courses, so that by the time they get to the internship and the methodology course, they already have these skills. Even though they don’t realize it, now they can implement them in bigger ways.

-Internship Coordinator, Public 4 Year University
RESEARCH FINDINGS & STRATEGIES

Findings from this study highlight opportunities for how institutions might better integrate communication learning outcomes such that students better learn how to communicate their skills, specifically coveted workforce skills, to employers. Moreover, the study suggests that institutions of higher education might better use workforce trends to develop courses, programs, and learning experiences to more clearly demonstrate the skill sets of their graduating students to employers. Topics derived from the five key findings of the research study include:

- Workforce Skills Communication Gaps
- Institution-Employer Collaboration
- Measurement of Learning Outcomes
- Understanding Student Needs
- Student Professional Narrative

These findings suggest the potential for closing the perceived skills gap may lie in innovative educational practices that teach students to effectively communicate their skill set in relation to workforce skills by creating a compelling professional narrative. Such a narrative would allow students to articulate personal and professional strengths in descriptive language that aligns with employers’ and industry experts’ expectations. Furthermore, this study highlights the need for institutions to build robust communication structures and strategies for learning about current workforce trends from employers while communicating to employers the technical and professional skill sets being developed through the institution’s programs.

The goal of this playbook is to provide institutions of higher education with strategies to more effectively leverage workforce trends for institutional decision-making and program and course design. Additionally, these strategies underscore opportunities for institutions, employers, and students to collaborate in ensuring that students enter the workforce with the skills to meet the workforce demand. One of the study’s five key findings highlights a workforce skills communication gap among institutions, employers, and students. The topics covered in this playbook are organized to showcase the three-way disconnect, which impacts institutional strategies for connecting learning outcomes to workforce needs, students’ ability to learn the skills and language needed to develop professional narratives, and employers’ pool of qualified and knowledgeable talent.
1. Workforce Skills Communication Gaps

Highlight Opportunities for Institutional Leadership to Develop Students’ Workforce Skill Competencies in Connection to Learning Outcomes

Connecting workforce skill competencies to learning outcomes creates opportunities for students to apply what they have learned in the classroom to tasks performed in the workplace. For institutions and employers, learning outcomes that align with workforce trends support the mutually beneficial goal of graduating and hiring qualified workforce talent. As technology, workplace values, and trends evolve, learning outcomes must be revisited to ensure that students are poised for success.

“You might suddenly realize that there are gaps in what [students] needed to know. It needs to be considered that maybe there's still going to be some training that is going to fall on the lap of the employer because of certain changes in technology and certain changes in the job.”

-Full-time Faculty - Professor, Community College

Actionable Strategies for Institutions

**STRATEGY:**
Establish institutional-industry partnerships that help employers articulate skill expectations for new professionals and identify skills new professionals lack.

**STRATEGY:**
Cultivate institutional-industry partnerships to develop new professionals’ skills through internal workforce development programs and ensure skills development persists after graduation.

**STRATEGY:**
Train students to articulate their workforce skill levels by reflecting on their strengths and learning experiences in ways that allow them to effectively communicate their skills to employers.
2. Institution-Employer Collaboration

Create Opportunities to Identify and Utilize Workforce Skill Development Trends for Program Development and Revision

The most innovative institutions, programs, and courses position the importance of workforce skill development within education alongside the development of professional, or “soft skills,” which include creativity, critical thinking, collaboration skills, and problem-solving skills. In addition to soft skills, participants also used other terms to describe proficiencies that support workforce talent in any role.

“All of our outcomes are approved by our employer advisory committees and that’s one of the things we call core ability, some people call them soft skills. They need those core abilities, and what we try to do with them as much as we can in the programs is contextualize them to the type of work that they’re going to do.”

- Director of Instructional Effectiveness & Flexible Learning, Technical College

“Instead of just a sociology course, it’s going to be taught from multiple perspectives and there’s always some multi-disciplinary element within it. For example, in my music class I’m teaching them programming, but I’m also talking about music and then we also get into math. It’s all about connecting whatever the main topic is to the other disciplines.”

- Assistant Professor of Computer Science, 4 year private university
Interview participants noted that for programs with accreditation or licensure requirements, data collection on the measurement of learning outcomes was expected. In programs without accreditation or licensure requirements, data collection on learning outcomes occurred in a patchwork of systems and processes. Regardless of program requirements, participants noted that many of their institutions collect data, but fewer participants believed institutions effectively used the data they collected to drive student success.

“So we have overarching core abilities in our institution that are soft skills, daily things, like communicating effectively and thinking critically. Each program has their own program outcomes and we actually map those program outcomes to our core abilities and the program outcomes map down into each one of our courses, because we are now [implementing] competency based education.”

-Director of Instructional Effectiveness & Flexible Learning, Technical

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**Actionable Strategies for Institutions & Employers**

**STRATEGY:**
Cultivate a full range of skills, from professional skills to field-specific technical skills, through experiential learning opportunities that are particularly powerful when paired with opportunities for reflection.

**STRATEGY:**
Promote badging and credentialing programs for skill development, upskilling, and articulation of skills that aid students in recognizing and communicating their technical and professional workplace skill proficiencies.
3. Measurement of Soft and Hard Skill Learning Outcomes

Include Learner, Professional, and Field-Specific Skills in Curriculum

While advisory committees are valuable and provide regular, annual, or biannual insights at many institutions, more sustained collaboration would strengthen the relationships and communication between academic and industry stakeholders.

“I am part of a pilot that we’re doing with an agency. We submitted our program learning outcomes and syllabi for many of the classes. They go through that and match our outcomes and objectives to what is being requested by the job market right now. They have this database of jobs and they are going to see where our learning outcomes match job requirements and then tell us where there are gaps. If it’s something that the leadership thinks is valuable they might use it for other programs as well. I’m very excited to see. That’s kind of our first real formal way of matching what the job market is.”

-Lecturer & Degree Director, 4-Year Public

Learner Skills

Learner-centered skills bridge technical and professional skills. Centered on self-reflection, individuals reflectively think about the skills they possess, skills they’re building, and why those skills matter. These skills begin in the classroom and extend to professional and personal domains.

Professional Skills

Professional skills include soft skills, such as critical thinking, collaboration, and problem solving skills. Professional skills also encompass the individual’s ability to articulate their experiences and levels of skill development to a variety of stakeholders orally, in writing, and through application.

Field-Specific Skills

Field-specific skills include technical, or hard skills that prepare students with a foundation of knowledge and technical skills to succeed in a specific professional field (e.g. nursing, business, education.) Field-specific skill development begins in the classroom and extends to the workplace domain.
Actionable Strategies for Institutions & Employers

STRATEGY:
Provide sabbaticals for faculty to engage in field work that provides industry experience and knowledge to be applied to teaching strategies, curriculum development, and interactions with students.

STRATEGY:
Highlight the industry experience of adjunct and contingent faculty by developing formal and informal mechanisms that showcase their skills, and use those experiences to amplify course instruction and catalyze student learning.
4. Understanding Student Needs

Help Faculty, Programs, and Institutions Foster Student and Workforce Success

Advising, career counseling, and other student support services provide key touch-points for school leaders to learn more about what students need. They also foster institutional awareness regarding their capacity to meet those needs. Typically, faculty and those who serve in student support roles engage with students to not only learn more about student interests and barriers to success but also to connect students to opportunities and additional resources outside of the institution. The industry experience of faculty can also serve to amplify the connection between what students are learning in the classroom and what it looks like to work in their field.

“The navigator would also have had some insight into who’s hiring in the field. Because they would be part of the advisory board as well. Which makes it a lot easier for a navigator to call their employer partner and say ‘Hey, are you hiring? You know, I’ve got a great candidate here.’”

-Program Coordinator, Community College

Actionable Strategies for Institutions and Students

STRATEGY:
Highlight the industry experience of adjunct and contingent faculty by developing formal and informal mechanisms that showcase their experiences and use those experiences to amplify course instruction and catalyze student learning.

STRATEGY:
Create reskilling and skills development opportunities through educational systems and corporate training to maximize the evolution and growth potential for student-worker-human development.
5. Student Professional Narrative

Teach Students to Develop their Professional Narrative and Effectively Communicate Workplace Skill Proficiencies

The institutional work of course and program building, along with the need for employers to articulate the proficiencies of new hires, ultimately converge on student professional narratives. The stories that students are able to tell about themselves through cover letters, resumes, interviews, and informal conversations create a summative professional narrative or identity. These professional narratives highlight the need for holistic collaboration amongst all actors, both in helping students tell their stories and providing them with the necessary skills to succeed post-graduation.

“For students, specific courses in general education and within their major could require them to develop and post artifacts considered most useful to employers. A web-based link would allow students to access and update their information after graduation and as they progressed through their careers, with the university supporting these alumni by continuing to host their e-portfolios”

Ward and Moser, 2008

Students would benefit from explicitly reflective opportunities that develop their metacognitive skills throughout their programs of study. These opportunities would help students identify and communicate their professional narratives -- their professional and technical skill sets -- as they develop through their learning experiences, courses, and programs.

“I do try to advise my students to keep a professional journal because there are things that are happening every day at our workplaces that are examples of how you use your communication skills or use your critical thinking skills. Employers want to know about that, so I try to get them to be highly reflective of what they’ve already done and what they already know.”

-Associate Professor, Community College
Participants also highlighted the importance of tracking alumni employment data to understand how graduates are using their academic credentials and skills in the workforce. Alumni can potentially inspire students with similar life experiences and/or career trajectories.

“We always want to have information from our graduates, and it’s something that our curriculum committees are constantly asking for. Do we know what our students are saying? How are they applying the knowledge they’ve learned? We will finally have some data from the graduates of our college talking about where they ended up after they graduated. That’s really what we want to know. We want to see how the degree translates to jobs.”

- Lecturer & Degree Director, 4-Year Public

**Actionable Strategy for Institutions, Employers & Students**

**STRATEGY:**
Promote badging and credentialing programs for skill development, upskilling, and articulation of skills that aid students in recognizing and communicating their technical and professional workplace skill proficiencies.
“I think we just don’t often turn attention onto students themselves and ask them to really reflect on what they have and also what they don’t have, because while it’s great to acknowledge their super powers, it’s also really important sometimes to be honest with students about where they need to grow.”

-Associate Professor of English, Four-Year Private College

Institutional leaders and faculty should work toward maximizing opportunities for innovation to bridge gaps between institutions and students, institutions and employers, and students and employers. Connecting course learning outcomes to in-demand hard and soft workforce skills, by providing experiential learning opportunities and intentionally helping students develop learner skills, professional skills, and field specific skills, cultivates student success in and beyond higher education classrooms. These opportunities prepare students to meet the needs of employers as they transition into the workforce and continue to develop within their professional roles.
CONCLUSION

The potential for closing the workforce skills gap may be cultivated through collaborative efforts among institutions, employers, and students to implement strategies for connecting learning outcomes to in-demand workforce skills. Moreover, when students reflect on their academic and professional experiences to construct professional narratives that articulate their strengths, they are poised for success as they enter the workforce. This study highlights the importance of building robust communication structures and strategies for learning about current workforce trends. In the figure below, the strategies discussed in this Playbook are presented to illustrate how and where they can be applied – from student matriculation to graduation and employment.

One study limitation that must be noted was the lack of employer and student participants. Closing the workforce skills gap will require employer perspective on what skills students need to qualify for and excel on the job. We call for future research that engages all of these actors to better understand the synergies, challenges, and successes that exist on campuses across the US. There is also further opportunity to better understand how existing programs and partnerships between institutions, employers, and students can address workforce skills gaps and foster student success, what specific elements of collaboration between institutions, employers, and students are most beneficial, and how they vary across contexts.

Strategies for Closing the Workforce Skills Gap
Through Collaboration Among Institutions, Employers, and Students
REFERENCES


