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LIBERAL ARTS AT THE OFFICE

Addressing the New Skills Gap

presented by COLLEGE for AMERICA



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Closing the skills gap for frontline workers at major U.S. employers requires a better bridge between what colleges and universities offer and what the workplace requires. Discussions about this gap too often get characterized as simplistic debate. On one side are educators insisting on an impractical ideal of the liberal arts. On the other side are employers pressuring universities to compromise that ideal by providing "mere" workplace skills training.

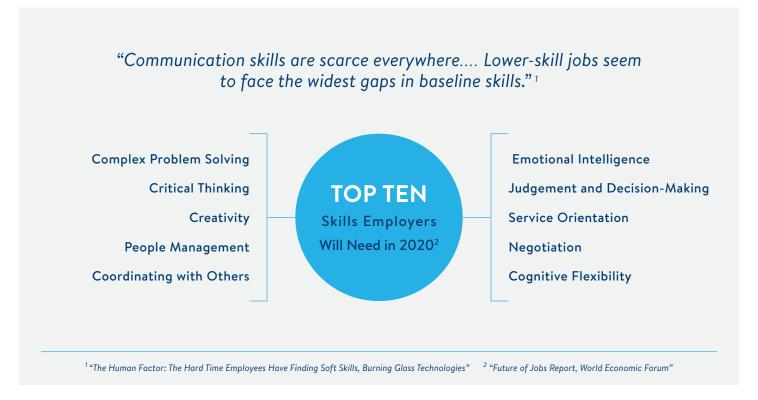
In fact, employers in multiple surveys have said they are eager to have a workforce with higher order skills such as creativity, critical thinking, communication, and cognitive flexibility. It's as if employers and educators can't hear that sometimes they are talking about the same thing.

It doesn't help that these discussions take place with an imperfect vocabulary, starting with the term liberal arts, which often prompts confusion or indifference among working adult students and others outside of academia. Other terms like general education, 21st century skills, foundational skills, soft skills, and cognitive skills have their own limitations.

At College for America, we usually find that once a discussion about the liberal arts moves to specific examples, everyone understands what is being talked about, and everyone agrees it is important. Today's employers desperately want frontline employees who are excellent at writing, communication, analysis, and problem solving. In fact, economic and technological changes mean these skills are not just relevant; they are becoming mission critical.

But employers and working adult students also want colleges and universities to be more precise than they traditionally have been about how those skills connect to workplace needs. It's not good enough anymore to put a student through a philosophy course and to say she is somehow automatically better at higher order skills in ways that will matter in the workplace. For a health care aide who wants to become a department manager, and the employer investing in her, the dots need to be more clearly connected between assignments in that philosophy course and the research and analysis skills she will use at work.

In designing — and continually improving — our competency-based online degrees at College for America, we talk frequently with employers and other thought leaders about how to connect those dots. Below are excerpts from recent interviews that specifically tackle the question of the liberal arts and of how to translate those skills to the workplace.



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Matthew Hora, Assistant Professor, Adult and Higher Education UW-Madison

Hora and his team at the <u>Wisconsin Center for Education</u> Research focus on how the skills gap narrative plays out in two critical industries: advanced manufacturing and biotechnology. To understand the alignment between education and industry, they interviewed 145 Wisconsin employers and educators. The <u>resulting policy brief</u> provides recommendations for how lawmakers and educators should address the skills gap. Hora's book, <u>Beyond the Skills Gap:</u> <u>Preparing College Students for Life and Work</u>, was released November 2016 by Harvard Education Press.

What were you surprised to hear from employers in your study?

"Lifelong learning" is an education buzzword, but we heard it more from employers than educators. Manufacturers aren't just making the same diesel pump every week for years on end, and employers are struggling to find people who have flexible intellectual and social skills to learn new machinery and processes quickly.

How well do the competencies developed in colleges translate into the workplace?

Both educators and employers want many non-cognitive competencies, like communication, to be embedded within the discipline. Educators want students to know how to communicate within a biology lab. Employers want employees to know how to communicate in frontline customer service.

Problem solving in an advanced manufacturing context is very different than problem solving in a biotechnology research lab. Basic cognitive abilities can be applied to both settings, but as you go higher up within a discipline, it's no longer generic.

How does a general education background prepare employees with these skills?

Non-cognitive competencies can be taught in any course. Something like teamwork or communication doesn't need to be taught in arts and humanities. It can be in a math course or biology.

The difference is that the arts and humanities are particularly well-suited for certain types of skills. Employers are looking for the ability to resolve conflicts and to interact with other cultural groups. You aren't going to learn that in chemistry, but a sociology or anthropology course will teach how to understand differences. That's one of the arguments in favor of general education. It gives a student a broad range of skills across disciplines.



"That's one of the limitations of the bootcamp model that's emerging. There's a role for them, but learning how to properly and adequately solve problems takes time."

Is the skills gap helping or hindering the way universities and employers work together?

It has put the idea that college is about job preparation on the radar screens of policy makers, but the narrative can lead to quick-fix solutions. A technical college instructor we interviewed brought up the idea of training "habits of mind" while teaching electrical repair. He said, "I'm not teaching how to read a manual or apply a cookbook recipe. I'm trying to teach a way to think." The reason that's so important is his students will rarely come across the same problems — they must be prepared to think on their feet.

That's one of the limitations of the bootcamp model that's emerging. There's a role for them, but learning how to properly and adequately solve problems takes time.



Takeaway

Help employees become lifelong learners, or you'll be limited to yesterday's processes.

Skills for succeeding in the workplace according to employers and educators 1



EMPLOYERS

Technical ability
Technical knowledge
Lifelong learning
Problem solving
Communication

Work ethic

Adaptability
Self-motivation
Interpersonal skills
Teamwork
Experience



EDUCATORS

Technical ability
Work ethic
Technical knowledge
Problem solving
Teamwork
Communication

Critical thinking Innovativeness Attention to detail Lifelong learning Troubleshooting

¹ From the Wisconsin Center for Education Research policy brief, "'A Different Take on the 'Skills Gap': Why Cultivating Diverse Competencies is Essential for Success in the 21st Century Economy"

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Ryan Craig, Managing Director, <u>University Ventures</u>

Ryan Craig is the author of *College Disrupted: The Great Unbundling of Higher Education* and of a popular newsletter analyzing the higher education and workforce development marketplace. His investment fund University Ventures works with colleges and universities that often form innovative partnerships with companies to bridge the last mile to training. (Revature, profiled below, is a University Ventures investment.)

Do you think employers value liberal arts skills?

If you ask a senior executive at a large organization, they believe critical thinking, problem solving, and the like are best developed through a liberal arts curriculum and a four-year degree. But if you ask the algorithms that are currently the gatekeeper to their organizations via the applicant tracking systems, those are filtering based on keywords that incorporate more technical skills than cognitive skills. Part of the reason is it is easier to identify technical skills required for a job than to think of ten different ways to say "critical thinking and problem solving." But the brilliant liberal arts graduate is not going to get through the filters despite your belief in the value of a liberal arts education.



"That's the fundamental source of the skills gap. The only way to address it is through competencybased hiring."

It sounds like there isn't a good way to convey what foundational skills are.

That's the fundamental source of the skills gap. The only way to address it is through competency-based hiring, which means you are actually valuing the competence of the candidate. That means looking at work samples, credentials, badges, and assessments.

These are the ways sourcing and training are going to be done in the future, because when you've got eight million people looking for work and six million jobs, clearly there's something broken with our filtering functions.

What are you hearing on this subject from the companies you are investing in?

It's all about building bridges between the competency suppliers and those who are demanding the competencies. Universities also need to incorporate more technical skills into the curriculum, whether they do it themselves or by partnering with a third party. Graduates should be conversant with the basic applications of the professional world — not just Microsoft Office but tools like Salesforce.

What would you advise employers and educators about developing both foundational and technical skills?

The most remarkable development in higher education is not the affordability crisis. It's that we've gone from 50% of students enrolling in higher education primarily for reasons of employability to more than 90%. We have a generation that is hard-headed and practical. They are there for one reason: this is the price of entry to a job in a profession valued and respected in our economy, and there is no other path. So we absolutely expect to see more differentiated, lower cost, and quicker paths emerging.

WHAT THE RESEARCH SAYS

A 2015 <u>survey by the Association of American</u>

<u>Colleges & Universities</u> of 400 employers
found that:

- The majority say that both field-specific knowledge and a broad range of knowledge and skills are important for long-term career success.
- When hiring, they place the greatest value on demonstrated proficiency in skills and knowledge that cut across all majors.
- The most important learning outcomes include written and oral communication skills, teamwork, ethical decision-making, critical thinking, and the ability to apply knowledge in real-world settings.



Takeaway

Find university partners who understand the competencies your workplace requires.

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Revature provides "last mile" training in software development to college students and recent college graduates through online and in-person coding courses and bootcamps. The company then places its students in jobs with their employer-partners. Revature works closely with both universities and employers to customize bootcamps to specific workplace needs, which helps ensure students have the enterprise skills necessary to pursue a career in software development.

You work with higher ed, employers, and students. What trends are you observing?

We see more non-STEM graduates pursuing careers in technology. There are hundreds of thousands of jobs

available for college graduates with the right skills, and there are multiple pathways for graduates to gain those skills. Coding bootcamps have helped graduates from all disciplines gain in-demand skills. However, with the average coding bootcamp today costing over \$12,000 for a 12-week program, it is an extremely prohibitive path.

More recently, we are seeing greater collaboration between universities, corporations, and no-cost career pathway providers, like Revature, to provide alternative and accelerated pathways to in-demand, high paying jobs. I've seen firsthand how important this is to university leadership and how committed they are to ensuring their graduates have valuable career opportunities.



"A lot of people think the push for diversity is just about gender and race, but it's much more than that — it's diversity of mind, too."

What benefit do your employer partners see in hiring technology employees from non-IT backgrounds?

If you start with strong critical thinking and problem-solving skills and add a deep set of in-demand industry skills like coding, that combination is compelling to large employers. A lot of people think the push for diversity is just about gender and race, but it's much more than that — it's diversity of mind, too.

Rather than having a group of engineers who all went through the same program, liberal arts students can see things differently. They can bring creativity, collaboration, and team building skills. They can be very dynamic and often bring a different perspective to the team. Employees with these skills are able to communicate well, whether that's with business analysts, senior management, or other people on the software development team.

Have you noticed a skills gap between graduating students and what employers want?

There is a lot of talk about underemployment of college graduates, especially those with non-STEM backgrounds. The reality is employers value a solid liberal arts education, but at the same time they increasingly look for people with good strong technical skills who can help propel their businesses forward. As a result, there's a shortage in the number of students who have the skills needed to hit the ground running.

You're going to see a stronger connection between colleges, corporations, and pathway providers which will make some headway toward bridging the skills gap and will provide more meaningful employment opportunities to talented yet underemployed graduates.

WHAT THE RESEARCH SAYS

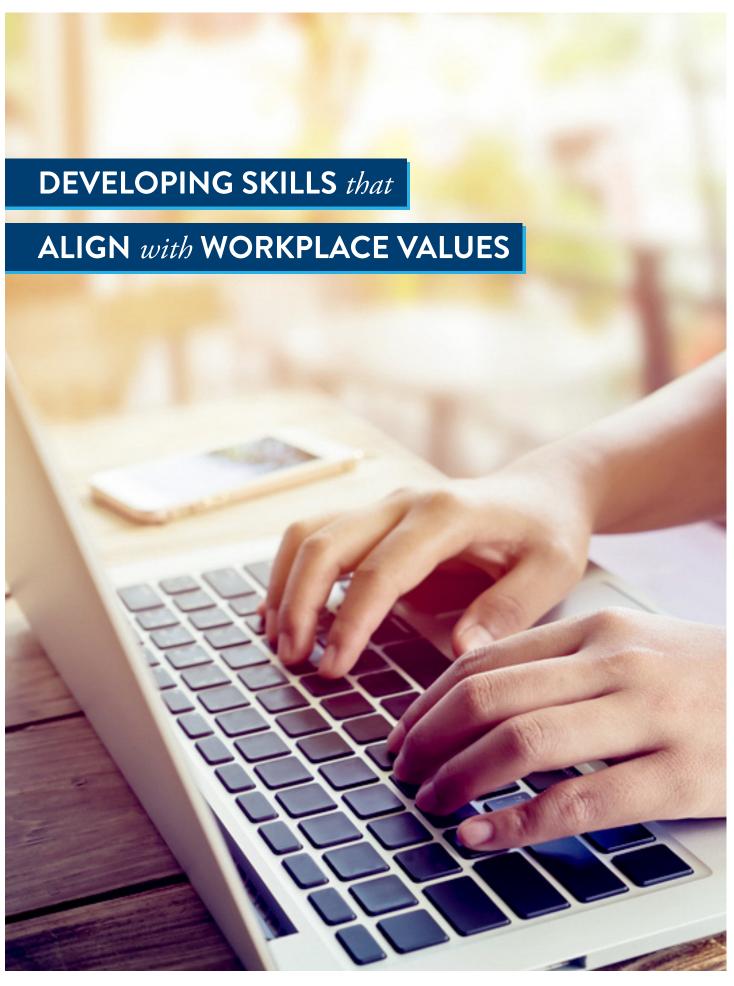
A **2016 Pew Research Center survey,** conducted in association with the Markle Foundation, surveyed over 5,000 U.S. adults about the role of higher education and training in their future career success:

- More than half (54%) say it will be essential for them to get training and to develop new skills in order to keep up with the changing workplace.
- Nearly one third of respondents (35% of total and 27% who had at least a bachelor's degree) don't believe they have the education and training they need to get ahead at work.
- Of the employed respondents, 45% have taken job skills training in the past 12 months.



Takeaway Start with a broad set of critical thinking and problem-solving skills and then add a deep set of industry skills.

The Case for "Diversity of Mind" | P 11



Debbie Krider, Chief Operating Officer, Granite State Independent Living

Granite State Independent Living (GSIL), a nonprofit with eight offices throughout New Hampshire, provides tools for people with disabilities to live independently. GSIL relies on office workers and home care attendants who are attuned to the values of the organization. GSIL recently partnered with College for America to allow employees to attain college degrees.



"As employees move up and become supervisors, giving meaningful and constructive feedback is an extremely important skill."

What skills are the most critical to develop in GSIL's frontline employees?

They need to be able to write well, including the "who, what, where, and when," along with the ability to document future needs and tasks, as well as what has occurred. We're trying to figure out how to be more efficient, so employees need to be open-minded about learning new technology. As employees move up and become supervisors, giving meaningful and constructive feedback is an extremely important skill.

Is GSIL's training designed to help employees move up in their careers or to shore up skills necessary for their current jobs?

A little of both. Many are interested in moving up in the organization, and we like to give people an opportunity to grow and to promote within. It fits both of our goals.

Learning new skills is so important.

What used to be efficient or appropriate can change pretty quickly. Ongoing training helps people get into the mindset of "I need to continue to learn throughout my career."

How has workforce development contributed to GSIL's success?

We've found that education opportunities attract people who want to help our consumers. Most people come to work here because of our culture, values, and mission. They know we are about making people independent and helping them live up to their full potential. It's really rewarding as an employee to work at a company where these are the goals.

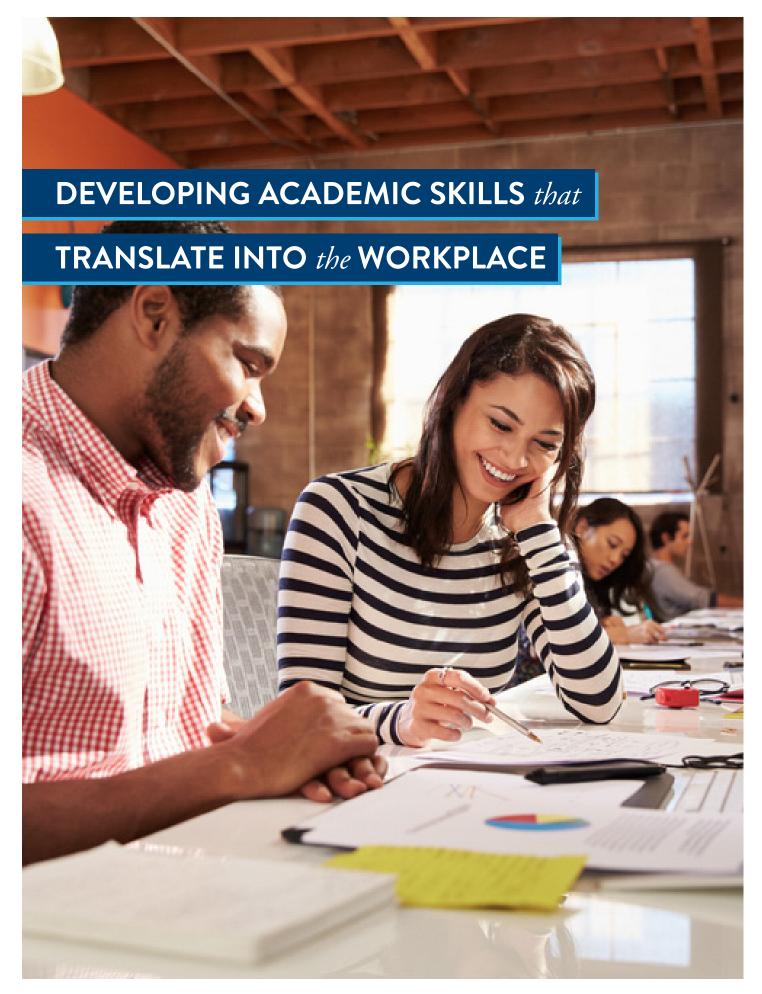


Takeaway

Use educational opportunities to attract employees who want to help your customers.

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Developing Skills that Align with Workplace Values | P 13



Cathrael Kazin, JD, PhD, Founding Chief Academic Officer, College for America

Cathrael Kazin works to extend access to career and academic success to a diverse population of students. She attributes College for America's success in this area to to its competency-based curriculum, which encourages mastery of academic subjects while emphasizing the development of skills employers are looking for.

How do you get employers and educators on the same page about foundational skills?

If you say to employers that our degrees have a strong foundation in liberal arts, they might not see the relevance. But if you say this degree develops critical thinking and problem-solving skills and helps people communicate more effectively in a variety of contexts, they recognize it's exactly what they want. At College for America, we sometimes talk about cross-cutting skills, meaning competencies that cut across academic disciplines.

How can colleges bridge the gap between liberal arts education and the workplace?

Traditional liberal arts education is very content driven, but what drives our program is identifying what people need to know and be able to do when they graduate. Many people have the idea that competency-based education is just vocational. Our students are exposed to anything they'd find in a general education program, but we're focusing on developing competencies that would be valuable in any situation.



"Many students have never had to translate what they're learning into situations where they might actually use those skills. That's a big disconnect."

For example, if you're giving a presentation on the paintings of Frida Kahlo, you're demonstrating skills in giving presentations and in visual literacy. But in the traditional liberal arts college, the focus would be on what you've learned about Frida Kahlo. Most students aren't going to work as art historians, but they are going to give presentations, do research, and analyze images. Many students have never had to translate what they're learning into situations where they might actually use those skills. That's a big disconnect.



Takeaway Get on the same page with university partners about what foundational skills mean to you.

Devemoping Academic Skills that Translate into the Workplace | P 15 info@collegeforamerica.org | (855) 764-8232

Longer and more wide ranging versions of these interviews are available on the <u>College for America blog</u>.

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Debbie Krider, and Joe Mitchell for their participation.

About College for America

College for America is part of Southern New Hampshire University — a fully accredited, 83-year-old, nonprofit university. We partner with employers nationwide to bring a competency-based college degree program to their employees at an extraordinarily low cost.

To learn about how to partner with College for America click here.

Credits

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