WHAT GRADUATES NEED TO SUCCEED:
Colleges and Employers Weigh In
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For over thirty years, Maguire Associates has provided consulting, modeling, and research to the education market. They have a successful track record partnering with institutions to develop enrollment management practices, institutional marketing, branding, competitive positioning strategies, retention plans, and strategic planning both nationally and abroad. They work with their clients to understand the values, priorities and perceptions of important constituent groups via qualitative and quantitative market research supported by sophisticated modeling and forecasting.

What Graduates Need to Succeed: Colleges and Employers Weigh In is based on a survey conducted by Maguire Associates, Inc., was written by Julie Bourbon, and sponsored by Pearson. The Chronicle is fully responsible for the report’s editorial content. Copyright ©2017.
Executive Summary

Where once a college degree was considered the ticket to a good job, the pathway from campus to career is no longer as straightforward or as certain as it was for previous generations. The world and the job market are changing dramatically, and parents, students, institutions, and employers are all deeply concerned with the question of whether college is preparing graduates for careers—a question that is itself intertwined with the larger question of the ultimate purpose of a college degree. Tuition is an investment—of time as well as money, often a lot of money—and informed consumers want to know that they’re going to see a return on that investment, usually in the form of a good-paying job that leads to a satisfying and lucrative career. Hiring and training new employees is also an investment, and companies want assurances that they are bringing on competent, capable staff with the smarts to succeed and become an asset.

But in a global, information-based economy, it’s no longer enough to have a college degree in hand. Graduates must be prepared for an employment market that is ever evolving, one that demands flexibility and adaptability just to keep up, let alone thrive. For their part, colleges and universities are expected to provide students with the knowledge and skills that will get them that critical first job, ideally in their field of study, with potential for growth. Employers want to hire job candidates who come to them armed not only with a degree but also an impressive array of both “hard” and “soft” skills, including relevant technical skills, the ability to analyze and problem-solve a situation, and the capacity to communicate well with supervisors and colleagues.

To find out what skills employers are looking for, whether their new college hires arrive equipped with those skills, the value each sector places on a degree and on the reputation of the degree-granting institution, and how institutions are changing to meet the demands of employers, The Chronicle of Higher Education and Maguire Associates conducted a survey of college leaders and employers in May 2017. This report reflects the impressions of employers in a variety of industries and those of college and university administrators from private and public, two-year and four-year institutions.
Highlights

Among the key findings of the survey:

**EMPLOYERS AND COLLEGES BOTH BELIEVE COLLEGES ARE PREPARING GRADUATES WELL FOR THE WORKPLACE.**

While colleges believe they do a slightly better job at producing successful employees than employers (70 percent of employers said colleges are doing a “good” or “excellent” job, compared with 78 percent of colleges), there is great variation among types of industries. Confidence is high from both employers and colleges that graduates are ready for an increasingly efficient, automated economy.

**GRADUATES MUST POSSESS A BROAD RANGE OF SKILLS AND KNOWLEDGE.**

Employers are looking for specific, technical skills, but they also want employees who can communicate well, problem-solve, and collaborate with others. Communication scored higher (45 percent of employers cited it as the top skill they look for) than relevant technical skills (40 percent) in terms of what employers want, but being able to communicate was not among the top three skills they actually see in their recent hires.

**WHAT IS THE VALUE OF A DEGREE, AND A MAJOR?**

The value of a college degree, and the reputation of the institution that awarded it, carry weight for employers, but not necessarily as much as colleges and universities believe. Other factors matter too, such as relevant coursework and grade-point average.

**THE JOB SEARCH PROCESS SHOULD BEGIN EARLY.**

Are students focusing enough time on their career prospects and are they ready to conduct a job search? Institutions are making changes to career services and academic offerings in an effort to prepare students for jobs that exist today, as well as those that may exist tomorrow.

**INSTITUTIONS AND EMPLOYERS ARE PARTNERING ... SLOWLY.**

Employers value internships and work experience highly. And while there is a disconnect between the number of employers and colleges that say they’ve partnered with each other in the last three years, there is, according to many experts, consensus that internships and cooperative programs greatly improve the chances of making a successful hire and becoming a successful employee.
Introduction

It used to be that you didn’t necessarily need to go to college to get a good job, one that would last you most, if not all, of your working life. You went to work for a company, received training, moved up through the ranks if you showed promise and initiative, and maybe even retired there. While young people today might find it unfathomable to spend their entire career at one company, it was often the norm until the recession of 1980-82. By the late 1980s, employers began engaging in “rightsizing” and frequent layoffs, and investing less in training new employees. As a result, employees did not reward employers with their loyalty.

“Employers often don’t think their new employee is going to stay for five years, because the figures don’t bear that out,” says Peter McPherson, president of the Association of Public and Land-Grant Universities (APLU). “That’s a disincentive to put too much money into training somebody who a generation ago might have stayed 10, 20 years.”

As recently as the 1970s, 60 percent of American workers had only a high-school diploma, and almost three-quarters of them were solidly in the middle class. Today, about 60 percent of the American workforce has at least some college, while just 20 percent of those with only a high-school diploma make it into the middle class. While the wage premium—that is, the degree to which college graduates out-earn high-school graduates—was about 35 percent before the 1980-82 recession, it now stands at 84 percent.

All signs, then, point to the value of a college degree in order to get ahead financially in the modern economy. But it’s turning out to be not enough to have just the degree. Increasingly, employers are looking for a set of skills that can’t necessarily be taught in the classroom—adaptability, problem-solving, the ability to work with diverse groups, collaboration, and communication. That’s on top of possessing the relevant knowledge and technical skills for the job itself.

Many employers today are saying they don’t see those skills in college graduates, even as the institutions boast of the capabilities of their alums.

“There’s always been a mismatch,” says Philip D. Gardner, director of the Collegiate Employment Research Institute at Michigan State University, who recalls the days when companies trained and invested in employees for the long-term, providing an opportunity for young people to develop those very capacities that employers today say they’re looking for and often not seeing. “On-boarding is different than training and developing competencies, and most companies don’t do that” anymore.

One thing that is clear: Employers are hungry for capable, accomplished college graduates to fill out their staffs. The question is whether higher education, whose wheels turn slowly, can keep pace with the job market and continue to turn out well-rounded, highly employable men and women for whom the time and expense of acquiring a college credential turns out to be the best investment they ever made.
Success and Preparedness

“The demand for general skills has increased dramatically and will come up more for employers. In the end, it’s the general skills that count, if you want to promote people.”
When asked to rate the work colleges and universities are doing in producing successful employees, nearly three-quarters of employers (70 percent) responded "good" or "excellent," a show of confidence in higher ed and its ability to prepare graduates for the world of work. But just over one quarter (27 percent) gave only a "fair" rating to these efforts, while 20 percent of colleges did the same. Overall, colleges rated themselves higher on this question than employers, with 78 percent answering "good" or "excellent." (See Figure 1.)
There was greater disparity on this issue depending on the industry of the employer. Those in health care/medical expressed the greatest satisfaction with universities and their ability to produce successful employees—a full 84 percent—followed closely by computer services/telecommunications (79 percent), and then manufacturing (76 percent). The most satisfied employers were those in highly technical fields, suggesting that institutions are doing a good job educating students with the technical skills to succeed at analytical work. At the other end were media/communications/publishing (64 percent), education/training (60 percent) and consumer/personal services (56 percent), all of which might be said to rely as much on soft skills as hard. (See Figure 2.)

### Figure 2
**Industries Rate How Well Colleges Are Doing in Producing Successful Employees**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health care/medical</td>
<td>84%</td>
</tr>
<tr>
<td>Computer services / telecommunications</td>
<td>79%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>76%</td>
</tr>
<tr>
<td>Nonprofit/government</td>
<td>72%</td>
</tr>
<tr>
<td>Computer hardware/software</td>
<td>72%</td>
</tr>
<tr>
<td>Business services</td>
<td>66%</td>
</tr>
<tr>
<td>Media/communications/publishing</td>
<td>64%</td>
</tr>
<tr>
<td>Education/training</td>
<td>60%</td>
</tr>
<tr>
<td>Consumer/personal services</td>
<td>56%</td>
</tr>
</tbody>
</table>
In terms of being ready to work in an increasingly automated and technological world, both employers and colleges have confidence in recent graduates, with 42 percent of employers rating them “prepared” and 33 percent rating them “well prepared” or “very well prepared.” Colleges rated them similarly, with 37 percent answering “prepared” while nearly half (41 percent) called them “well prepared” and “very well prepared.” (See Figure 3.)

**FIGURE 3**

EMPLOYERS AND COLLEGES RATE THE PREPAREDNESS OF RECENT COLLEGE GRADUATES FOR AN INCREASINGLY AUTOMATED WORK FORCE

Employers

- Very unprepared: 2%
- Unprepared: 23%
- Prepared: 42%
- Well prepared: 26%
- Very well prepared: 7%

Colleges

- Very unprepared: 2%
- Unprepared: 20%
- Prepared: 37%
- Well prepared: 23%
- Very well prepared: 18%
A breakdown by industry shows that fields requiring greater technical skills from the get-go rated graduates higher than the aggregate, with computer services (49 percent), health care/medical (44 percent), and manufacturing (36 percent) saying recent grads are “well prepared” or “very well prepared.” (See Figure 4.)
Skills and Knowledge

“Soft skills in particular have to be constantly developed and worked on. It takes all of us to produce somebody, not just colleges and universities. Companies have to understand they can’t just find cheap talent, they have to invest, too.”
Interesting patterns emerged when employers were asked about the three specific skills that recent college graduates would need to be successful at their organizations and the actual skills that graduates seeking employment with them possess. In the former category—the “wish list,” as it were, that they seek in a new hire—employers cited communication (45 percent), relevant technical skills (40 percent), and problem-solving (36 percent). In terms of the skills they’re really seeing, though, the order was relevant technical skills (47 percent), relevant knowledge (38 percent), and communication skills (33 percent). The skill they say they most desire—the ability to communicate well in the work place, something that can’t necessarily be taught without real work experience—is not the one they’re seeing most often, while problem-solving (another soft skill) doesn’t make the top three list of actual skills at all. (See Figures 5, 6.)
For their part, colleges cite, by a wide margin, communication skills (87 percent) as the top attribute graduates need to be successful, followed by collaboration skills (47 percent) and problem-solving (45 percent)—all soft skills, none technical, none generally taught in the classroom. But in terms of the skills their graduates actually possess, the list shakes out a little differently, with collaboration skills coming first (57 percent), followed by relevant knowledge (45 percent) and communication skills (40 percent). (See Figures 5,6.)

The area of greatest overlap in terms of the skills graduates ought to possess was communication skills, but even there, the disparity between colleges and employers was almost two to one. Relevant technical skills didn’t make the top three in either category for colleges.

“One of the things we do as professors is focus so much on content, and skills are so embedded, that we forget to call them out,” says Susan Ambrose, professor of education and history and senior vice president for undergraduate education and experiential learning at Northeastern University. “Outcomes and goals in the syllabus are usually focused on content, not process.”

She also notes a presumption on the part of colleges that students who have good general skills can—and usually do—learn specific skills on the job.

Ultimately, employers value specific, technical abilities more than broad-based skills, and they do so at a greater rate than colleges believe they do, with the exception of public, two-year colleges. (See Figure 7.)
“Underneath is this tension between the general and specific,” says Anthony Carnevale, director of the Georgetown University Center on Education and the Workforce. “Higher ed should be more supportive of the general, and the business people are saying they like specific more. ... it looks like they’re losing sight of the fact that the combination of general and specific is what they want.”

He adds, “The demand for general skills has increased dramatically and will come up more for employers. In the end, it’s the general skills that count, if you want to promote people. Most CEOs have a bunch of competent people working for them, but would they make them a vice president? No. A manager? No. In order to be a manager, you must have general skills.”

When the question about top three skills was phrased in terms of responsibility—that is, which skills are colleges responsible for developing in graduates—the answers broke down as follows for colleges: communication skills (73 percent), relevant knowledge (50 percent), and analytical skills (38 percent). Employers ranked communication skills first (58 percent), followed by relevant technical skills (38 percent), and then relevant knowledge (35 percent). *(See Figure 8.)*

### FIGURE 8
EMPLOYERS AND COLLEGES PICK THE TOP THREE SKILLS THEY CONSIDER A COLLEGE’S RESPONSIBILITY FOR DEVELOPING IN THEIR GRADUATES

<table>
<thead>
<tr>
<th><strong>EMPLOYERS</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication skills</td>
<td>58%</td>
</tr>
<tr>
<td>Relevant technical skills</td>
<td>38%</td>
</tr>
<tr>
<td>Relevant knowledge</td>
<td>35%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>COLLEGES</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication skills</td>
<td>73%</td>
</tr>
<tr>
<td>Relevant knowledge</td>
<td>50%</td>
</tr>
<tr>
<td>Analytical skills</td>
<td>38%</td>
</tr>
</tbody>
</table>
“Most of your soft skills are learned in multiple settings, and you have to have practice in a work setting,” says Gardner, noting that sharpening a skill such as communication is like learning a foreign language—total immersion may be the best teacher.

In a breakdown of desired skills by industry, communication was the only one named by respondents in all nine industries surveyed, followed by problem-solving (six industries) and relevant technical skills (five industries), which tracks with the top three desired skills named earlier. (See Figure 9.)
Relevant knowledge and relevant technical skills were cited by respondents in six industries as the top skills they’re actually seeing in job seekers, followed by collaboration skills and communication skills (four industries). Again, this reflects the top three skills employers cited earlier. (See Figure 10.)

**FIGURE 10**
**INDUSTRIES NAME THE TOP THREE SKILLS RECENT GRADUATES ACTUALLY POSSESS**
For What It’s Worth

“There’s a large part of the labor market where what you majored in isn’t what you do, because we’re not credential crazy.”
A disconnect exists at the extremes between employers and institutions of higher education over the value of a college degree in the job market, with more than twice as many employers (26 percent) as college personnel (10 percent) finding a bachelor’s degree to be worth “less” today than five years ago. The inverse is also true—three times as many colleges (18 percent) believe degrees from their institutions are worth “a lot more” today than do employers (6 percent). But the vast majority are in the middle, with 65 percent of employers and 70 percent of colleges responding that a degree is worth “about the same” or “more” than it was in the job market five years ago. (See Figure 11.)

FIGURE 11
EMPLOYERS AND COLLEGES RATE THE VALUE OF A COLLEGE DEGREE AS COMPARED WITH FIVE YEARS AGO

Employers

<table>
<thead>
<tr>
<th>A LOT LESS</th>
<th>LESS</th>
<th>ABOUT THE SAME</th>
<th>MORE</th>
<th>A LOT MORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2%</td>
<td>26%</td>
<td>45%</td>
<td>20%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Colleges

<table>
<thead>
<tr>
<th>A LOT LESS</th>
<th>LESS</th>
<th>ABOUT THE SAME</th>
<th>MORE</th>
<th>A LOT MORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2%</td>
<td>10%</td>
<td>37%</td>
<td>33%</td>
<td>18%</td>
</tr>
</tbody>
</table>
“If you look at the aggregate data, it makes all the sense in the world to get a college degree, because it pays more over time and gets you access to a lot of jobs that used to not require credentials but now do,” says Jason A. Tyszko, executive director of the Center for Education and Workforce at the U.S. Chamber of Commerce Foundation. But as he notes when queried about the “value” of a college degree, “Not all credentials are equal.” In other words, to put it bluntly, some degrees will get workers access to higher-paying jobs more than others, he says. And in today’s labor market, access to those jobs is the reason students and potential students are going to college in the first place.

“People want jobs, and they see college as the gateway to that,” says Tyszko.

While a graduate’s field of study is important to employers when making hiring decisions—54 percent say they value some majors over others—one-fifth (21 percent) said they value other factors besides major while another 20 percent look for specific majors only. Colleges are in accord in believing that some majors have greater value for employers (57 percent) but overestimate the value of other factors besides major (35 percent). (See Figure 12.)
While employers were not asked which majors they value more highly, in terms of overall factors in evaluating a candidate and résumé, they listed major first (33 percent), followed by relevance of coursework to the position (30 percent), and college GPA (23 percent). The institution’s reputation was of least concern (14 percent). Colleges were in the same ballpark, ranking relevance of coursework first (31 percent), then major (29 percent), and GPA (21 percent), with reputation only slightly behind, at 19 percent. (See Figure 13.)
“There’s a large part of the labor market where what you majored in isn’t what you do, because we’re not credential crazy,” says Carnevale, noting that major tends to be most important for that first job out of college, when specific skills matter more, before on-the-job learning starts. “Employers hire people who get the job done,” he said, adding, “Your college degree qualifies you for a lot of jobs. Your major qualifies you for a lot of jobs that pay differently.”

When asked about the alma maters of prospective hires and how desirable they find certain types of institutions, employers ranked flagship public colleges highest (75 percent), followed by private, not-for-profit colleges (71 percent), with regional campuses of public colleges not far behind (67 percent).

Colleges overestimated the desirability to employers of the various types of institutions, rating them at 100 percent (flagship publics), 80 percent (liberal-arts colleges), 78 percent (privates), and 75 percent (regional publics). Employers found online colleges to be the least desirable (28 percent). (See Figure 14.)
In terms of reputation, nationally known institutions ranked highest among employers (91 percent) and colleges (100 percent) when asked how likely employers were to consider their graduates, followed by regionally known (75 percent for employers, 65 percent for colleges) and local colleges/universities (64 percent for employers, 41 percent for colleges). Eighty-two percent of employers were likely to consider graduates from elite institutions, which hardly needs explanation. (See Figure 15.)

**FIGURE 15**
**EMPLOYERS AND COLLEGES WEIGH THE IMPORTANCE OF EDUCATION CREDENTIALS**

<table>
<thead>
<tr>
<th>Institution Type</th>
<th>Employers</th>
<th>Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nationally known</td>
<td>100%</td>
<td>91%</td>
</tr>
<tr>
<td>Regionally known</td>
<td>65%</td>
<td>75%</td>
</tr>
<tr>
<td>Local college/university</td>
<td>41%</td>
<td>64%</td>
</tr>
<tr>
<td>Unknown college/university</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td>Elite</td>
<td>82%</td>
<td></td>
</tr>
</tbody>
</table>

Given the Small Business Administration figure that 99.7 percent of U.S. employers are small businesses, it should not come as a surprise that graduates of regional and local institutions would appeal to employers. What’s interesting is that the higher-ed sector itself has less confidence in the appeal of these institutions, which they may consider second tier in comparison with their flagship and elite peers.

Indeed, according to Brandon Busteed, executive director of education and workforce development at Gallup, regional institutions and local businesses are a natural fit to work together, by partnering to turn students into future employees.

“The low-hanging fruit is universities working with all the small and medium-sized employers within 10 miles of their campus,” he says.
Getting Ready for the Job Hunt

“We hear it over and over again. Businesses are looking for grads to come with an ability to be adaptable and to continue to learn and change. They want them to have the right foundation that allows them to morph with technology.”
Respondents at colleges expressed concern that students aren’t spending enough time on their career plans, with 71 percent saying they had “far too little” or “too little” focus on the future. Evidently, that’s been a concern for some time, as 56 percent of respondents said they thought students today were spending the “same amount” of time preparing for their careers as they were five years ago, and 34 percent thought they were spending “less” or “much less.” (See Figure 16.)

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**FIGURE 16**

**COLLEGES CHARACTERIZE HOW MUCH TIME UNDERGRADUATES FOCUS ON THEIR FUTURE CAREERS**

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Far Too Little Focus</td>
<td>19%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Too Little Focus</td>
<td>52%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enough</td>
<td>27%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Too Much Focus</td>
<td>2%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**COLLEGES CHARACTERIZE THE AMOUNT OF CAREER FOCUS UNDERGRADUATES HAVE NOW COMPARED WITH FIVE YEARS AGO**

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Much Less Focus</td>
<td>13%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less Focus</td>
<td>21%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Same Amount of Focus</td>
<td>56%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More Focus</td>
<td>10%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In terms of preparation to conduct a job search, 60 percent of employers believe students are “prepared” or “well prepared” to do so, although more than one-third (36 percent) called them “unprepared” or even “very unprepared.” Colleges found 18 percent of their own students to be “unprepared,” with another 42 percent “well prepared” and 18 percent “very well prepared.” (See Figure 17).

**FIGURE 17**
**EMPLOYERS AND COLLEGES RATE RECENT GRADUATES’ PREPAREDNESS FOR SUCCESS IN THE JOB SEARCH**

Employers:
- Very Unprepared: 4%
- Unprepared: 32%
- Prepared: 44%
- Well Prepared: 16%
- Very Well Prepared: 4%

Colleges:
- Very Unprepared: 18%
- Unprepared: 22%
- Prepared: 42%
- Well Prepared: 18%
- Very Well Prepared: 18%
These results might explain why colleges have been making some changes to their career services in the past three years—something that 86 percent of public four-year respondents and 89 percent of private respondents have done—with 57 percent increasing their outreach to alumni and 55 percent adding career services to the strategic plan. Another 45 percent said they were making organizational changes to prioritize career services. (See Figures 18, 19.)
“It’s an ongoing relationship in terms of career development,” said Joseph Urgo, provost and vice president for academic affairs at the University of North Carolina at Asheville, who notes that 10 years ago, his institution’s career center might have engaged with alumni only occasionally. Now at UNC-Asheville, he says, one-third of the people using the university’s career services are alumni who are looking for career advice, and some institutions have now moved the center into their alumni-services departments.

When asked if this trend suggests that institutions need to do a better job of offering career services to students while they’re still undergraduates, Urgo agrees that it does, although he is hesitant to suggest that students focus on future work plans at the expense of their studies. “I sure wouldn’t want our students cutting class to go to the career center.”

Institutions like UNC-Asheville are also changing their coursework to adapt to changing workforce demands, although most are doing so only “moderately” (40 percent) or “slightly” (38 percent). (See Figure 20.)
Urgo said his institution has made three changes, which he describes as “incremental rather than moderate”: an alliance with Mission Health, one of the region’s largest health-care providers, which will include internships and employment opportunities for students; the expansion of a “mechatronics” concentration in the engineering major, which he describes as “anything that moves with the assistance of a computer,” from cell phones to drones; and the addition of an arts-management and entrepreneurship major, which he calls a “direct response” to the tourist- and arts-based economy in Asheville.

“I would characterize it as part of a three-pronged effort on campus to adapt to changing circumstances,” he says.

Debbie Hughes, vice president of higher education and workforce at The Business-Higher Education Forum (BHEF), spends a lot of time thinking about how colleges and companies can better partner to help graduates prepare to meet emerging work-force needs, including cyber, automation, and artificial intelligence, and to do so quickly and nimbly.

“We hear it over and over again. Businesses are looking for grads to come with an ability to be adaptable and to continue to learn and change,” she says. “They want them to have the right foundation that allows them to morph with technology.”

That core foundation includes some level of technical skills (analytics, statistics, a little bit of programming, a little bit of computing) so graduates can manage and be relevant for the digital economy, plus the ability to tell a story and be creative and make decisions. In short, they need the ability to do everything. Hughes notes that the term “unicorn”—a reference to something so elusive it probably doesn’t even really exist—gets tossed about “an awful lot” in these conversations. What BHEF is finding is that colleges are willing to quickly ramp up courses and minors, implementing programs in real time, ultimately resulting in new majors in emerging fields. And they’re doing this by coming to the table with CEOs to talk about what they both need and can provide.

Humanities students are not being left out, Hughes says, as institutions are increasingly including quantitative sciences and data literacy into the core curriculum, integrating the STEM fields into general education requirements.

Students also should not forget that two-thirds of employers investigate social media presence—and most colleges prepare students for this possibility. Employers most often review LinkedIn, Facebook, and conduct web searches on job candidates. (See Figures 21, 22.)

“We include discussions on this in our career-management classes as well as some of their other classes,” says Carrie Roath Ernst, director of student professional engagement at Robert Morris University. “Many instructors will have students Google themselves so that they see the first thing that come up, in order to understand that will be the first thing an employer sees.”
FIGURE 21
THE PERCENTAGE OF EMPLOYERS WHO INVESTIGATE A JOB CANDIDATE’S SOCIAL MEDIA PRESENCE COMPARED WITH THE PERCENTAGE OF COLLEGES WHO PREPARE THEIR STUDENTS FOR THAT POSSIBILITY

FIGURE 22
EMPLOYERS CHECK THE FOLLOWING TO EVALUATE A JOB CANDIDATE’S ONLINE PRESENCE

- LinkedIn: 74%
- Facebook: 73%
- Conduct Internet search: 72%
- Twitter: 42%
- Require passwords to social media sites: 9%
- Other: 4%
And how does all of this pay off? Nearly half of employers hire recent college graduates at $40-$59,999 as a starting salary, with the highest starting salaries in computer hardware/software and manufacturing; the lowest are in nonprofit and government work. (See Figures 23, 24.)

**FIGURE 23**
**AVERAGE STARTING SALARIES FOR RECENT COLLEGE GRADUATES**

<table>
<thead>
<tr>
<th>Salary Range</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $20,000</td>
<td>3%</td>
</tr>
<tr>
<td>$20,000-$39,999</td>
<td>29%</td>
</tr>
<tr>
<td>$40,000-$59,999</td>
<td>45%</td>
</tr>
<tr>
<td>$60,000-$79,999</td>
<td>15%</td>
</tr>
<tr>
<td>$80,000-$99,999</td>
<td>5%</td>
</tr>
<tr>
<td>$100,000 or more</td>
<td>3%</td>
</tr>
</tbody>
</table>

**FIGURE 24**
**AVERAGE STARTING SALARIES FOR RECENT COLLEGE GRADUATES**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Less than $39,999</th>
<th>$40,000-$79,999</th>
<th>$80,000 or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer hardware/software</td>
<td>12%</td>
<td>72%</td>
<td>16%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>16%</td>
<td>68%</td>
<td>16%</td>
</tr>
<tr>
<td>Computer services/telecommunications</td>
<td>13%</td>
<td>75%</td>
<td>12%</td>
</tr>
<tr>
<td>Business services</td>
<td>20%</td>
<td>71%</td>
<td>9%</td>
</tr>
<tr>
<td>Health care/medical</td>
<td>28%</td>
<td>68%</td>
<td>4%</td>
</tr>
<tr>
<td>Media/communications/publishing</td>
<td>48%</td>
<td>48%</td>
<td>4%</td>
</tr>
<tr>
<td>Nonprofit/government</td>
<td>60%</td>
<td>36%</td>
<td>4%</td>
</tr>
<tr>
<td>Consumer/personal services</td>
<td>44%</td>
<td>56%</td>
<td></td>
</tr>
<tr>
<td>Education/training</td>
<td>48%</td>
<td>52%</td>
<td></td>
</tr>
</tbody>
</table>
What Works in the Real World

“Employers just continually tell me that they’re less interested in what students majored in and more interested in what they know and can do. That is absolutely, positively what they say.”
In terms of the experiences employers want to see on résumés, internships (34 percent) and college employment (32 percent) carried the most weight, well ahead of either extracurricular activities or volunteer experience (17 percent each). Colleges tended to overestimate the significance employers give to internships (46 percent) and undervalue work experience (23 percent). (See Figure 25.)

**FIGURE 25**

**EMPLOYERS AND COLLEGES WEIGH THE IMPORTANCE OF TYPES OF EXPERIENCE**
“Employers just continually tell me that they’re less interested in what students majored in and more interested in what they know and can do. That is absolutely, positively what they say,” says Northeastern’s Ambrose.

Ninety-six percent of Northeastern University’s students complete at least one six-month work experience through the Cooperative Education and Career Development (Co-op) program, according to Ambrose. The university has more than 3,000 employer partners, half of which routinely offer students a full-time job after graduation once they’ve done a co-op for them.

“Co-op is part of the larger issue of experiential learning, connecting theory and practice,” said Ambrose, noting that it is imperative that students have the opportunity to make those connections before they leave college. “In the learning-science world, we talk about ‘transfer’ being a really difficult, sophisticated cognitive process. Taking what you learn in one context and using it in another is not easy to do.”

Despite the desire of employers to see a greater focus on internships and campus employment as part of the curriculum, they say they aren’t partnering with colleges to make curriculum changes that would better align degree programs with job opportunities. Three quarters (76 percent) responded that these partnerships are not happening, while 62 percent of colleges say they are. Without follow-up questions, it’s difficult to know where the disconnect lies. (See Figure 26.)

**FIGURE 26**
**EMPLOYERS AND COLLEGES DESCRIBE WHETHER THEY’VE PARTNERED TO MAKE CURRICULUM CHANGES TO BETTER ALIGN DEGREE PROGRAMS WITH JOB OPPORTUNITIES**
Communication between employers and colleges is typically informal; more than 70 percent of colleges say they ask employers through informal communications about how well their graduates are prepared for the workplace, and 53 percent of employers provide such feedback to colleges the same way. Many colleges administer surveys, host formal events, and create joint membership on a task force. (See Figure 27.)
Existing partnerships are described as rewarding, engaged, and relevant, although colleges view these as much more collaborative and inclusive than employers do. (See Figure 28.)

For Tyszko, these partnerships have benefits that should be more clear to the business community he represents. “For companies that have a skill shortage, that’s impacting their ability to compete,” he said. The answer is to be engaged and innovative throughout the process of educating students for the work force.

“You need to be hands-on and a partner throughout your value chain,” he says. “Engage colleges like you do any part of your business. Find the best way of working with talent and adding value and know whether you’re getting qualified people on Day 1.”
Conclusion

While some would cast the issue of 21st century work-force preparedness as a question of whether the point of college is to educate students for work or for life, the answer need not be one or the other, but rather, both.

APLU’s McPherson sees it this way: “It’s important that a four-year education provide both education for employment opportunity as well as a broad education—preparation for life and multiple employment. We don’t think these are mutually exclusive outcomes.”

Indeed, as more and more Americans struggle to make it in a changing economy, a college degree is only a starting point. It is a worker’s opening salvo into a global, information-based economy, announcing that they have the basic knowledge and know-how to succeed as an employee. They must then prove that they’ve also got the skills—both general and specific—to hit the ground running and the smarts to continue learning well into the 21st century.

Colleges and employers are both responsible for helping graduates develop those skills; they can do so by continuing to partner where they already are, and exploring new partnerships where they are not. When these two sectors come together to create learning and employment opportunities for students, everybody wins, including the economy.

“If you ask Americans, the general population, ‘why is college important, why are you going to college,’ it doesn’t matter where you ask that question, they have many reasons why they value college. It’s not singular,” says Buested of Gallup, who writes frequently about lifelong learning and individual well-being as key components of long-term personal and professional happiness. “But the number one reason in every group we’ve ever surveyed is to get a job.”
Methodology

*What Graduates Need to Succeed: Colleges and Employers Weigh In* is based on a survey of college administrators, including human-resource officers, career-center directors, and provosts, in May 2017. Of the 359 who responded, 75 were involved in job training, career development, or career services for undergraduate students seeking bachelor’s degrees. A representative panel of employers across several industries participated in May 2017. There were 223 respondents. To qualify, the employer had to have at least a bachelor’s degree and be involved in recruiting and/or hiring of recent college graduates with bachelor’s degrees for at least one year.

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*What Graduates Need to Succeed: Colleges and Employers Weigh In* is based on a survey conducted by Maguire Associates, Inc., was written by Julie Bourbon, and sponsored by Pearson. The Chronicle is fully responsible for the report’s editorial content. Copyright ©2017.
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