THE SHOCKING TRUTH
ABOUT THE SKILLS GAP

careerbuilder®
This finding may seem surprising, considering more people than ever before are earning college degrees, and as many as 39 percent of people under 25 are unemployed or underemployed. According to the Bureau of Labor Statistics, nearly 8 percent of those under the age of 25 who have a four-year degree cannot find a job at all. If so much young, educated talent is flooding the market, why are employers having trouble finding the right employees?

In an effort to answer this question, CareerBuilder conducted a survey to ask employers, academics and job seekers nationwide about their perceptions. CareerBuilder conducted this survey between Oct. 17 and Nov. 6, 2013 among 1,025 employers, 205 academics and 1,524 job seekers (of which 506 were employed, 513 were underemployed, and 508 were unemployed). More than half of surveyed employers reported they have open jobs for which they cannot find qualified candidates. Eighty-one percent claim it’s at least somewhat difficult to fill job vacancies. Many employers blame a skills gap, which is another way of saying there is a gap between the skills applicants possess and the skills required for employers’ jobs.

**WHAT IS THE SKILLS GAP?**

It has been five years since the Great Recession officially ended. The economy is beginning its uphill climb toward prosperity, and signs of healing markets suggest a promising future. Though massive layoffs characterized the height of recessionary conditions, that situation too has begun to turn around as more jobs are added every day. Despite these positive signs of growth and recovery, a curious problem has emerged: Employers are having a difficult time filling open jobs.

**HOW DIFFICULT IS IT TO FILL JOB VACANCIES?**

81% say it’s at least somewhat difficult

- Extremely difficult: 4%
- Very difficult: 9%
- Difficult: 22%
- Somewhat difficult: 46%
- Not at all difficult: 19%

base: all qualified employers (n=1025)
Employers complain about a shortage of qualified people for their jobs, citing a lack of necessary skills among applicants. Hiring managers are searching for people with the ability to be productive immediately, not candidates who may need extra training to do well in a job (even if that training is job-specific).

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Despite this apparent shortage of talent, however, 75 percent of employers believe they can afford to be selective in the offers they make to potential employees due to the current high rate of unemployment. In fact, 35 percent actually believe they can pay people less because of the unemployment rate.

Job seekers agree with employers that the skills gap exists, but the two groups tend to place the blame in different places. While employers are quick to point the finger at a general lack of skills within the applicant pool, job seekers believe the problem to be rooted in education gaps and a lack of job-specific training. Interestingly, both groups agree — at least to some extent — on disparities concerning wage expectation.

There is a final element at play in this issue: the role of academia. The emphasis on the importance of obtaining a bachelor’s degree has driven the number of degree holders from 3.4 million in 2003 to 4.9 million in 2012 — a 44 percent increase in just under a decade, according to the National Center for Education Statistics. Labor market forces have changed drastically in the past several years, and it is no easy task to adjust educational programs swiftly enough to keep up with these changes.

The skills gap is a multi-dimensional problem with widespread roots. It is also important to note that though the skills gap is a national issue, our ability to understand, diagnose and treat it is largely dependent on our ability to diagnose and treat problems happening at the regional level. The skills gap is therefore not so much a monolithic problem as much as it is a multifaceted phenomenon perpetuated by hundreds of regional labor market interactions inside of America’s complex economy. Despite the challenges the skills gap creates, a concerted effort from all parties involved would give us a unique opportunity to effectively close the skills gap.

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**WHAT DO YOU FEEL IS CAUSING THE SKILLS GAP?**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Education gaps in particular areas</td>
<td>55%</td>
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<tr>
<td>Gaps in on-the-job training</td>
<td>53%</td>
</tr>
<tr>
<td>New/shifting technologies</td>
<td>48%</td>
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<tr>
<td>Outsourcing of jobs to other countries</td>
<td>48%</td>
</tr>
<tr>
<td>Gaps in expectations about wages between employees and employers</td>
<td>47%</td>
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<tr>
<td>Lack of knowledge about potential career opportunities</td>
<td>42%</td>
</tr>
<tr>
<td>Access to education</td>
<td>41%</td>
</tr>
<tr>
<td>Job requirements that are too specific</td>
<td>35%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
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</tbody>
</table>

*base: all qualified job seekers who feel there is a skills gap (n=837)*
The Employer’s Dilemma

The first element of the problem involves employer expectations. One of the most notable employer complaints about applicants points to what employers claim is a general lack of necessary skills: 52 percent report they cannot fill job vacancies because applicants are unqualified, and 61 percent claim to have hired a person who does not fully meet the stated requirements for a job.

When asked about the particulars of the skills applicants lack, 49 percent claim job-specific skills are a scarce commodity. Interestingly, only 24 percent of employers believe gaps in on-the-job training are one of the causes for the skills gap. The question for employers remains, then: How are employees to develop the required skills specific to their jobs without receiving on-the-job training?

The Shocking Truth About The Skills Gap

Tracing the origin of the skills gap is not easy; many factors have contributed to its formation. The three major elements of the issue are rooted in the actions and priorities of three parties: the employer, the job seeker and academia.

Have You Ever Hired A Person Who Does Not Fully Meet All The Stated Requirements For A Job?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>61%</td>
<td>39%</td>
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**What do you feel is causing the skills gap?**

- Education gaps in particular areas 37%
- Gaps in expectations around wages 37%
- Job requirements that are above entry requirements 35%
- New/shifting technologies 32%
- Lack of job candidate’s interviewing skills 27%
- Job requirements that are too specific 25%
- Gaps in on-the-job training 24%
- Lack of job candidate’s knowledge about how to search for a job 19%
- Lack of willingness to relocate to where jobs are 18%
- Outsourcing of jobs to other countries 18%
- Lack of access to education 11%
- Other 5%

**Have you ever hired a person who does not fully meet all the stated requirements for a job?**

- Yes 61%
- No 39%

*base: all qualified employers (n=1,025)*

*base: all qualified employers at least somewhat concerned about the skills gap (n=936)*
Another part of the problem may be the number of available jobs above entry level in relation to the number of jobs better suited to less experienced talent. Thirty-five percent of employers believe posting jobs that are truly entry level with above-entry-level requirements contributes to the skills gap for their companies. It’s even more surprising, then, that only 33 percent of employers say they offer re-skilling or cross-training for other jobs within their companies, as cross-training employees gives employers a built-in pool of talent to choose from when job vacancies occur within their companies. When existing employees are promoted, for example, employers who have cross-trained are able to post the promoted employees’ former jobs with requirements closer to entry-level, greatly expanding their options for new candidates.

Unfortunately, only 33 percent of employers said they would consider on-the-job training if they were having trouble finding candidates for a particular job; just 31 percent reported they would consider cross-training current employees.

SKILLS GAP — OR WAGE GAP?

With the economic climate slowly rising to pre-recession conditions, one might think wages and compensation for employees would follow a similar trend. This has not been the case, however.

The job skills employers require are costly commodities, yet employers are unwilling to invest in their own talent for longer-term payoff.

Many employers claim they cannot fill vacancies because the compensation they offer new hires is not competitive enough to attract the talent they seek; 37 percent also think a gap in wage expectations is one of the biggest causes for the skills gap today. Because of the recalcitrant approach to shifting wages to reflect economic conditions, employers effectively remove a good portion of potential candidates from their own pools.

The job skills employers require are costly commodities, yet employers are unwilling to invest in their own talent for longer-term payoff. Why? They believe the high unemployment rate justifies keeping salaries low, and most would not even consider raising a starting salary to attract new talent. In fact, some have claimed they’ve actually adjusted wages down. This trend is problematic considering more than 30 percent of talented professionals with a certain level of education or skill sets are looking for new jobs due to dissatisfaction with their current salaries.

In a separate study, EMSI also conducted research into this issue and found that jobs related to health care, the Internet and software, finance, and engineering have seen notable wage increases since 2006. However, the well-known fact still stands — there does appear to be an actual shortage of qualified candidates available for these positions.

Analysis of wage changes and the potential supply of workers indicates there are 1.9 available workers for every opening in computer occupations — the lowest ratio for occupation groupings with notable wage growth. The available workers-to-openings ratio is similarly low for health diagnosing and treating practitioners (2.3), financial specialists (3.1), health technologists and technicians (3.1), engineers (3.1), and occupational therapy and physical therapist assistants and aides (3.4).

THE RUDDERLESS YOUTH

The next element of the widening skills gap involves the job seeker. Children are often told they “can be anything” when they grow up. The spirit of this statement is a positive one: “Follow your dreams!” Counseling children to find and follow their passion is excellent advice, but it should not be the only guidance a young person receives. In an atmosphere of seemingly unlimited choices, many young people are faced with making a career selection that seems adequate and hoping for the best.

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Choices regarding higher education, majors and career prospects are critical. High school, then, may seem like a logical time for young people to receive counseling about their job paths; yet only 25 percent of polled job seekers
reported receiving career pathing in high school, and 41 percent said they wished they had received more guidance. The majority of employees claimed to have received minimal information when trying to decide which career path to pursue, and 23 percent claimed to have received no information at all.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Did receive career pathing in high school</th>
<th>Did receive career pathing in grade school</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>41%</td>
<td>23%</td>
<td>25%</td>
<td>2%</td>
<td>8%</td>
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This lack of information creates a unique set of challenges for young professionals. Many are entering the workforce with no knowledge of the types of entry-level jobs available to them, no awareness of internships that may provide them with valuable skills, and no mentors to guide them in the right direction. Without prior guidance, all of these elements take time and effort to develop.

“High school seniors should consider their options before making the choice to take on the debt load of college. There are many careers for which trade school is a better, cheaper option.”

Others argue the emphasis on the four-year degree is far too high. Brian Huff, CEO of Midwest Technical Institute, suggests high school seniors should consider their options before making the choice to take on the debt load of college, asserting that there are many careers for which trade school is a better, cheaper option. He and “Dirty Jobs” star Mike Rowe advocate trade school as an efficient path to gaining the necessary skills for in-demand jobs. Unlike colleges, trade schools are required to maintain a minimum level of job placement, giving most students the opportunity to put those skills to work immediately. This suggests a level of career guidance unavailable in many high schools or four-year colleges.

OVEREDUCATED AND UNDEREMPLOYED

The skills gap is particularly difficult for recent college grads. Forty-four percent of college-educated workers under 25 have jobs that do not require a college degree — and in many cases, they have little choice. With student debt payments looming, graduates opt into these jobs, which are often much more available than jobs within the field they studied. With a mountain of debt already a consideration, 61 percent say the expense of paying for school is the biggest barrier when it comes to looking for further training.

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Job seekers are, however, very interested in receiving this training. More than 50 percent of job seekers think the skills gap is widening as a result of gaps in on-the-job training, and nearly as many express keen interest in learning new skills, even if those skills guide them in a different professional direction.

Another conundrum: Although about 50 percent of employers believe most applicants lack job-specific skills, more than 60 percent of applicants believe those skills will be acquired on the job. There is a huge difference in expectation here.
PREPARING STUDENTS TO FAIL?

The third and final piece of the skills gap puzzle is the role academia plays in preparing college grads for careers in their field of choice. Ninety-six percent of academics think they should communicate with potential employers about their programs to discern the job skills employers value most in young candidates, yet only 45 percent claim to be communicating with employers consistently.

Most academics believe their role is to prepare students to be successful in their chosen career. To this end, 54 percent of academics say they are working with employers to fill the gaps between the skills employers need and the skills their schools’ graduates have.

Sixty-three percent claim they are changing their curriculum to provide students with education that builds their market credentials based on local demands or employer shifts. Change is not easy at the university level, however; many report that instituting effective changes in their programs typically takes more than a year.

Quality education and training results in a strong workforce, which in turn bolsters the county’s economy, leading to more funding for community colleges.

Community colleges may also be in a unique position to bridge the skills gap. As nearly 50 percent of all U.S. undergraduates are enrolled in community colleges, these institutions have an opportunity to offer skills training to the students enrolled in their programs. In addition to being more agile to their larger counterparts when it comes to instituting changes, they also have strong connections to surrounding communities and businesses. Quality education and training results in a strong workforce, which in turn bolsters the county’s economy, leading to more funding for community colleges. This positive feedback loop creates an environment in which offering strong training to students benefits all parties and offers an excellent template for larger universities.
The skills gap is a concern best fixed by approaching it as you might approach a puzzle. First, consider that there are many pieces of the puzzle. From there, discover where each puzzle piece fits in the grand scheme of the solution.

**BRIDGING THE SKILLS GAP, ONE PIECE AT A TIME**

As the employer, the employee and academia have all played roles in the widening of the skills gap, all must play a role in closing it once more.

Employers are instrumental to closing the skills gap. To do so, they need to ask themselves several questions. Considering the majority of job seekers are eager to learn new skills, how much training are they offering new hires? Are there opportunities to cross-train existing employees to create a more versatile, flexible workforce? Could they re-skill top performers to help close the skills gap? If these opportunities exist, employers must begin taking advantage of them.

There is a culture of fear surrounding employee training; by giving an employee valuable, marketable skills, employers worry they are creating a flight risk. Our data suggests this is not the case, however. When employers invest in an employee, that individual is actually much more likely to cultivate a deeper sense of employee commitment to the organization. An overwhelming 92 percent of employees become more loyal to a company that invests in training them, adding that they are more likely to stay at a company that values them in this way.

For organizations looking to develop nearly-ready job candidates, don’t overlook the opportunity to partner with non-profit organizations that create train-to-hire programs aimed at closing the skills gap and empowering employment for the long-term unemployed. To add to the benefits of developing a more robust on-the-job training program, the federal Workforce Investment Act provides funding for businesses that hire eligible candidates who need additional training to meet a position’s technical requirements through on-the-job training reimbursement.

Finally, employers could benefit from changing the way they approach the search for new talent. Seventy-two percent of job seekers are willing to take jobs in a different field from the one in which they are currently looking. As employers invest in training their existing human capital, they should search with an open mind for new employees, casting the net into multiple industries and disciplines. They should set realistic job expectations from the start and be prepared to offer a competitive wage if they want to attract the best talent available.

**Employees should always take advantage of tuition reimbursement when it is offered.**

For job seekers, the task at hand is more closely linked with making themselves more marketable. There are many ways to increase one’s skill set. Some are more challenging than others, but all are worthwhile. If an employee’s current company does not offer training opportunities, he or she should seek out further training on their own. Additionally, employees should always take advantage of tuition reimbursement when it is offered. Some companies offer reimbursement for professional and technological certifications, and employees should never leave such opportunities on the table.

Unemployed job seekers have options as well. Experiences such as co-ops, internships and industry-specific volunteer opportunities also add valuable skills and help create a stronger, more impressive résumé.
Academia must also aid in the effort to close the skills gap. Academics need to create pathways of communication with employers who are likely to hire their graduates. These relationships can be valuable sources of information concerning specific skills employers need, and academics can use this information to integrate changes to their program requirements with the intention of graduating truly marketable candidates.

One example of this comes from Rochester, NY where administrators at Monroe Community College* asked themselves two basic questions: “Where are the gaps within our region? And what is our ability to actually produce the worker that’s needed against the gap?” Using a programmatic approach with local labor market information, surveys and dialogues with businesses, the school is making changes to its programming that are positively impacting workers and employers. Monroe Community College has become a go-to source in the region for local labor market and workforce information. Internally, the college uses data for grants, program review and more.

**WHAT SOME EMPLOYERS ARE DOING TO FIX THE SKILLS GAP**

**Learning@Cisco: Empowering Employment Through Cisco Certifications**

Learning@Cisco, an education services company, created its Cisco Certifications program to provide technological training and certification for networking professionals as a way to meet growing employer demands. Explains Jeanne Beliveau-Dunn, vice president and general manager of Learning@Cisco:

“Over the past five years, we set out to address talent gaps in networking professionals needed across the globe by harnessing our certifications and knowledge programs, and addressing new roles in technology. Our training and certifications programs provide the skills and expertise networking professionals need to meet the demand for networking talent.”  

**Randstad: Empowering Employment by Inspiring Experts**

Recognizing the struggle companies were having finding candidates with specific skill sets, Randstad created a way to help both the clients it serves and future candidates — by creating awareness around the skills gap. Understanding the power of video to tell a story, Randstad utilized the medium for its “Inspiring Experts” campaign. They wanted an interactive, engaging and modern way to educate others about careers with stable futures in growing industries and inspire others to pursue the skills needed for jobs in those fields. So they began creating videos featuring both real people with careers in growing industries talking about what makes their jobs so great and the young people who are pursuing jobs in those fields. Today, Randstad has an extensive online video library with hundreds of thousands of viewers — and the interest is only growing.  

**Cook Systems Puts ITs Training on the Front Burner**

Two years ago, Cook Systems International CEO Wayne Cook realized something needed to change — and fast — to help meet the growing talent needs of the companies it serves. Believing the source of the talent shortage was a lack of quality training programs, Cook created FastTrack’D: The U.S. Source for Java Developers, a comprehensive program (free for students) designed to fully prepare graduates with the in-demand programming skills for success in the Java Software Development industry. FastTrack’D conducted its first class in August 2012 to astounding success (all graduates were placed), and now has classes taking place in three cities. The ultimate goal, says Cook, is to create a model other businesses can adapt and use for their own needs — and give American workers the chance to learn new skills and establish high-paying careers.  

**Allscripts Commits to Training the Unemployed**

In June 2011, health care solutions company Allscripts created a plan to add jobs to the local community while helping unemployed job seekers find work. After announcing plans to add up to 300 jobs in Chicago, Allscripts then partnered with Skills for Chicagoland’s Future, a non-profit organization, to design a training program to prepare unemployed job seekers in the Chicago area for work in these roles. The program was a success: After an intense eight-week training program, 100 percent of the participants were offered and accepted full-time employment with Allscripts as associate technical support consultants.  

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* Monroe Community College
**Code.org Sets Its Sights on Closing the Skills Gap Through K-12 Education**

Right now in America, there is a standing demand for 120,000 people who are training for jobs in the computer science field. By 2020 there will be a million more jobs than students in the field. Code.org® is a non-profit dedicated to closing that gap — by making computer science education available in more schools and increasing participation among women and underrepresented students of color. Code.org believes every student in every school should have the opportunity to learn computer programming, and that computer science should be part of the core curriculum in education. In 2013, the company created its very first Hour of Code, a worldwide campaign to help millions of students of all ages learn the basics of computer science, with free online tutorials for an entire week. The ‘Hour of Code’ was a tremendous success: in the course of the seven-day event more than 16 million students learned at least one hour of code and wrote over 500 million lines of code.  

**SUMMARY**

The skills gap is a real and growing issue affecting many aspects of many industries. Employers, job seekers and academia are all aware of its existence and, to some degree, their role in its formation.

Employers cannot find skilled candidates to fill their open jobs, but show resistance to investing in training for new employees. Most job seekers are saddled with debt from an excellent education that has nevertheless left them without the crucial, job-specific skills employers desire. Academia understand this problem as well, but struggle to institute change quickly enough to solve the problem.

Although the skills gap looms large, a concerted effort by all parties will be the strongest avenue to turning the situation around. If the skills gap continues to widen, the consequences could be dire. Employers will not be able to replace skilled workers who retire or move on, unemployment rates will rise, and the value of college education may decrease.

Employers must embrace change and invest creatively in the skills of their workforce, and they must also begin to consider more competitive compensation. Job seekers should actively strive to add marketable skills to their résumés, and academia must dedicate themselves to communicating to employers the top qualities they look for in a new hire. When each group begins to shift their efforts in these directions, they will lay the foundation of a lasting solution.

We are on the edge of a serious problem, and employers, job seekers and academia must take immediate action. By working together now, we may yet bridge the skills gap before it becomes a true crisis.
ABOUT CAREERBUILDER®
CareerBuilder is the global leader in human capital solutions, helping companies target and attract great talent. Its online career site, CareerBuilder.com®, is the largest in the United States with more than 24 million unique visitors and 1 million jobs. CareerBuilder works with the world’s top employers, providing everything from labor market intelligence to talent management software and other recruitment solutions. Owned by Gannett Co., Inc. (NYSE:GCI), Tribune Company and The McClatchy Company (NYSE:MNI), CareerBuilder and its subsidiaries operate in the United States, Europe, South America, Canada and Asia. For more information, visit www.careerbuilder.com.

SURVEY METHODOLOGY
This survey was conducted online within the U.S. by Harris Poll on behalf of CareerBuilder among 1,025 employers (employed full-time, not self-employed and have full or significant involvement in hiring decisions and work in Healthcare, Information Technology, Manufacturing, Engineering or Finance/Accounting), 1,524 job seekers (506 employed full-time who feel that their current job requires less skill or training than they currently have or employed part-time who are currently looking for full-time employment and feel that their current job requires less skill or training than they currently have, 505 unemployed seeking work and 513 full/part-time employees who are at a job not in their desired field or one that matches their unique skill set) and 205 academics (employed full-time, not self-employed and part of their daily responsibility include curriculum and planning decisions for their community college, technical school, 4 year college or university or graduate school) ages 18 and over between October 17 and November 6, 2013 (percentages for some questions are based on a subset, based on their responses to certain questions). With pure probability samples of 1,025, 1,524 and 205, one could say with a 95 percent probability that the overall results have sampling errors of +/- 3.06, +/-2.51 and +/-6.84 percentage points, respectively. Sampling error for data from sub-samples is higher and varies.

SOURCES
1http://www.forbes.com/sites/groupthink/2013/08/02/can-we-fix-the-skills-gap/
6http://www.economicmodeling.com/2013/03/25/improving-labor-market-outcomes-at-community-colleges/