



Presented by DeVry University

Anne Unger
DeVry University
aunger@devry.edu
630-353-7009

Career Advisory Board Reveals Growing Lack of Tech Preparedness for the American Workforce

Research uncovers growing gap in both applied and hard technology skills

DOWNERS GROVE, Ill. – March 6, 2017 – The Career Advisory Board, established by [DeVry University](http://DeVryUniversity.com), today announced the results of its survey on the technology skills gap. The research found deficits in both applied and hard tech skills among current employee circles and new applicants, and a general lack of preparedness for individuals entering the workforce with the right level of technical competency.

“The tech skills gap is a well-known issue among both educators and employers,” said Alexandra Levit, chair of the Career Advisory Board. “However, in addition to the shortage of hard tech skills such as computer programming or web design, we discovered a growing concern among employers over the lack of applied tech skills.”

Having applied tech skills refers to an individual’s ability to use technology for the benefit of an organization, not necessarily the ability to deploy specific technologies themselves. Employers are seeking individuals with these abilities more and more, but not enough are graduating with the proper skill set.

Survey respondents consisted of 500 individuals from a number of leadership and hiring positions within organizations. Of the respondents, 71 percent agreed it is rare for an employee to possess all requirements outlined in a job description. Although gaps are present across varying skill areas, nearly 60 percent said it was common for job applicants to lack the technology skills important for success in their career, with half reporting a tech skills deficit in their current employee base.

When defining exactly what employers are looking for within the tech skill deficits, four in five agreed that for technology to be effective, it must integrate people, process, data and devices. Seventy-five percent agreed employees should understand how to use technology to inform and drive business decisions, while 84 percent claimed employees who know how to use the right tech tools in their fields are more effective.

Other Key Findings

Applied Tech Skills are Essential in 21st Century Business

- Seventy-seven percent said a company’s competitive advantage lies in using applied tech skills to solve problems, and they desire a workforce well-equipped with the proper skills to do so.
- Proficiency with data analytics – which refers to qualitative and quantitative techniques and processes use to derive business insights from behavioral data – is an example of an increasingly sought-after skill in numerous employee roles.

Hard Tech Skills are More Relevant for Certain Professions

- Although hard tech skills like coding are not mandatory for all job types, there is still a serious shortage of these skills in IT-related professions.
- An overwhelming majority of respondents agreed their organizations do not have enough of the following hard tech skills: network and information security (80 percent), cloud computing (76 percent), web architecture development (73 percent), internet of things (72 percent) and artificial intelligence (63 percent).

Advice for Educators and Employers

“Educators serve a vital role in narrowing the technology skills gap in today’s workforce,” said Shantanu Bose, Ph.D., Career Advisory Board member and provost and vice president of Academic Excellence at DeVry University. “It is important for those in education to continuously work with employers to understand what their needs are and to ensure they can impact and inform our curriculum. Likewise, employers need to turn to educators to not only help with talent acquisition, but also talent development and skills gap training.”

Along with partnerships between educators and employers, the Career Advisory Board also recommends the following strategies to bridge the applied and hard tech skills gaps:

- **Leverage design thinking:** A strategy for innovation, design thinking can be leveraged by educators to ensure students are interacting with technology as they would in the real world.
- **Encourage tinkering:** Whether in the classroom or in an employment setting, incorporating technology learning and experimentation into coursework or job responsibilities can help students and employees become applied tech proficient.
- **Build reciprocal mentorship channels:** Reciprocal mentorship programs, which pair more seasoned employees with less experienced ones, can help expand the adoption of applied tech skills throughout an organization.
- **Focus on the female pipeline:** Currently, women are underrepresented in the IT industry. The public and private sectors must partner to encourage and support young girls to explore technology careers and provide resources along the way.
- **Review what is working globally:** While the tech skills gap is not unique to the U.S., other countries have taken steps to bridge that divide that educators and employers should emulate.

For more information and for the complete executive summary, visit www.careeradvisoryboard.org.

About the Career Advisory Board

Established in 2010 by DeVry University, the Career Advisory Board is comprised of leading representatives from business and academia who deliver valuable insights on today’s most important career trends and provide actionable advice for job seekers. The Career Advisory Board generates original research and commentary, and creates tools, insights and resources to prepare job seekers for success. Its members include executives from DeVry University, Google, Apple, HP, IBM and LinkedIn, as well as nationally recognized career experts. For more information, visit CareerAdvisoryBoard.org.

Tech Skills Gap Survey Methodology

The 2017 Job Skills Gap research was conducted online within the United States by Ketchum and Research Now on behalf of DeVry in January 2017. Survey respondents included 501 U.S.-based individuals (64 percent male, 36 percent female) with full-time positions who are responsible for making hiring decisions, work in human resources or are an executive-level employee. Around two-thirds of respondents worked for organizations with over 1,000 employees and worked in one of the following industries: healthcare, technology, financial/insurance services, business/consumer services or retail.

#