

Employers are seeking individuals with hard-tech and applied-tech abilities more and more, but not enough are graduating with the proper skill sets.



Presented by DeVry University

The Career Advisory Board asked 500 leaders and professionals in hiring positions within organizations about the technology skills gap. Here's what they discovered:

#TechSkillsGap

Applied Tech Skills are Essential.

Different from Hard Tech like network security and cloud computing, Applied Tech refers to the deployment and utilization of technology for the benefit of an organization.

Hard Tech

vs

Applied Tech



4/5

employers agreed that for technology to be effective, it must **integrate**:

- people
- process
- data
- devices

A/B
C/D

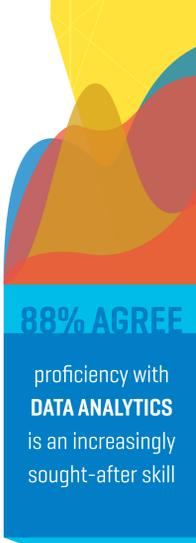
Employees should understand how to use technology to inform and drive business decisions

75% agree



Employees who know how to use the right tech tools in their fields are more effective

84% agree



88% AGREE proficiency with DATA ANALYTICS is an increasingly sought-after skill

APPLIED TECH

70%

said a company's competitive advantage lies in using applied-tech skills to solve problems

SXSW.edu 2017 - Tech Skills Panel

"When it comes to applied tech skills, as educators we need to come to grips with the fact that regardless of what a student's major is, they need to minor either officially or unofficially in tech."

Robert Paul, President of DeVry University

Skilled Employees are in Short Supply.

71% agree

It's rare for an employee to possess all requirements outlined in a job description

60% agree

It's common for job applicants to lack the technology skills important for success in their careers



Half report a deficit in their current bases

"A lot of us probably put out job descriptions for open jobs in our companies. Make sure you're wording those job descriptions so you're not alienating smart, creative people who could learn the skills you need, but maybe just don't have them today."

Randi Zuckerberg, CEO of Zuckerberg Media

80%

Network and Information Security



76%

Cloud Computing



73%

Web-Architecture Development



72%

Internet of Things



63%

Artificial Intelligence



Hard-Tech Skills are More Relevant for Certain Professions.

An overwhelming majority of respondents agreed their organizations do not have enough of these hard-tech skills.

SXSW.edu 2017 - Tech Skills Panel

"Tech is moving so fast, and it's hard to keep up. It's important to bring in educator partners to provide the right content for when we need it."

Sara Ley, Digital Learning and Tech Leader at General Electric

How do We Bridge the Gap?

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.

Shantanu Bose, Ph.D., Career Advisor Board member and provost and vice president of Academic Excellence at DeVry University.

Along with partnerships between educators and employers, the Career Advisor 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, which educators and employers should emulate.

For more information and for the complete executive summary, visit

CareerAdvisoryBoard.org