EXECUTIVE SUMMARY

2017 Job Preparedness Indicator Survey:

Hiring Managers Are Hungry for Applied Technology Skills and Receptive of Non-Traditional Students



Presented by DeVry University

THE CAREER ADVISORY BOARD

The annual Job Preparedness Indicator (JPI) survey conducted by the Career Advisory Board, established by DeVry University, identifies gaps between the skills and traits candidates have and the skills and traits employers seek to fill open positions. Gaps are measured by assessing skills that are most important and least common among entry-level, mid-level and senior-level job candidates. In an effort to provide the market with the critical intelligence to help all job seekers advance, the Career Advisory Board's research program uncovers and reports on key insights about the current hiring climate. Our 2017 study specifically explored how 500 U.S.-based hiring managers at the director level and above view two top-of-mind issues: managing the technology skills gap and evaluating non-traditional students.



This year, our participants considered the following 25 skills and traits – presented here in no particular order – according to importance and commonality among entry-level, mid-level, and senior-level job candidates:

25 SKILLS AND TRAITS

- 1. Time management skills
- 2. Work ethic
- 3. Written communication skills
- 4. Verbal communication skills
- 5. Presentation skills
- 6. Business acumen
- 7. Problem solving skills
- 8. Initiative-taking skills
- 9. Accountability
- .O. Integrity
- 1. Interpersonal skills
- 2. Strategic perspective
- 13. Networking skills

- 14. Global competence
- 15. Adaptability
- 16. Assimilation skills
- 17. Decision-making skills
- 18. Risk-taking skills
- 19. Innovation skills
- 20. Data analytics skills
- 21. Organizational skills
- 22. Cross-functional skills
- 23. Information technology skills
- 24. Non-IT technical skills
- 25. Remote work ability



WHAT ARE THE MOST IMPORTANT AND LEAST COMMON SKILLS AND TRAITS AT THE ENTRY LEVEL?

Several years of the JPI study have revealed that the characterrelated traits of work ethic, high integrity, and accountability are the most important attributes in entry-level job candidates. This indicates most hiring managers vastly prefer these candidates to have "good heads on their shoulders" rather than a specific combination of skills that can be taught.

On average, hiring managers said that the 25 skills and traits were "somewhat common" among entry-level candidates. The 10 most important skills all received ratings less than "quite common." The skills that appeared as least common were indeed those that hiring managers might expect candidates to develop as they gain more experience in the professional world, with examples including global competence, business acumen, strategic perspective and cross-functional skills.

In 2017, we also included remote work skills on our list of assessed skills and traits. At the entry level, remote work was #9 on the list of least common skills. This might reflect that it's easier to master the skills associated with remote work once you have learned to be effective in a more structured environment.

On average, hiring managers said that the 25 skills and traits were "somewhat common" among entry-level candidates.

ENTRY-LEVEL SKILLS AND TRAITS

Most Important (Ranked 1-10)

- 1. Work ethic
- 2. High integrity
- 3. Accountability
- 4. Verbal communication skills
- 5. Interpersonal skills
- 6. Problem-solving skills
- 7. Time management skills
- 8. Initiative-taking skills
- 9. Written communication skills
- 10. Adaptability

Least Common (Ranked 1-10)

- 1. Global competence
- 2. Business acumen
- 3. Strategic perspective
- 4. Data analytics skills
- 5. Risk-taking skills
- 6. Presentation skills
- 7. Cross-functional skills
- 8. Innovation skills
- 9. Remote work skills
- 10. Decision-making skills



WHAT ARE THE MOST IMPORTANT AND LEAST COMMON SKILLS AND TRAITS AT THE MID LEVEL?

The three most important skills and traits – high integrity, work ethic and accountability – were consistent at the entry and mid levels. All 10 of the most important attributes were ranked between "very important" and "critical to have" at the mid level.

The least common skills at the mid level – global competence, data analytics skills, and strategic perspective – were still ranked as "somewhat common," indicating that many mid-level professionals do possess these highly strategic (and in the case of data analytics, highly specialized) skills.

We still see a skills gap at the mid level, though: our respondents reported that the most important skills are only moderately common (the average ranking was "quite common" versus "very common" or "extremely common"). In other words, while it's not unusual to see mid-level candidates interviewing with these highly important attributes, it's also not a sure thing. Interestingly, the most important skills and traits were not significantly more common in this population than the less important ones.

All 10 of the most important attributes were ranked between "very important" and "critical to have" at the mid level.

MID-LEVEL SKILLS AND TRAITS

Most Important (Ranked 1-10)

- 1. High integrity
- 2. Work ethic
- 3. Accountability
- 4. Problem-solving skills
- 5. Verbal communication skills
- 6. Initiative-taking skills
- 7. Time management skills
- 8. Interpersonal skills
- 9. Decision-making skills
- 10. Written communication skills

Least Common (Ranked 1-10)

- 1. Global competence
- 2. Data analytics skills
- 3. Strategic perspective
- 4. Business acumen
- 5. Risk-taking skills
- 6. Remote work skills
- 7. Innovation skills
- 8. Cross-functional skills
- 9. Adaptability
- 10. Information technology skills



WHAT ARE THE MOST IMPORTANT AND LEAST COMMON SKILLS AND TRAITS AT THE SENIOR LEVEL?

Our results at the senior level illustrated the essential traits of high integrity, work ethic and accountability are the most important for candidates to display, regardless of position in an organization. Overall, the 10 most important skills and traits at the senior level received higher importance rankings than at the lower levels (these attributes were ranked between "very important" and "critical to have"). As in previous years, the increasing importance ratings of all skills represents the hiring manager's desire for senior candidates to be the "total package."

While the most important skills were ranked as common at the senior level, our respondents didn't go as far as to say they were "very common" or "extremely common." Since we are considering skills gaps, this finding illustrates room for improvement. In an ideal world, senior-level candidates with a great deal of work experience would nearly always be able to demonstrate the right mix of skills and traits for personal and organizational success – but this is not happening.

As in previous years, the increasing importance ratings of all skills represents the hiring manager's desire for senior candidates to be the "total package."

SENIOR-LEVEL SKILLS AND TRAITS

Most Important (Ranked 1-10)

- 1. High integrity
- 2. Accountability
- 3. Work ethic
- 4. Verbal communication/ decision-making skills (tie)
- 5. Problem-solving skills
- 6. Initiative-taking skills
- 7. Interpersonal skills
- 8. Business acumen
- 9. Written communication skills
- 10. Adaptability

Least Common (Ranked 1-10)

- 1. IT skills
- 2. Global competence
- 3. Remote work skills
- 4. Data analytics skills
- 5. Non-IT technical skills
- 6. Risk-taking skills
- 7. Cross-functional skills
- 8. Innovation skills
- 9. Assimilation skills
- 10. Adaptability

TO WHAT DEGREE DO WE NEED – AND HOW DO WE DEVELOP – APPLIED TECHNOLOGY SKILLS?

- Applied technology skills have officially moved out of IT. They matter for everyone. When asked to indicate whether they agreed or disagreed with this statement: "When I interview a prospective candidate, the presence of applied technology skills and experience is a competitive differentiator," nearly 70% agreed.
- Despite a demonstrated need among employers, many applied technology skills are still relatively uncommon in the candidate pool. Data analytics, for instance, was among the least common skillsets at the entry, middle and senior levels.
- Applied technology skills that are most important in modern workplaces include how to create a compelling story from data and how to best use and integrate software systems to maximize business value.
- Organizations recognize that it's THEIR responsibility to train employees in applied technology skills: 75% are taking action - from internal courses to tuition reimbursement - to ensure this happens.

In the JPI survey, we defined an applied technology skill as a skill that is needed by employees to leverage the right technology to do their jobs. In the Career Advisory Board's Spring 2017 research on the technology skills gap, we learned that some hiring managers weren't familiar with applied technology skills. Less than a year later, we see that the majority is now looking for them.

When asked to indicate whether they agreed or disagreed with this statement: "When I interview a prospective candidate, the presence of applied technology skills and experience is a competitive differentiator," 69 percent of our respondents agreed. The desire for leaders to have these skills is even higher (76 percent of the managers who hire senior-level candidates agreed). Organizational function matters too, as hiring managers indicated that some areas require applied technology skills more than others. For instance, nearly half of our respondents said operations and administration functions are most in need of them, followed by customer relations (39 percent), and sales and business development (36 percent).

Training existing employees in applied technology skills is a major challenge for HR executives and managers alike, in part because current professionals did not receive this type of instruction via traditional education paths. It's also not something that can be done overnight. According to futurist Ray Kurzweil, author of The Singularity Is Near, because technology is evolving more quickly than in the past, much of applied technology skill acquisition will be spread out over an employee's lifetime. Many of our respondents understand this, and are ensuring that their workforces continuously train and retrain on applied technology skills through the development of internal courses (40 percent), internal trainings (38 percent), tuition reimbursement (35 percent), and external trainings (31 percent). Only one- fourth said their organizations are taking no actions to develop this skillset.



HIRING MANAGERS SAID...

WHAT APPLIED TECHNOLOGY SKILLS ARE MOST RELEVANT FOR EMPLOYEES IN YOUR ORGANIZATION?

- \cdot "Ability to adapt to different software packages and embrace their use."
- · "Ability to understand new types of projects and how to utilize the IT resources available to them."
- · "Ability to connect the various technology systems already in place."
- · "Ability to recognize trends, themes, or anomalies in data."
- · "Ability to use data to make appropriate decisions and draw logical conclusions regarding the business."
- · "Ability to gather data and sort through essential and non-essential information."
- · "Ability to employ data analytics to improve margins, profitability, and processes."

NON-TRADITIONAL STUDENTS AND GRADUATES?

For the purpose of this research, the Career Advisory Board defined non-traditional college students and graduates as meeting ANY of the following criteria: started attending college more than one year after graduating high school; attended/attending college as a part-time student; had/have children and/or other dependents other than their spouse while attending college; worked/work at a full-time job while attending college; or did not receive a standard high school diploma and instead received a GED or high school certificate of completion.

We speculated that attitudes toward non-traditional students and graduates were shifting, and the JPI study results revealed this to be the case. Half of our respondents said their organizations have increased their hiring of non-traditional students and graduates. Why has this occurred? Fifty percent said they have "recognized valid, alternative education paths besides the typical college journey"; 43 percent said "skills gaps in the traditional talent pool have prevented us from filling open positions"; 34 percent "desire more diversity in our workforce"; and 32 percent perceive that "these students/ graduates have a stronger work ethic."

Skills gaps may be responsible for a refreshingly progressive stance on education." When asked to indicate how much they agreed or disagreed with the following statement: "If a candidate has the right skills for an open position, it doesn't matter what type or format of education was used to get them," 70 percent of hiring managers agreed.

Hiring managers may also embrace non-traditional students and graduates due to their growing presence in the workforce overall: 63 percent of survey respondents said these candidates are common in their talent pools, and 72 percent of those who hire senior-level positions said the same.

When it comes to offering non-traditional students and graduates the same opportunities as traditional candidates, we still have a bit of work to do. Forty-six percent of respondents who said their companies have not increased their hiring of these candidates commented they cannot do so due to unreliable sourcing methods, followed by missing skills (24 percent) and resistant organizational cultures (10 percent).

Nevertheless, in many cases, our respondents are part of a movement in their organizations to be more inclusive of non-traditional candidates. Half said they regularly communicate the positive traits demonstrated by non-traditional candidates, 37 percent emphasize the importance of workforce diversity, and 28 percent have implemented new hiring practices.

If the JPI survey is any indication, this is an excellent time to be a non-traditional student or graduate.

HIRING MANAGERS SAID...

WHAT SHOULD NON-TRADITIONAL COLLEGE STUDENTS/GRADUATES DO TO BE MARKETABLE AMONG AND COMPETITIVE WITH MORE TRADITIONAL CANDIDATES?

- "Develop niche skill sets or unique experiences that differentiate them from the market."
- "Keep their technology skillset up to date."
- "Include things in their resumes such as raising a family and volunteering."
- "Emphasize the internal drive and time management skills represented by the non-traditional path."
- "Make motivations and dedication clear to interviewers what have they learned BECAUSE they are a non-traditional candidate?"
- · "Demonstrate a track record of stable work history including promotions and cross-functional experiences."
- · "Be willing to learn the business and work in whatever capacity the company needs them."

WHAT'S OUR ADVICE FOR JOB SEEKERS?

If you're in the job market, the Career Advisory Board offers the following guidance in keeping with this year's JPI survey results.

Know the target position inside and out: To help you stand out from other candidates showcase your experience that directly relates to the job description. Be prepared to tell your interviewers exactly how you have solved similar challenges – with excellent results. Practice your narrative until you can share it concisely.

Show that you are goal-oriented: Hiring managers like degrees because they illustrate that a candidate can take actions in pursuit of a specific objective over an extended period of time. If you didn't get your education in the traditional way, brainstorm and share other examples of goal achievement and focus.

Develop superior communication skills: In an era of short-form interactions and emoticons, demonstrate a sound command of the English language in writing and in person. Taking a course or seeking help from a coach might benefit you, as making a polished, professional impression can help hiring managers look past education gaps.

Build your data sense: Our research illustrated that data analytics skills are uncommon at every level, yet applied technology skills are a competitive differentiator. Learn to collect and manipulate data from disparate sources, derive key strategic insights and create a cohesive story.

Be confident about your differences: In increasing numbers, hiring managers want to bring diverse perspectives and experiences to their workforces. Instead of trying to prove why you're like every other graduate, explain how the organization will benefit by having an employee with your special combination of grit, determination, resilience and resourcefulness.



ABOUT THE JOB PREPAREDNESS INDICATOR SURVEY

The 2017 Job Preparedness Indicator research was conducted online within the United States by DeVry University on behalf of the Career Advisory Board in November 2017. Survey respondents included 491 U.S.based individuals (55 percent male, 44 percent female) with full-time positions at the director level or above, in companies with more than 10 employees (mean company size was moderately large at 7,000). Most frequently in the education, financial services, and healthcare industries, our respondents' primary job responsibilities include management of staff, hiring employees, and human resources management. Sixty-four percent of respondents hire entry-level professionals, 78 percent hire mid-level professionals, and 46 percent hire senior-level professionals/executives.



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.



Presented by DeVry University