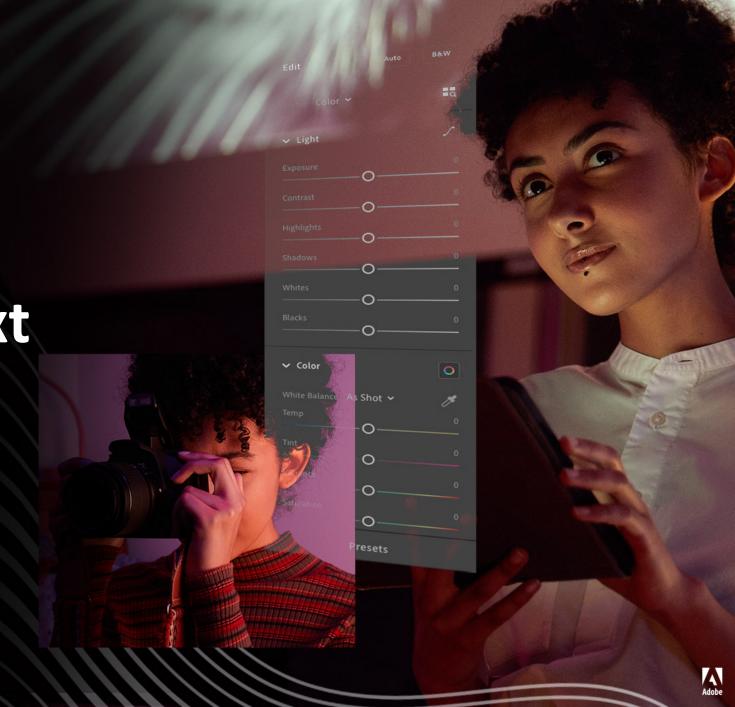


Adobe strives to inspire and empower the next generation to be lifelong creators.



For almost 30 years, Adobe has had a deep commitment to education and to the next generation.





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Turns out, the global business world agrees that creativity is a critical skill for the future workforce.

Organizations around the world also find that creativity and creative problem solving are among the most critical skills for success in the future workforce:



World Economic Forum:

Complex problem solving, critical thinking and creativity as the three most important skills required to thrive in 2020 and beyond.

Bloomberg: Creative problem solving, communication, strategic thinking and leadership are the most desired but hardest to find skillsets.

The Economist: Creative thinking and problem solving will be the #1 most valued skills for future workplaces.



Leading employers see creativity as a critical skill for the future workforce.

1	COMPLEX PROBLEM SOLVING	EMOTIONAL INTELLIGENCE	6
2	CRITICAL THINKING	JUDGEMENT AND DECISION MAKING	7
3	CREATIVITY	SERVICE ORIENTATION	8
4	PEOPLE MANAGEMENT	NEGOTIATION	9
5	COORDINATING WITH OTHERS	COGNITIVE FLEXIBILITY	10

"The Future of Jobs Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution." World Economic Forum, January 2016, http://www3.weforum.org/docs/WEF_Future_of_Jobs.pdf

Gen Z

values creativity as a critical skill

89% of students

believe creativity is going to play an integral role in solving today's global challenges.

76% of students

wish there was more of a focus on creativity in the classroom.

85% of students

believe being creative will be essential to their success.

78% of students

say they learn best by doing and creating.

2016 http://adobeeducate.com/genz

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Educators see creative problem solving skills as critical to future career success in an age of automation.

97%

say creative problem solving is important for students to learn in school.

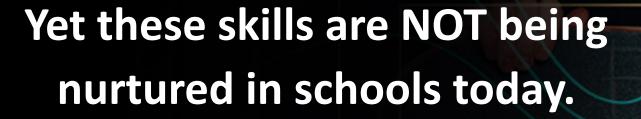
74%

say professions that require creative problem solving skills are less likely to be impacted by automation.

85%

say creative problemsolving skills are in high demand today for senior level/higher-paying careers.

http://cps.adobeeducate.com



69%

of educators agree that there is **not enough emphasis on creative problem solving in today's curricula.**

Global educators cite the following as barriers to teaching creative problem solving: lack of time to create; lack of education training for new software; lack of access to new hardware and software in classrooms; outdated standardized test requirements; and more.





But we didn't want to stop there.

We wanted to understand just how often these creative/soft skills are showing up in today's workforce.

We scanned millions of job postings and resumes...



2 million job postings analyzed



2 million resumes analyzed



Gap analysis conducted across

18
diverse & in-demand
career fields



10 in-depth interviews conducted

...and focused on 5 creative and soft skill sets...







Creativity



Collaboration

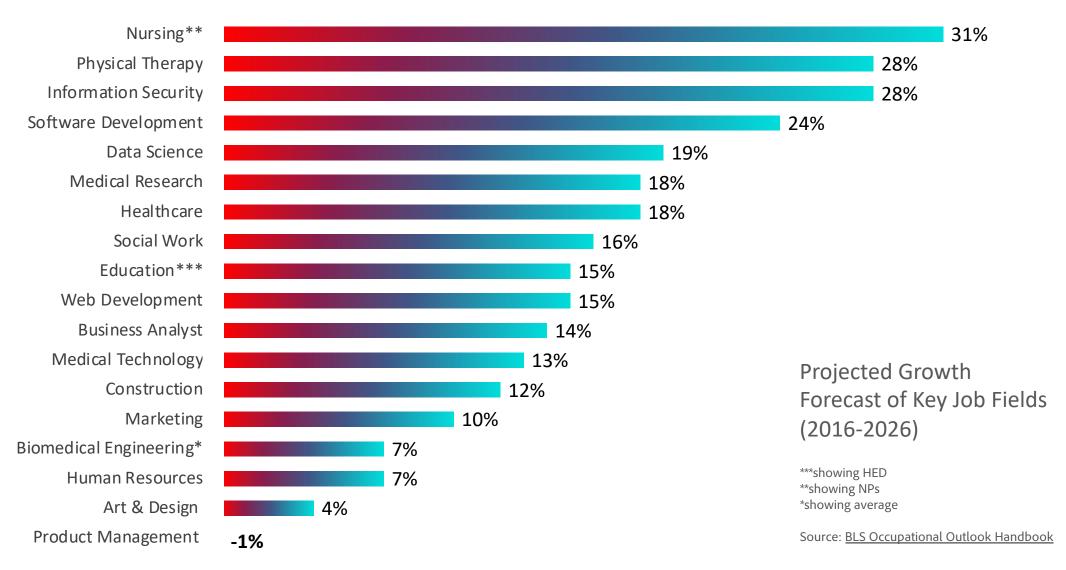


Creative Problem Solving



Critical Thinking

... spanning 18 diverse and in-demand, growing career fields



Soft Skills & Today's Workforce



Across the 18 career fields we analyzed, **Communication** skills were the most highly sought out in job postings, followed by **Creativity** and **Collaboration**.

% of Job Postings listing these skills

1	Communication	71%
2	Creativity	50%
3	Collaboration	41%
4	Creative Problem Solving	15 %
5	Critical Thinking	4%

Soft skills like collaboration, communication and creative thinking are critical to Hiring Managers in their evaluation of job applicants

"We always want to hear how people think and we encourage them to think aloud because whatever the problem is, we want to know how they arrived at the solutions. We need for people to be able to communicate and discuss and brainstorm their ideas, and it applies to Data Science big time because they have to be very clear on communicating what may work."



Q. What are the main challenges that you have in recruiting for these roles specifically?

... and these uniquely qualified candidates can be hard to find across industries begging the question,

"I find that it's always a challenge to find someone with the right skillset.

Someone can have all the functional skills and maybe not have those... soft skills. So really it's marrying the functional skills with the soft skills that is a challenge."



Carrie Bucci *People Operations Consultant*Mixtape Talent

Q, What are some of the main challenges that you have in recruiting for those roles specifically?

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Bloomberg's research highlights these same desired skills across all industries



Source: Bloomberg Job Skills Report 2016



Resumes did not stack up on emphasizing soft skill sets.

Sought after soft skills appear less frequently on resumes hiring managers review.

% of Resumes listing these skills

1	Creativity	3 in 4 resumes analyzed didn't mention either Creativity or Communication.	24%
2	Communication		22%
3	Collaboration		11%
4	Creative Problem Solving		1%
5	Critical Thinking		0%

Even though an emphasis on functional skills appears to make the most sense, like in a Data Science role, Hiring Managers are still surprised that candidates do not promote soft skills more.

"I'm surprised that they're not all 100% to some extent. The job description I'm sure requires certain educational background and certain experience, but with the definition of Data Scientist, they must be creative, be able to communicate across teams, and collaborate with them."



Q. What are your initial reactions to these findings?

Hiring Managers <u>want</u> these soft skills showcased. In today's competitive market, this emphasis could be the differentiator among the resumes reviewed by recruiters and automated tracking software searching for these terms.

"**75%** of recruiters and talent managers use some form of recruiting or applicant tracking software." — <u>Capterra</u>

"It would be great if people would emphasize skills like collaboration, creative problem solving and critical thinking on their resumes because that would help someone like myself and my team to be able to better filter applicants for the needs that we have."



Phil Pelleriti
Director of Talent Acquisition
UNM Hospitals

Q. How much does this ring true based on your own personal experience? Source: <u>Capterra</u>, an online provider of business software solutions.

Just seeing the words on one's resume isn't enough. Job seekers that share a narrative on how they have used these specific skills can help them stand out.

"I'd rather see a little bit of narrative in someone's resume than just bullet-pointed words and a list. So I think that communication, collaboration, creativity - those are things that I imagine appear in a very bulleted list on just about everyone's resumes. But if someone can really give more of a narrative around how have they collaborated in their present or former job. How they've creatively solved problems before. How they applied critical thinking to achieve results and what is the impact been on the organization."



Carrie Bucci *People Operations Consultant*Mixtape Talent

Q. What advice would you have for how job seekers can better highlight the softer skills they possess?

Soft skills need to come through both on paper and in practice. Hiring Managers look for candidates that can show that they can deliver in these key areas throughout the hiring

"We've had exercises where people have been in rooms without a whiteboard, however, there are windows where people have written formulas and there is a marker there. If someone takes the initiative to say do you mind if I use this tool? That shows us that this person has some initiative. They have that creative process. If someone is afraid to ask to use these tools, that's a dead giveaway that they might not have that creative critical thinking that we'd like to see. It's a little bit of a trick but it does seem to work well."



Mike JohnsonSenior Talent Acquisition Consultant
State Street

Q. When you're thinking through the hiring process, how do you try to pinpoint who would more effectively embody some of these types of skills?



These sizeable gaps not only point to a need for job applicants to better highlight their soft skills on resumes and demonstrate these skills during the interviewing process, but it also begs the question — **do candidates possess these skills?**

Gaps in Resumes vs. Job Postings*

1	Communication	-50%
2	Collaboration	-30%
3	Creativity	-25%
4	Creative Problem Solving	-14%
5	Critical Thinking	-4%

^{*} Gap calculated as the % of Resumes listing a skill minus the % of Job Postings listing that same skill.

The problem seems to be more than just missing key words on an application. Hiring Managers are concerned that certain skills aren't being adequately developed in the first place.

"I think collaboration is being built out through socioemotional learning but again, not all schools take that on. What I don't see happening a ton and I worry about is the creativity which I think plays into that critical thinking and creative problem solving. I think too many people interpret that as coloring a pretty picture or making a painting versus being creative around the ways in which they're tackling something."



Sara Taylor

Managing Director of Talent & HR

Rocky Mountain Prep

Q. What is the role of educators in addressing these skills gaps?

Across all levels, soft skills are not adequately emphasized and developed to prepare students for their future careers. The same need for development goes for job seekers too.

The World Economic Forum emphasizes a need for lifelong learning and personal career development for workers as worker needs shift across industries and the Fourth Industrial Revolution unfolds.

"I'll be honest with you, this is just my unbiased opinion, I'm involved in Pre-K through 12, but also teach at the Doctoral and Master's level, and I will tell you first and foremost that this is where we struggle. A lot of students that are coming out of college and from universities -- this is my opinion -- that are lacking in these creative and soft skills areas."



Dr. Donis Toler *Executive Director of Human Resources*Princeton City School District

Q. How much of a priority do you think is being put around developing these types of skills for students?

In order to close the gap, Hiring Managers believe these soft skills need to be better fostered through education and using methods and tools that promote these skill sets.

"What I see here is I truly believe that we are not doing a good enough job of preparing students for success, no matter if it's a Pre-K-12 level or it's the Higher-Ed level in regards to what we reference as soft skills. You're talking about a work ethic, you're talking about the growth mindset, or time management, whatever it may be. I think this is very real."



Dr. Donis Toler *Executive Director of Human Resources*Princeton City School District

Q. What is the role of educators in addressing these skills gaps?





There needs to be a greater emphasis on developing creative and soft skills so students can succeed in the future workplace

In addition to more focus on the development of these skills, students need to better understand how vital these are to their career growth.

"I think we're seeing schools move in that direction, but not fast enough and certainly not enough in schools that serve more historically marginalized populations."

Sara Taylor Managing Director of Talent & HR Rocky Mountain Prep



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Job seekers need to showcase these soft skills throughout the hiring process and work on continual skill development

Job seekers must recognize these non-functional job skills as valuable and make personal strides towards developing and showcasing them in the application process as well as applying them. As role requirements shift and emphasize these skills, working towards personal development will be necessary.

We're getting the best of the best, and that just has to be started at a very young age and constantly reiterated as they move along in their journeys. Because I'll be quite honest with you, I've got the highest level that you can achieve, which is a doctorate, and no one told me how to write a resume at all. I just cut bits and pieces, and hopefully it'll look good, but over the years, it's gotten better and better because I've gotten ample feedback from my colleagues and peers, and because they got better experience at it than I did.

Dr. Donis Toler Executive Director of Human Resources Princeton City School District





More tools need to be available to students to grow and foster their creative skills

The education system must adapt to the changing world of technology and account for the need to better develop creative and soft skills necessary for their future success. "The tie in, in terms of education... the idea that much of this has to be part of a changing curriculum and a focus on starting earlier in terms of building this skill set."

Samir Bajaj VP International HR Operations Fiserv





Hiring managers and recruiters need to adapt the way they evaluate and seek out candidates

Hiring managers need to adjust job posting descriptions to accommodate for their desire to find candidates that are able to communicate, think creatively and collaborate with others on top of the role's functional aspects.

Got my mind thinking all differently now, from my perspective, I may have to have my people in the office look over these postings and review them to see if we're doing an adequate job, because I can't even sit here and tell you right now if we are after looking at this. It makes me question if we're doing a good job or not.

Dr. Donis Toler
Executive Director of Human Resources
Princeton City School District





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- Use Adobe Creative Cloud to create whatever you can imagine
 - www.adobe.com/education



We'd like to thank the following people for sharing their perspective and insights to help us better understand our data findings.



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Lilia TsalenkoSenior Executive Talent Partner
Box, Inc. (Cloud Storage)



Dr. Donis Toler *Executive Director of Human Resources*Princeton City School District
(Education)



Brenda Papazian-Madden
Director of Human Resources
Nursing on Demand (Nursing
Services Startup)



Sara Taylor

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Rocky Mountain Prep
(Education)



Amanda Turbeville

HR Manager and Consultant

Montway Auto Transport

(Transportation)



Phil Pelleriti
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(Hospital System)



Carrie BucciPeople Operations Consultant
Mixtape Talent (Career Coach)



Mike Johnson
Senior Talent Acquisition Consultant
State Street Corporation (Investment
Management)



*Quotes in this report are personal opinions of the interviewees and do not reflect the views of the company and organizations they work for or are affiliated with.

Ben Lieberman

Senior Talent Partner

Drip (eCommerce Software)