

A journey, not a destination

What we mean when we talk about employability

Why understanding the future of work and skills is crucial today

Demographers have predicted that the first person who will live to be 150 has already been born. This means that children entering school today face the possibility of being the first generation of workers with 100-year careers.^{1,2}

The increasing pace of technological change, coupled with this predicted increase in longevity, means that the skills and knowledge learned in childhood, or a degree earned in your twenties, won't be enough for success in the long term. Already, across the world, companies are struggling to find candidates to fill job vacancies and to effectively evaluate the skills that these candidates have. Jobseekers are finding themselves overqualified, under-skilled, or both. They no longer have the relevant skillsets for advertised roles and are unable to compellingly communicate the skills they do have.

Meanwhile, technological advances and globalization are fuelling social, economic, and environmental challenges. And in addition to our aging populations, we are also facing rising inequality and political uncertainty. Because we understand the importance of context, we at Pearson set out to explore the impact of these factors on work and education. Through our *Future of Skills* research, undertaken in partnership with Nesta and the Oxford Martin School, we found that far from the doom and gloom headlines of robots taking our jobs, it is precisely the things that make us human that will make us more employable.

Broadly, the skills most in demand in the future fit into three categories:

1. Teaching and learning, of oneself and others
2. Understanding systems, whether those be human relationships, or the interface between human and machine
3. Creativity, such as originality and the ability to generate ideas

Importantly, the job titles we hold or industries that we work in are not likely to be dramatically different from those we would recognize today. However, new skills will be required to be successful in those roles, as AI and automation optimize productivity.

In addition, the pathway to sustained employment will not be linear. No single job will be the final destination. Individuals will gig, freelance and diversify the work they do. In the new talent economy, there will be higher value placed on what you learn today than a degree earned straight after school.

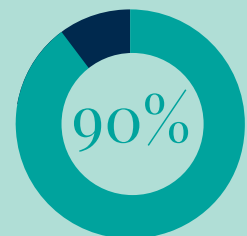
What this means is that we have an opportunity to reconfigure job roles, and rethink education, to equip ourselves and our children with the human skills to succeed.³ Maintaining careers will require a lifetime of learning new knowledge and skills.⁴

A common understanding of what those skills are is the first step. In this paper, we seek to outline what makes individuals employable. We offer practical guidance for educators, learners and employers on how to make progress towards enhancing skills needed for the future world of work.

Only **11%** of employers think that education institutions are effectively preparing students for work.

While **96%** of chief academic officers believe they are equipping their students for future employment⁵

76% of CEOs are concerned with the availability of **digital skills** in their workforce⁶



of graduate recruiters cited **21st century skills** as among the three most important factors in hiring decisions⁷



The number 1 reason why hiring is challenging is a lack of candidates with needed **hard skills**⁸

¹ LeVine, S., *The next great workplace challenge: 100-year careers*
² Gratton, L., and Scott, A., (2016). *The 100-Year Life - Living and Working in an Age of Longevity*, Bloomsbury Publishing
³ Pearson, Oxford University, Nesta, (2017). *Future of Skills*
⁴ Deegan, J., & Martin, N., *Demand Driven Education, Merging work & learning to develop the human skills that matter*
⁵ Gallup and Lumina Foundation, (2014). *What America Needs to Know about Higher Education Redesign*
⁶ PwC, (2018). *21st CEO survey*.
⁷ CBI & Pearson, (2017). *Helping the UK Thrive, CBI/Pearson Education and Skills Survey 2017*
⁸ Pearson Global Employer Research, 2019

What makes us employable?

At Pearson, we have identified four areas that make up employability, based on formal and informal research with employers, educators, and learners. Individuals need to develop skills in each area, but the stage they are at in their life - whether that's starting, developing, or changing career - will impact which areas to focus on most.

Productivity competencies

Skills, knowledge and attributes that make individuals productive in the workplace

Transitional competencies

Enable individuals to secure employment and make progress in employment

English language



CORE ACADEMIC COMPETENCIES

A solid foundation of literacy, numeracy, and digital fluency are essential. Regardless of the field we select or the education we pursue, there are few opportunities open to us without these competencies. The roots of these core skills are found in K-12 education, however global assessment results suggest significant numbers of adults even in developed countries lack basic literacy and numeracy skills required to fully participate in society.⁹



OCCUPATIONAL COMPETENCIES

Occupational competencies have become equally as important as traditional core academic skills. These are skills related to a specific job, like nursing skills if you want to be a nurse, or coding if you want to be a programmer. Increasingly, K-12 institutions are including more courses in digital sciences and other future facing skills. In some countries, literacy in English is crucial for certain occupations. In others, there is reason to believe that English language skills enhance a person's potential to gain employment as well as their earning power.¹⁰



PERSONAL & SOCIAL CAPABILITIES

This is how we refer to what can be known as 'soft skills', '21st century skills' or 'transferable skills'. These are capabilities that we start learning at a young age and continue upskilling throughout our careers, and each should be specifically taught, practiced, and assessed to have the greatest impact on learners.

The Personal and Social Capabilities are:

- Critical thinking & Creativity
- Communication
- Collaboration
- Self-management
- Social responsibility
- Leadership



CAREER KNOWLEDGE & TRANSITION SKILLS

These are the skills learners need to transition and transfer what they do in school, higher education and the experience they have at work to their futures. For example, how to showcase certifications, credentials and accomplishments in the best way, how to brand yourself, and how to develop a presence on social media.

Learning throughout life

These fictional profiles demonstrate the type of learning experiences an individual could have in order to develop certain employability skills at different ages and stages.

Rosa was born into a connected world and has had a smartphone since she was nine. At school, computing is part of the curriculum. In a recent hackathon in partnership with Google, her team built an app to help individuals reuse plastics.

Rosa is passionate about the environment, and so was keen to take part in a debate in class on the climate crisis. She had to put forward an opposing viewpoint to her own. She earned level 2 badges in critical thinking and communication, which were added to her digital record alongside academic results and badges for extra-curricular activities.

In the future, Rosa hopes to secure a placement at Greenpeace.

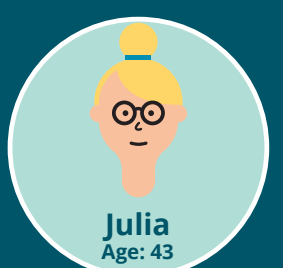


Ade's childhood was unsettled because his family moved a lot, so he lost momentum at school and didn't complete his qualifications. He had always loved sport, so he started working on reception in a local gym. He was good with customers and learned quickly.

Ade's manager recognized his potential, and persuaded the company to sponsor him to go to college to gain the GCSEs in Maths and Science that he needed to secure a place on a Sports and Exercise Science BTEC. Once qualified, Ade will be able to run coaching sessions. In the future, he hopes to become a personal trainer for elite athletes.

Julia has always had an interest in science, though she really credits her secondary school chemistry teacher for giving her the confidence to pursue a career in the sciences. She chose to study Materials Science Engineering at University and did work experience in two newer sectors where companies were keen to attract talent.

Her company operates internationally, and so to be able to network better on social media and at conferences, Julia has enrolled on the in-company English language program aimed at developing spoken and written communication skills, particularly in technical English.



After losing his job as a newspaper journalist, **Amit** retrained as a community college teacher. His background in communications stood him in good stead when teaching skills such as collaborative problem-solving and interpersonal skills.

He was struck by the growing number of mature students who wanted and needed to re-skill in response to transitions in their lives. Amit began to work with individuals as a counsellor - helping them to imagine possible future selves and think through their implications for sequencing a multi-staged life. He has taken self-directed training courses in applied philosophy and ethics as well as reflective practices to enrich the advice that he is able to give to clients.

⁹OECD, (2013). *Skilled for Life? Key Findings from Surveys of Adult Skills*

¹⁰Erling, E., (2015). *The Relationship Between English and Employability in the Middle East and North Africa*, British Council, Manchester

Closing the skills gap

Now we know what skills are needed, how can we ensure we have systems in place that develop those skills? In *Demand Driven Education: Merging work & learning to develop the human skills that matter*, Joe Deegan and Nathan Martin outline some practical steps, which are summarized here: ¹¹

For individuals

- 1 Use insights from *The Future of Skills*, combined with local labor market information, to understand what skills are in demand now and what is likely to change in the future.
- 2 Build a personal plan for upskilling, seeking out learning and development opportunities that align with the capabilities that will continue to be useful through 2030.
- 3 Think beyond degree programs to build and demonstrate competency. The rise of short-term education and training is reducing the tradeoffs between learning and working.

For Education Systems

- 1 Commit to making curriculum and pedagogy dynamic, work-based, and skills-focused.
- 2 Collaborate with employers and use digital tools to understand the skills needed in the local labor market, so you can address the pressing needs of the economy.
- 3 Embrace strategies that allow individuals to advance rapidly and convert learning to earning, for example: alternative credentials, bootcamps, and digital badges.

For Employers

- 1 Map the skills of existing workers using digital tools, and then provide opportunities for them to enhance their skills. The same assessments can also help screen job candidates.
- 2 Support the provision of work-based learning (such as career exposure experiences, internships, apprenticeships, and on-the-job training models), which will help build a talent pipeline.
- 3 Collaborate with educators to share insight on skill gaps and validate education strategies.

¹¹ Deegan, J., & Martin, N., *Demand Driven Education, Merging work & learning to develop the human skills that matter*

Busting the myths

We hope this paper gives you a clearer understanding of our approach to employability and lifelong learning. If you only take three things away, remember:

1. **Employability isn't only the concern of higher education.** Development of these capabilities should start before a career is even on the horizon and it continues after graduation as new job responsibilities and advancement opportunities arise.
2. **Employability skills are not new.** But they are more important now than ever before, in light of the world we are living in.
3. **Employability is not about funneling people into a specific job.** It's about the skills we need as people for success now and in the future. It's about being fulfilled and engaged in a rewarding career that helps you grow in ways you may not even have imagined. It's about making sure that everybody has access to these opportunities.

We all need to embrace lifelong learning, continuously acquiring new knowledge and skills to thrive in an ever-changing and increasingly connected world. If we can make changes as individuals, and in our roles as educators or employers, we can turn the challenges we face into opportunities for personal, economic and societal growth.

Would you like to talk to us about employability and lifelong learning?

Email efficacy@pearson.com

The Efficacy & Learning Research team focus on the science behind and the measurement of how we help people make progress in their lives through learning.