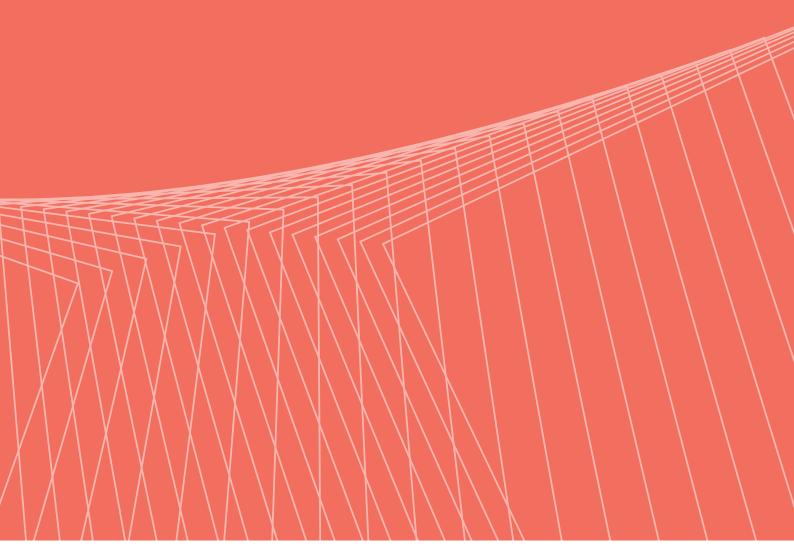






# PREPARING THE NEW GENERATION FOR THE FUTURE OF WORK

A survey of European youth, employers and universities



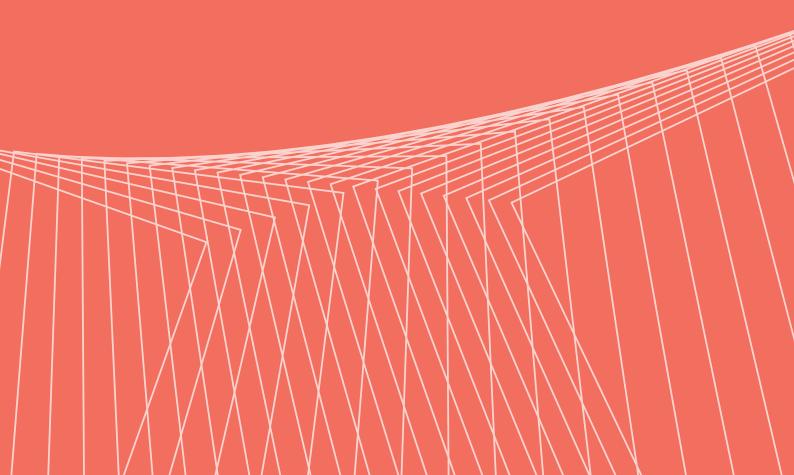


On the occasion of WISE@Paris, taking place on February 20-21, 2019, WISE and its partner JobTeaser asked IPSOS to conduct an extensive European study on the future of work, and how it should impact the future of learning.

To get the full picture on this very broad topic, 5 European countries were selected (France, Germany, Spain, the UK and Belgium) and more than 3000 people were interviewed online, including representative samples of the population aged 18-25 in these five countries, recruiters from the JobTeaser community and education stakeholders who are members of WISE or JobTeaser communities across these 5 countries.

How do young Europeans, employers and education stakeholders see the future of work? Do they feel well prepared for this future that many are even calling the fourth industrial revolution?

Who do they think should be held responsible for preparing young people for their first job, and more broadly for their future at work? Businesses? Universities? Young people themselves? And how well do their national education systems prepare young people to enter the job market and seize the new opportunities that are arising? What should be done as a priority to improve the way young Europeans are prepared for these opportunities? Which skills will be most in demand and which subjects will become compulsory? Will recruiters' attention shift away from hard skills and certificates, instead focusing more on soft skills and other kinds of qualifications?



#### EUROPEAN YOUTH, EMPLOYERS AND EDUCATION STAKEHOLDERS ARE OPTIMISTIC ABOUT THE FUTURE OF WORK

"One major change we see in the jobs market is the increase in career transitions. The average worker in the EU has gone from having a job for life to having more than 10 in a career. These transitions can be voluntary or involuntary, but inevitably require new knowledge, skills and mindsets, flexibility and adaptability."

**Commissioner Marianne Thyssen**, European Commission, Employment, Social Affairs, Skills and Labour Mobility

More than three quarters of young Europeans are optimistic when they think of the way people will work in 10 years (78%). Among them, 20% even feel "very optimistic" about the future of work, especially young men (26% vs. 13% of young women) and people who are already working (22%), particularly when they are managers or professionals (41%). Young people from a more privileged background are also in general more optimistic than others (of those whose mother is a manager or professional, 81% are optimistic about the future of work, and 27% are "very optimistic"). When considering the country of residence, Germans are the most enthusiastic (81%), and the least enthusiastic are the French (72%), but they are still largely confident about the future of work.

**Recruiters share their optimism** (86% are optimistic about the future of work), **as do education stakeholders** (74%), albeit both in a more measured manner (13% of recruiters and 12% of education stakeholders are very optimistic).

Among the various aspects of the future of work that make these three populations optimistic, technological progress (for instance tools powered by AI) is what makes young Europeans the most optimistic (82%), and the same is true for education stakeholders (80%).

Technology and AI-based learning machines appear particularly promising to some education experts, both at an individual and a collective level:

"AI based systems can compare the individual competencies of one person with the experience of millions of other learners to identify a learning path that fits. We need to use technology to personalize education, i.e. to generate individual learning paths, and to identify and validate competencies."

**Dr. Jörg Dräger**, CEO of the Centre for Higher Education Development (CHE) and Executive Board Member, Bertelsmann Stiftung

The possibilities that technological progress provides in terms of individualizing learning pathways hold great promise, especially since they are accompanied by a shift in expectations:

"A good competency-based system should not only focus on 21st century skills. It also should properly recognize prior achievements of each individual. An education system should measure and validate the competencies that somebody already has, and build the individual learning path on these existing competencies."

**Dr. Jörg Dräger**, CEO of the Centre for Higher Education Development (CHE) and Executive Board Member, Bertelsmann Stiftung

Recruiters are even more positive about **flexible ways of working in the gig/ collaborative economy** (89%), especially when they are aged under 30 (94% are optimistic about this aspect of the future of work, including 38% who are "very optimistic"). **Recruiters are also more confident about changes in how people are managed** (less hierarchy and more horizontal project-based working) than others (77% are optimistic, compared to 60% of young Europeans and 60% of education stakeholders). **The values that will be prevalent in the workplace are a source of optimism for almost two thirds of young people and recruiters.** Education stakeholders are slightly more doubtful, with only one in two being confident on this subject (53%).

The most worrying aspect of the future of work for the three populations is their respective countries' economic outlook (growth, employment rate, etc.). Only 45% of employers and 46% of education stakeholders are optimistic about this, along with 51% of young Europeans (60% of Germans, but only 41% of the French).

The young Europeans, recruiters and education stakeholders interviewed feel well prepared for what many people consider to be the fourth industrial revolution (77% of young Europeans, 70% of employers and 74% of education stakeholders), in which we are seeing development of technologies such as robotics, the Internet of Things (IOT), virtual reality and AI. This explains why they are largely optimistic about the future of work, and especially about technological progress, even though it represents a huge challenge for the world of education:

"[About GAFA] in a way, they are challenging our education because you have to accept Google and the others. In the past, before Google, if you did not know the answer to a question, you could look into an encyclopaedia and it was true. On Google you find 100 answers to your question! And no one tells you if it's right or wrong. The capacity of young people to navigate, and to understand the complexity, this is the challenge of those technologies."

**Andreas Schleicher**, Director for the Directorate of Education and Skills (OECD)

Employers and education stakeholders are also convinced that young people in general are well prepared for this major change (79% of recruiters think so, as do 73% of education stakeholders). They are, however, much more critical of the level of preparation among people currently in the workforce (35% of recruiters and 42% of education stakeholders think these people are well prepared), in their country in general (35% and 40% respectively), and among retired people (7% and 6%).

These major changes will, however, be a huge challenge for the future of education and training. On this aspect, recruiters are rather less optimistic (60%, although this figure rises to 72% among those aged under 30) than education stakeholders (72%) and young Europeans (72%). Among young people, differences between countries are significant: Germans are the most optimistic (80%) and the French are the least optimistic by far (59%).



## UNIVERSITIES AND BUSINESSES ARE CONSIDERED THE MAIN STAKEHOLDERS RESPONSIBLE FOR PREPARING YOUNG PEOPLE FOR WORK AND FOR THE FUTURE OF WORK

When it comes to preparing young people for their first job, young Europeans, recruiters and education stakeholders agree that schools and universities should be seen as the stakeholder with primary responsibility. However, this is a significant challenge, given that when young Europeans are asked to rate their level of employability (their level of competence and skills that make them attractive to a recruiter) on a scale from 0 to 10, they do not give a different rate if they are currently studying at secondary school (6.7/10 on average), at university (6.7/10) or at a higher education institution.

However, when it comes to their future at work, young Europeans and recruiters consider businesses to be the stakeholders with primary responsibility in this area, ahead of schools and universities and young people themselves. Education stakeholders still feel they have the greatest responsibility, but that businesses come second, and then young people themselves.

"There cannot be employability without employers! We need to make sure that employers take on responsibility for education and partner with educational institutions. In the German VET employers have been doing that for decades. But we need to get their input in higher education as well, because employers strengthen employability".

**Dr. Jörg Dräger**, CEO of the Centre for Higher Education Development (CHE) and Executive Board Member, Bertelsmann Stiftung

The responsibility of businesses to help prepare young people for their future at work can take many forms.

For businesses, building their employees' future means first making on-the-job training available within their company, which is not always the case, ensuring that it is not limited to specialist sector-based knowledge, and ensuring that it is available to everybody who wants or needs it. Currently, only a minority of employers report that training programmes are made available to everyone when it comes to IT skills (41%), soft skills (40%) or language skills (36%), even though these skills are key to building a professional career path.

But it also simply means businesses have to be better understood by children, as well as building bridges between the school system and the business world. This is also the key to reducing inequalities, by opening up future prospects for children from underprivileged backgrounds.

"I think we need to do much better for the future world... At school, the concept of work is very abstract. We should create bridges through training and internship early on, to make learning more relevant, more interesting, more genuine – it's not only numbers on a board, learning should be something to experiment. It's about bringing people to the real world, and showing them what jobs really entail."

**Andreas Schleicher**, Director for the Directorate of Education and Skills (OECD)

It also means businesses should have an input in how higher education institutions prepare students for the future of work (90% of recruiters agree) to ensure their priorities are heard. Currently, just 55% of the recruiters interviewed think that their organization has any kind of input on how higher education institutions are preparing students for the future of work (and among this figure, 10% say it is "absolutely" the case). One of the highest levels of business involvement in the preparation of students is the example of Dual University given by Dr. Jörg Dräger:

"A Dual University is a university where you combine academic and vocational training, finishing with two degrees: a bachelor and a VET degree. Employers sit in the board of the Dual University. [...] The system combines an academic approach with a high degree of employability. It is like a joint venture between government that runs the university part and industry that runs the workplace learning."

**Dr. Jörg Dräger**, CEO of the Centre for Higher Education Development (CHE) and Executive Board Member, Bertelsmann Stiftung

But in order to build bridges between the business and education worlds, changing views on skills-based and technical work is also key, both in the academic world and society as a whole:

"I think that in these countries (Germany, Austria and Switzerland), there is a general attitude that, in regard to skills and technical work, they are equally as rewarding and equally respectable as university."

**Simon Bartley**, President of WorldSkills International

### CONSIDERABLE SCOPE FOR IMPROVEMENT IN THE WAY NATIONAL EDUCATION SYSTEMS PREPARE YOUNG PEOPLE FOR THE JOB MARKET

Young Europeans, education stakeholders and especially recruiters are very critical when judging how well their country's education system prepares young people for the job market: less than half of young people think it prepares them well for their first job (48%) and for building a professional career path (42%). Education stakeholders are also very doubtful of the performance of their respective national education systems (49% think it prepares young people well to enter the job market, and only 36% think it helps them build a professional career path, despite the fact that most of them consider it to be their responsibility). But recruiters are even more critical: less than one in four are positive about the contribution that their national education system makes, be it for entering the job market (23%) or for their later careers (11%).

Among young Europeans, the French are the most critical (only 37% think the French national education system prepares them well to enter the job market), followed by the British (43%) and the Spanish (44%). A majority is satisfied only in Belgium (59% think they are well prepared) and Germany (54%). These differences can partly be explained by the bridges built between the world of education and business, and the resulting ability to match labour market requirements:

"I would like, for instance, that every young person has at least one handson entrepreneurial experience before leaving school. Other vital skills include the ability to reflect upon oneself, effectively manage time and information, work with others, remain resilient and manage one's own learning and career. Our European framework lays the foundation for young people to find a good-quality job and become active citizens."

**Commissioner Marianne Thyssen**, European Commission, Employment, Social Affairs, Skills and Labour Mobility

To improve this state of affairs, the three populations agree that the priority for their national education system should be to develop work experience, by encouraging training sessions, entrepreneurial initiatives, or courses in which students alternate between spending time at school and in a company. Among young Europeans, 62% believe that work experience is essential to preparing students for the future of work, and 35% think that it is – if not essential – important.

This certainly explains why the three populations surveyed believe that vocational schools are the institutions that best prepare young people for the future of work (78% of young Europeans and 77% of recruiters and education stakeholders think that they properly fulfil this mission).

A majority of young people think the same about higher education institutions (62%), as do education stakeholders (67%), but only a minority of recruiters agree (41%). And when it comes to secondary schools, only a minority of young Europeans (42%), recruiters (12%) and education stakeholders (16%) think they provide good preparation for the future of work.

Career advice comes second for young Europeans, which is not surprising given the fact that 88% of them would like to be better supported when they make their professional choices (advice from teachers, career advice, etc.). Young people in Spain have particularly high demand for better support in this regard (94%, including 48% "very much"), which is undeniably linked to the fact that of the five countries surveyed, Spain has the highest unemployment rate for under-25s (34.1% in Spain compared to just 6.1% in Germany in November 2018).



**Developing project-based learning as well as the quality of and training given to teachers** are also cited as priorities by the three populations. Education stakeholders in particular are asking for better training, which is not surprising given the fact that almost four in ten (38%) consider themselves poorly equipped to prepare students for jobs that they think will be in demand in 10 years. This is all the more important given that the role of teachers will change considerably:

"In the future, teachers will help individuals in their career path... They will have to be able to teach technologically, and the subjects that they will teach will not only be subjects like maths and French history... They will have to teach people to be able to learn, to learn their whole life, to learn using technology, and to learn skills and new skills."

Simon Bartley, President of WorldSkills International



#### WILL THE SKILLS OF THE FUTURE LEAD TO THE DEATH OF UNIVERSITY DEGREES?

A majority of young Europeans – and an even larger majority of recruiters and education stakeholders – feel that employers generally place too much importance on having a qualification (77% of recruiters themselves think so), and even on having a degree that exactly relates to the job they are hiring for (84% of recruiters).

As far as young Europeans are concerned, the French and Germans are the most critical about the excessive importance that they feel is placed on qualifications (62%). On the contrary, a majority agree that soft skills are not considered enough by recruiters: 57% of young Europeans think so (and even 61% in France and 60% in Spain), along with 75% of education stakeholders and 83% of recruiters themselves.

To be ready for work, the three populations surveyed believe that what is most important for young people is to develop soft skills or people skills, even more so

than having a good academic background or qualification (these were cited among the least important aspects; although they are not considered unimportant, they are in a way taken for granted). Although hard skills or academic background obviously remain very important criteria for recruiters, soft skills are often decisive in today's market: 58% of recruiters say that they now pay as much attention to the soft skills of the job applicants that they meet as they do to their hard skills, and 25% to an even greater extent than their hard skills or academic background.

"Content knowledge will become less important in the future. It means what you know, but it's more about what you can do, and it's a bit different! So understanding is important, can you think like a scientist? It's about that: can you think as a historian, history is not about places, but you understand the narrative... Can you think like a philosopher? I mean the deep understanding is very important (...) [it's about] the capacity of people to imagine things, and to create a novelty, to be open. It's very important - easy to say, but it's not easy to do! Because in the education system we spend a lot of time teaching young people our knowledge, but we don't give them the opportunity to question the established system; in the future, imagination and curiosity will be very important."

**Andreas Schleicher**, Director for the Directorate of Education and Skills (OECD)

Of the many skills listed, recruiters and education stakeholders believe that those that will be the most important at work in the next 10 years are flexibility and adaptability (cited first by both of these populations and second by young Europeans) and the ability to self-train. This skill is cited second by recruiters and third by education stakeholders, but only seventh by young Europeans, who tend to underestimate the importance of developing this ability.

Recruiters also emphasize the need to master foreign languages and the ability to work in a team, skills that are not cited among the three most important by education stakeholders, showing gaps in perceptions.

"New education needs to focus on collaboration. It needs to be more learner centric, and it should lead learners to be more self-responsible."

**Dr. Jörg Dräger**, CEO of the Centre for Higher Education Development (CHE) and Executive Board Member, Bertelsmann Stiftung

Interestingly, young Europeans think that computer skills (including coding) and the ability to interact with AI tools will be the most important skills at work in the next 10 years (44% cite them as the most important to develop, while only 26% of recruiters and 27% of education stakeholders do so). Logically, they also consider computer science as the most important subject to teach at school in the coming years, while recruiters cite foreign languages first, and education stakeholders cite ethics. This does not mean that recruiters consider computer skills to be unimportant or that they think that all the young people around them have mastered these skills

(only 56% of recruiters feel that the young applicants they meet are well prepared and fully aware of the skills required), but that they have even stronger expectations regarding two key skills: the ability to self-train and flexibility/adaptability. Furthermore, only around one in two believes that the young applicants that they meet are well prepared in and aware of these areas (49% regarding the ability to self-train and 54% for flexibility/adaptability).



Does the attention that is paid to soft skills and self-training ability mean that traditional degrees will disappear in the near future? Only a minority of young Europeans (21%), recruiters (11%) and education stakeholders (8%) believe that digital badges and qualifications will replace traditional degrees in the future. Most of them state that this approach will be a good way to certify some skills, without replacing traditional degrees.

Recruiters are still rather unlikely to hire people without university degrees but with online learning qualifications (the average likelihood of doing so is 4.3 on a scale of o – very unlikely – to 10 – very likely). They are also rather unlikely to hire people without university degrees but with employer badges or qualifications (5.2/10) or with a university degree in another field than that relevant to the job (5.4/10). They would, however, be more willing to hire people without qualifications or a degree but who do have relevant work experience (6.8/10). Traditional degrees are not dead, but higher education systems' ability to incorporate work into the curriculum is clearly a key aspect of their survival, and of the quality of the preparation provided to the next generation for the future of work.

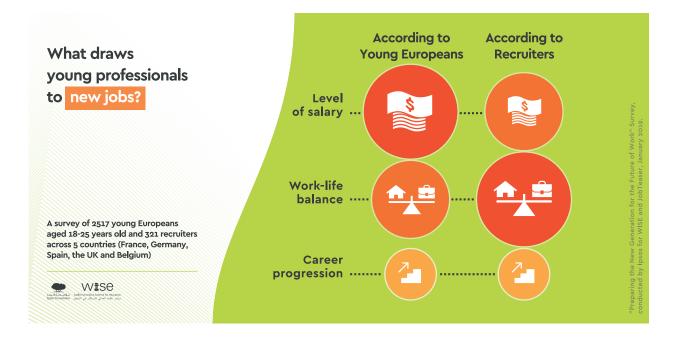
"The challenge is not about institutions, **it's more about what they learn, how they learn, where they learn, when they learn.** Again I don't believe that the future is about studying MORE; the future is about integrating work and being able to make many more decisions about what I do, where I learn, when I learn. I'm learning digital technologies, some will be coaching

the humans, so I think we should not think about sending people to do long studies, **but actually finding new ways for these technological skills**."

**Andreas Schleicher**, Director for the Directorate of Education and Skills (OECD)

"Looking 10 years ahead, I think that lifelong learning will have become the norm. In this respect, it is also important that people can have their skills, qualifications and certifications recognised. Too often, people's skills go unrecognised and are therefore rendered invisible, particularly when they are gained outside formal education. This is something we need to address to make the future of work better for everyone."

**Commissioner Marianne Thyssen**, European Commission, Employment, Social Affairs, Skills and Labour Mobility



#### **METHODOLOGY NOTE:**

Study carried out by Ipsos for WISE in collaboration with JobTeaser in January 2019 among 3 populations:

- 2,517 young Europeans aged 18-25 y.o. including a minimum of 500 people in each of the five countries surveyed (France, Germany, Spain, the UK and Belgium). In each country, a representative sample (quota method) of this population aged 18-25 was interviewed online with Ipsos panel.
- 381 recruiters from these 5 European countries, members of JobTeaser community. Online consultation based on contacts provided by JobTeaser.
- 192 education actors from the same countries (most of them working in universities / other institutions for higher education), members of WISE community or schools/universities in contact with JobTeaser. Online consultation based on contacts provided by WISE and
- 4 education experts were also interviewed by phone on their views about the future of work and education.







