

# Future of Work: Decent Work and Skills

A summary of expert perspectives from the  
3M-GlobeScan SDG Leadership Forum for Goal 8:  
Decent Work and Economic Growth

July 2019



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More than **125** attendees

from **17** countries

**3** hours of online, text discussion

## What we set out to do

A diverse group of stakeholders from civil society, multilateral organizations, and the private sector joined hosts GlobeScan and 3M for the SDG Leadership Forum for Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all.

The Forum was a global, online, and text-based discussion with participants from around the world. Over the course of two sessions, held at different points during the day to maximize accessibility across time zones, guest contributors from 17 organizations were invited as panelists to help seed the discussion.

Together, we explored the future of work and what will be needed to support skills development for decent work and economic prosperity. In our globalized economy, technological advancement and competitiveness is empowering rapid evolution in work and production. The World Economic Forum urges business leaders and governments to take a proactive approach to developing the skills of their future workforces.

This report summarizes the discussions and identifies key challenges and priorities for action. The report also shares results from a poll of Forum participants surveyed during the event. A notation on each poll chart identifies how many participants responded to specific polling questions.

A full list of the participating guest contributors is provided in the report's appendix.

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## Introduction from 3M

In our global economy, technological advancement is empowering rapid evolution in work and production. As a company rooted in scientific exploration and the belief that every problem has a solution, we apply scientific expertise to help solve some of the world's biggest challenges. We are committed to advancing a global circular economy, innovating to decarbonize industry, and collaborating with others to create a more positive world.

Conversations in our Forum on SDG8 highlighted that economic growth needs to be inclusive in order for it to lead to decent work. Systemic barriers such as poverty, inequality, weak governance, youth unemployment, and human rights are inhibiting decent work, especially for the most marginalized. Greater efforts are needed to provide youth with the education and skills training they need to thrive in the workplace.

At 3M we are committed to supporting the next generation of vocational professionals and developing the skills of the future workforce. Meeting the challenges of Goal 8 will require business to change the way it thinks about work, and how society can prepare for the future of work and find effective ways to bridge the skills gap.

A special thanks to all the contributors for making the time to join us and for sharing their experience and wisdom. The dialogue must not end here.

We look forward to continuing this conversation and collaborating to build solutions that will achieve full and productive employment and decent work for all by 2030.



**Gayle Schueller**  
Chief Sustainability Officer  
3M

## Introduction from GlobeScan

The SDG Leadership Series is our opportunity to scale engagement and collective action around the Global Goals and bring us closer to a 2030 where we all live more sustainably and with dignity.

We are pleased to co-host this online discussion with 3M on Goal 8: Decent Work and Economic Growth. These sessions are an opportunity to bring together the world's leading thinkers to share knowledge and develop strategies for making progress on the Global Goals.

Decent work drives sustainable development and sums up the aspirations of people in their working lives. We know that economic growth alone is not enough to ensure equity, social progress, and to eradicate poverty. The consensus in this forum was that growth has to be inclusive and job-led for it to lead to decent work for all.

Our future is more prosperous and everyone benefits when people have access to decent, productive work. What is concerning is that there are high levels of youth unemployment and shortages of people with critical job skills. This forum sought to identify ways in which people can have greater access to decent jobs through skills development.



**Chris Coulter**  
CEO, GlobeScan

# Executive Summary

**Forum participants believe that decent work for all will be challenging to achieve if we do not address pressing social issues such as poverty, inequality, weak governance, youth unemployment, and human rights**

Systemic barriers are currently inhibiting decent work, especially for the most marginalized. Access to education, providing opportunities for people of low socioeconomic status, reducing inequality of opportunities, and providing strong social protection systems are seen as essential to achieving Goal 8. Greater efforts are needed to provide youth, particularly those in emerging economies, with the education and skills training they need to thrive in the workplace.

**Economic growth needs to be inclusive and job-led in order for it to lead to decent work**

One should not assume a direct and positive correlation between economic growth, productivity, and decent work. Increasingly, productive economies may not necessarily create more jobs, let alone decent ones. Inclusive growth that reduces poverty is essential if Goal 8 is to be achieved.

**Rapid technological changes are driving structural shifts in the way we work**

***The digital revolution is bringing about productivity gains along with increasing inequality.*** While many people are benefiting from this transition, there are also many being left behind (e.g., people with limited access to technology such as those in the developing world, workers at risk of displacement due to automation and AI, increasing informality of employment, etc.). Strengthening workforce safety nets and investing in lifelong learning are measures that are needed through this transition.

***Increasing dependence on technology requires responsible adoption by business.***

Experts agree that firms need a clear understanding of the implications of the adoption of new technology. This will require long-term thinking that does not relate competitiveness to labor costs. Firms will need to modernize their workforce strategies and practices to safeguard worker resilience.

***Technology has given rise to more flexible work environments and also the unstable "gig economy."*** Forum participants view this as a double-edged sword. While the gig economy provides some workers with flexibility and helps to diversify income sources, it lacks job security and a predictable career path. The gig economy is largely unregulated, both at national and international levels, which risks the exploitation of workers in some sectors as they often have little bargaining power.

## Lifelong learning will be an imperative for workers to remain competitive and productive

***One set of skills is no longer enough to maintain employment throughout a lifetime.***

Workers at all levels will require reskilling and upskilling to stay relevant in their organizations and to remain productive. Lifelong learning should be a shared responsibility between educators, government, and individuals.

***Transferable and soft skills are critical for success.*** Jobs that are difficult to automate will gain prominence over time, so humans will need to excel at the skills that set us apart from machines. This includes attributes such as creativity, empathy, flexibility, decision making, and interpersonal skills. Educators should be equipping children with the required social and behavioral skills early on to ensure they develop the life skills necessary to navigate the future of work.

***Businesses have a responsibility to upskill and reskill employees.*** Forum participants agreed that businesses have a responsibility to prepare their employees for their shifting skills needs and to safeguard workers' resilience. Businesses' investment in their own workforces to prepare for future needs may be a self-serving investment as well as a public good at the same time. This is the vital shift needed in business mentality for SDG 8.

## Addressing skills mismatches in labor markets will require a concerted effort and multi-stakeholder collaboration and dialogue

***Employers need to communicate to education providers about the skills that students need to succeed at work.*** Education and training models should be revised to address the demands of labor markets. This will require businesses to proactively signal to education experts and governments the types of skills that are in demand. Businesses benefit from supporting education and curriculum development because it helps them build a workforce that has the skills they need now and in the future.

***Business-education partnerships to support skills development are strong investments.*** Supporting the training and education of future workers is a win-win for the private sector, educators, and students. This helps companies develop the workforce they require by actively participating in the development of students' skills. Educators gain visibility of the types of skills that are in demand. Students can gain practical work experience to prepare them for labor markets through opportunities such as internships, apprenticeships, mentorships, job shadowing, participation in training academies, etc.

***Governments will need to collaborate with businesses and business organizations in the design of skill building and reskilling initiatives.*** Governments need to help workers navigate job transitions by developing programs and funding initiatives that address skills gaps. A greater emphasis on adult and lifelong learning is required. Policymakers could explore policy incentives for businesses to invest in training of workforces.

***NGOs, trade unions, and other civil partners are important to ensure the voice of civil society is heard in addressing skills gaps.*** Civil partners can help identify skill needs and bring together business and educators to define and deliver training programs. Civil

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partners help to ensure that skills development is provided not only to high-skilled jobs, but to low-paying jobs as well.

In the absence of leadership, meeting the challenges of Goal 8 will be left to individuals on their own, many of whom are not prepared to adapt to the future world of work. The upside of the opportunity these dynamics present to organizations (large employers) and stakeholders is a more prepared workforce, enhanced productivity, and a more prosperous future.

# Introduction

Labor markets around the world are changing as a result of rapid technological shifts that are also disrupting long-established business models. Increasing labor productivity, reducing the unemployment rate, especially for young people, and improving access to financial services and benefits are essential components of sustained and inclusive economic growth. However, the global economy is seeing slower growth, widening inequality, and a shortage of jobs in the face of an expanding labor force.

The world of work is influenced by a number of important current trends:

1. The transition to the fourth industrial revolution;
2. Demographic changes (e.g., Baby Boomers retiring, aging societies, growing numbers of youth in emerging economies, etc.); and
3. Ecological challenges compounded with mass migration.

Some employers say that it is becoming harder to find workers with the right skills. At the same time, there are 71 million youth who are unemployed and lack the skills needed to find decent employment. The billions of workers already in the labor market may also be at risk due to changes in the labor landscape. These imbalances in the supply and demand for skills will require employers and employees to change the way they think about work, particularly as new categories of jobs emerge while others are being displaced.

Solutions to address the challenge of decent work for all will require proactive talent management strategies as well as dialogue and collaboration among businesses, governments, education providers, and civil society. This forum sought to identify how organizations and society can prepare for the future of work and find effective ways to bridge the skills gap.

## What Is Decent Work?

Goal 8 of the United Nations Sustainable Development Goals (SDGs) sets out a vision for decent work and economic growth by 2030. One of the premises of Goal 8 is an understanding that decent work is a driver of sustainable development. “Decent work,” as described by the International Labour Organization (ILO), is work that:

- Is productive
- Returns a fair income
- Provides security in the workplace and protection for families
- Offers better prospects for personal development and social integration
- Allows freedom for people to express their concerns and to organize and participate in the decisions that affect their lives
- Has equality of opportunity and treatment for all women

The ILO’s Declaration of Fundamental Principles and Rights at Work commits member states to respect and promote the principles and rights of workers in four categories:

- Freedom of association and the effective recognition of the right to collective bargaining
- The elimination of forced or compulsory labor
- The abolition of child labor, and
- The elimination of discrimination in respect of employment and occupation

# Part 1. Factors Inhibiting Decent Work and Economic Growth

The forum began with a discussion about what inhibits decent work and economic growth. Our panel of experts commented that the factors that inhibit decent work and economic growth of course vary from country to country according to unique circumstances. Despite this, experts identified several common and often interrelated themes that present obstacles to what Goal 8 aims to achieve. The magnitude and scope of some of the inhibitors of decent work cut across many other Global Goals as well.

## Lack of access to quality education and low educational achievement

Both access to education and the quality of education received are requirements for access to decent work. Four in ten forum participants selected “lack of access to education” as the factor most inhibiting decent work (Poll 1). Low-quality education and education systems that have not adapted to changing skill requirements can affect students’ opportunities in the future. Related to this is the level of educational achievement. People who enter the labor market with no or few qualifications are more vulnerable and are likely to struggle to obtain decent work. Similarly, those who are not performing to the required standards may be excluded and forced to join more informal employment activities and pathways.

“ *The population of 15 to 24-year-olds is now over one billion in the developing world. Faced with limited investments in quality education, we could develop the largest ‘skill-less’ population in history, depriving businesses of talent that drives economic growth. Around 200 million young people in developing countries have not completed primary school, meaning they do not have the foundational skills needed for work.*

– **Anita Househam**, United Nations Global Compact

## Poverty and low socioeconomic status

Poverty and low socioeconomic status continue to limit economic and social mobility. This is particularly challenging in cases of cyclical poverty which are tied to a lack of access to capital, low productivity, and low incomes. Persistent and long periods of unemployment, weak social protection systems, and wage stagnation can cause people to live below the poverty line with few prospects to lift them out of poverty.

Forum participants pointed out that there is a positive correlation between low socioeconomic status and low educational achievement. Combined, these two factors cause the highest incidence of the exclusion of young people from schools and jobs.

“ *The youth bulge will be a huge factor affecting decent work and economic growth—both now and into the future. We must think critically about how to include youth early on and equip them with skills and training necessary to thrive in the workplace. We simply aren’t doing enough to engage them and this will be necessary to meet the demand posed by the largest population of youth in history.*

– **Arush Lal**, IntraHealth International / Frontline Health Workers Coalition

## Inequality

Experts view inequality as another major factor inhibiting decent work and economic growth. Unequal access to opportunities in education and labor markets because of the structural exclusion of specific groups, such as women, ethnic, racial, or religious groups, and other forms of discrimination inhibit the ability of those individuals to obtain decent work.

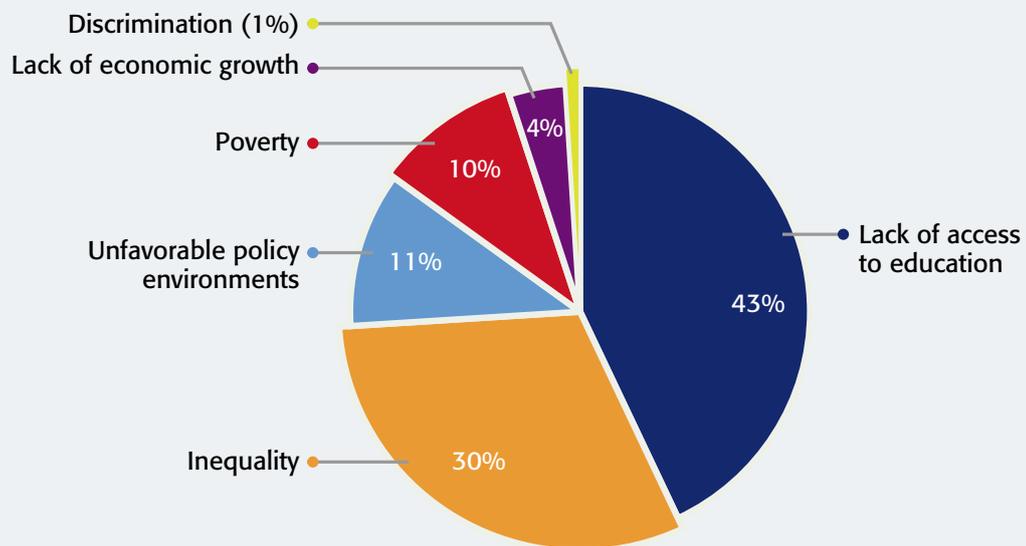
Limited access to information and resources for acquiring new skills and enter new job markets is also still thought to be a barrier. For example, low-skilled workers and workers in emerging markets that might have limited access to technology will not be able to grow their skill sets, thereby limiting their options for economic mobility.

“ *As global citizens we need to dramatically increase our focus on how we improve learning opportunities for the most marginalized children and young people in our world so that inequality doesn’t grow even further to the point where we have a growing population of disenfranchised youth that further destabilize our world.*

– **Serena Brown**, KPMG

## POLL 1

Which one of the following is the greatest factor inhibiting decent work? (n=71)



### Poor state governance and weak social protection systems

Contributors stated that decent work and economic growth can be limited in countries where there is weak rule of law, corruption and negligence within the public sector, or overly bureaucratic legislative frameworks. This can limit productivity and contribute to weak or unstable economic growth. Weak governance can also lead to the erosion of workers' rights, dangerous working conditions, low incomes, inadequate social protection systems, and human rights challenges such as forced migration and labor.

Many solutions that have been or will be designed to address the challenges of achieving decent work will depend upon governments' capacities to not only conceive of, but also implement the solutions. Governments in some parts of the world are compromised or challenged in their abilities to protect the general welfare of people. As one expert noted, "one cannot address growth and decent work without addressing the poor performance of the public sector."

## Precarious working conditions

Governments and employers have a critical role to play in protecting workers' rights through labor policies and regulations. The ILO's Declaration of Fundamental Principles and Rights at Work commits member states to respect and promote the principles and rights of workers in four categories. These rights are universal and apply to all people in all states—regardless of the level of economic development. In countries where labor and human rights standards are low, decent work for all cannot be achieved. One panelist mentioned the need to address forced labor in supply chains.

“ *Rapid economic growth often came together with the erosion of fundamental labor rights, abuse of wages, and health and safety standards. It often came at a price of repressing workers and unions. We have also seen that rising levels of productivity did not translate into the same type of rise in wage levels and, in fact, over the past decades against rising productivity levels, we see stagnating wage levels like in the case of the United States.*

– **Dora Sari**, Harvard University

## Lack of inclusive growth

A traditional assumption is that productive economies should grow and create better jobs. However, several panelists noted that this assumption is flawed. The factors inhibiting growth may not be the exact same factors inhibiting the creation of decent jobs; economic growth is not a causal factor for decent work (e.g., the notion of jobless growth). Some participants suggested that part of the problem is related to misguided measures of economic growth such as GDP. A cause for concern is that some economies are increasingly productive but are not creating more jobs, hence leaving some people behind. The need for fair pay and a minimum wage are important for decent work.

“ *We need to be concerned about a singular focus on growth and productivity and worry a lot about how inclusive (poverty-reducing) the economy is.*

– **Alvaro González**, World Bank Group

“ *Defining economic growth simply in terms of the amount of money being exchanged regardless of what it is being spent on creates disincentives that are driving countries and corporations to less sustainable outcomes.*

– **Maureen Hart**, International Society of Sustainability Professionals

“ *Economic growth of the ‘knowledge economy’ is actually spurring growth in low-wage, insecure service work. As knowledge workers find themselves busy, stressed, or just in need of a treat, they increasingly outsource daily chores (e.g., cooking, cleaning, driving, caring). The result is a whole set of jobs are created to support the work of the knowledge economy, and these jobs often don’t meet the aim of ‘decent work.’*

– **Nancy Worth**, University of Waterloo

### **The disruption of firms and short-term corporate thinking**

Increasing competitiveness and new organizational structures driven by technology are transforming the way we work. This has led some companies to make decisions that may not be aligned with workers’ interests. This may include reducing costs through labor reductions, eroding basic workers’ rights, or using flexible contracts, thereby reducing job security and diminishing the relationship between workers and employers.

### **The mismatch of skills**

Economic growth may be inhibited by the mismatch of the skills in demand and the lack of supply of these skills by prospective workers. Part of this may be driven by changes such as digitization and automation, or new structural formats where skills do not evolve in line with market needs, which in turn limits some workers’ employability. Parts 2 to 4 of this report discuss some of the challenges in addressing the supply and demand of skills in the future of work and how to address mismatches.

## Part 2. The Transformation of Work and its Implications

Digital and technological advancement and competitiveness are empowering rapid transformation in work and production. This has reshaped how work is done and therefore has implications for workers, firms, and society. One panelist articulated it best: “There are three ways in which technology can affect work: it can create, eliminate, or alter existing jobs.”

Technology creates opportunities for increased competitiveness, productivity, and innovation, and can improve work practices. A cause for concern, though, is that the speed and profoundness of change that we are seeing now is markedly different from previous experiences. While some people are consequently becoming worse off, others are becoming much better off, thereby increasing already rising levels of inequality.

There are still many ways by which the direction of technological change can be shaped and Forum participants discussed what the transformation of work could mean for employers and employees.

### Increasing dependence on technology

As companies become increasingly dependent on technology, keeping abreast of emerging technology will be a challenge for businesses and workers alike. Forum participants recognized that enterprises need to and do look for ways to be lean, and that new tools enable efficiencies. The perceived risk is that some businesses do not have the capability to adopt new technologies and instead shift the risks and costs onto workers. It could be tempting for a business to invest in technology like automation and artificial intelligence, cut labor costs in production and increasingly in management and produce wealth for shareholders by dislocating people.

“ *Having a clear understanding of the implications of adoption of new technology in the workforce (in terms of new jobs, displaced jobs and modified jobs) at all levels is critical to ensure a responsible transition.*

– **Paula Pelaez**, United Nations Development Programme (UNDP)

## Changing models of work and learning

**Technology is enabling new models of work and learning.** Over almost two decades, we have experienced the growth of more horizontal and flexible work environments. Obvious examples include increases in remote working, co-working, and teleconferencing. Experts also noted that project- and task-oriented assignments for freelancers is another evolution in the way we work; this blurs the boundary of the employer/employee relationship by giving workers the opportunity to more flexibly enter and leave firms. The gig economy allows for the expansion of entrepreneurship, innovation, and customer service orientation. However, it is largely unregulated, both at national and international levels, which risks the exploitation of those workers in some sectors as they often have little bargaining power.

“ *Exponential technologies will enable the capacity of individuals, organizations, and communities to solve problems and produce innovations in record time. Currently people focus on gaining knowledge, not applying it. The use of exponential technologies in education will replace the linear learning paradigm into an exponential activity to connect citizens from around the world in innovative collaborations to solve major problems and improve their lives.*

– **Armando Justo**, George Washington University / Inter-American Development Bank

“ *The whole workforce ecosystem will change. Companies need to redefine their talent strategy and adapt to project-oriented assignments addressed to freelancers. This will also make the firm boundary more blurry.*

– **Alisa Orlov**, BSD Consulting

“ *The gig economy is one of the ways that gives freedom, but it's a double-edged sword, given it lacks the security and career path.*

– **Rohan Chindooroy**, AB InBev

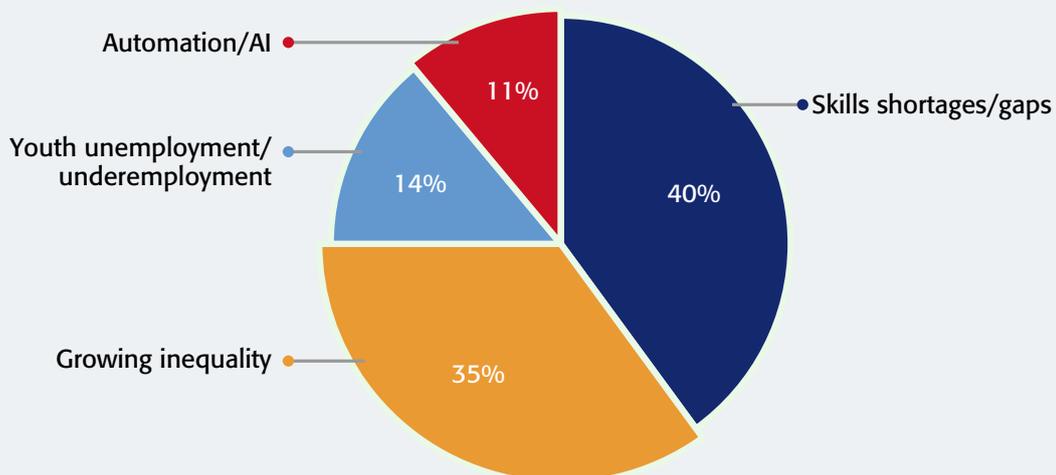
***A focus on tasks rather than guided career paths will mean more emphasis for “gig takers” to develop their own ideas of a career.*** The freedom and flexibility of the gig economy is attractive and many flourish in this environment; for some people it provides a variety of work options, higher levels of autonomy, new opportunities for learning in different role, and the choice to work if and when one wants to. Panelists recognize that the new labor environment may be difficult for some youth. Young adults entering the labor force will likely not have the kind of careers nor access to decent work and the job security that their parents did (e.g., long-term, full-time permanent employment with access to workplace benefit programs). However, employers should also recognize that younger generations have different expectations and desires in relation to their careers. Panelists note two trends in particular: the trend of working independently, which requires more entrepreneurial skills, and another trend toward more purposeful work that is aligned with personal values.

“ *Younger workers are very firm about aligning their values with companies and brands that “walk the talk.” Work takes on personal meaning with next and emerging generations.*

– **Joshua Lachs**, Net Impact

## POLL 2

What do you think is the greatest upcoming challenge for the labor force? (n=63)



## Skills mismatches in labor markets

The importance of skills shortages and gaps in the labor market was highlighted in a poll of Forum participants (Poll 2). Technology changes have led to the demand for new skills and could lead to skills mismatches in the labor force. Firms of all kinds may experience human resources and IT challenges as they integrate new technologies. This requires an increase in the talent and skill levels of employees, making it more difficult and competitive to find talent and skilled labor. Workers will need to learn new skills to stay relevant. This has implications for how firms manage their talent strategies and how they train and upskill workers for an agile and skilled workforce. This includes the need for better company policies to drive equality and inclusion in hiring and promotion practices.

“ *The half-life of skills nowadays is 2.5 to 5 years. The challenge arises to ensure that people are propelled and empowered and not displaced or marginalized by innovation and technology. The future growth and competitiveness of economies rests in their ability to build the relevant skills among their current and future workforces to prepare for these new realities.*

– **Matthias Thorns**, International Organization of Employment

“ *Human resources should change inside companies focusing on employability and resilience of people. Social and private insurances should allow for the flexibility (that is not only needed by companies but wanted by employees) and provide individual protective packages.*

– **Stefan Crets**, CSR Europe

## Case Study: Skillful, a Markle Initiative

Skillful was developed in partnership with Microsoft, LinkedIn, the State of Colorado, and many others. Their approach was to integrate businesses, state government, non-profits, and educators to forge a new way of creating and accessing opportunities. The initiative uses data and technology tools to give educators a clearer picture of which skills are in demand in their area, and give businesses a better sense of which skills are available in their applicant pool. Their goals are to help job seekers access a variety of choices to achieve lasting career success, for employers to find the skilled talent they need to grow, and for educators to train people with the skills required to compete in today's economy.

## The need for lifelong learning

Lifelong learning will be essential to remain competitive. Workers at all levels will require reskilling and upskilling to stay relevant in their organizations and to remain productive. For employees, training increases both employability and labor force mobility. For employers, lifelong learning increases the capacity of staff and serves as an important retention tool. Experts urged companies to view training and upskilling as an investment in their workforce and a public good rather than as a potential waste of resources because of the risk that employees could leave their companies. It is important to boost the interests and commitment of both enterprises and individual workers for ongoing training and qualifications.

“ *A lifelong learning attitude is a mandate by the employee. And thus, continual opportunities and access to learning and development opportunities is a mandate by the employer.*

– **Holly Duckworth**, Kaiser Aluminum

“ *The ability to adapt and learn (and unlearn) is critical for the workforce, new skills are required and new ways of operating.*

– **Luis Torres**, Millicom International

## Part 3. Building Workforce Resilience: Closing the Skills Gap

The jobs of the future and the integration of new technologies will likely require skills that we may not know about yet. A critical part in achieving SDG 8 will be how we prepare the future workforce and balance the supply and demand sides of skills in labor markets. Bridging the skills gap will require a concerted effort and a multi-stakeholder approach, our contributors commented. Dialogue and collaboration will be needed to build workforce resilience and prepare future workers.

Governments and educators have needed help in defining the “jobs of the future” and the required skill sets and training needs of employers. This means that the private sector should take a greater leadership role and proactively signal to educators the skills that are likely to be in demand, while at the same time developing appropriate workplace training programs. Governments and education experts must work together to determine the competencies that are relevant in secondary and post-secondary education to address the training needs of the labor market.

“ *The triangular relationship between employer, educator, and state is critical to SDG8—decent work and economic prosperity. NGOs can help to [facilitate] the relationship. And at different times, different players in the triangle need to take a leadership role in the relationship.*

– **Holly Duckworth**, Kaiser Aluminum

“ *The only way to close the skills gap is through extraordinary collaboration. None of these stakeholders has a really good feel for what the others know (and what they don't know!).*

– **Bruce Klafter**, Flex

### Closing the Skills Gap Through Collaboration



## Greater collaboration between educators and employers to support curriculum development

Many forum participants stated that there is a need for education systems to revamp their models of teaching and learning to better prepare students to meet future job demands. Half of participants said that greater communication is needed between educators and employers on the skills needed for employment (Poll 3). Existing curriculums should be revised, keeping in mind the type of skills needed in an age of globalization and digitization (e.g., language skills, cross-cultural competencies, computational and STEM skills, etc.).

“ *Education systems in some markets have been traditionally slow to react to market demands, skills development, and ongoing training. There is a greater need for educators to look to markets and sectors for ideation in terms of needs-based skill development.*

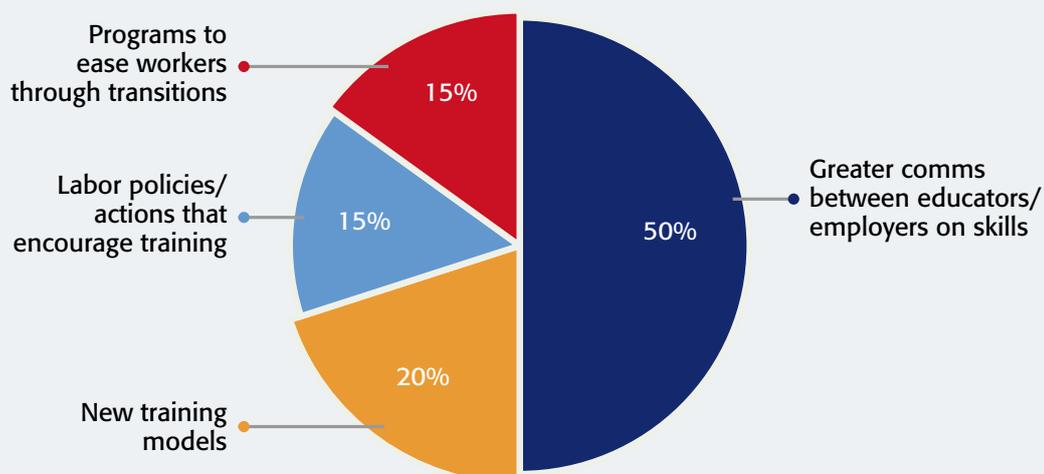
– **Joshua Lachs**, Net Impact

“ *I challenge companies to think about how they can proactively signal the skills that are likely to be in higher demand. What structures can we put in place to enable technology creators and employers to give trainers/educators visibility into high-demand skills at scale?*

– **Libby Reder**, The Aspen Institute

### POLL 3

Which one of the following approaches could most help to close the skills gap? (n=41)



## Business-education partnerships in skills development

Business-education partnerships can be a strong investment as businesses have an interest in the skills that are learned at school. Four in ten Forum participants that participated in a poll said that supporting training and education of future workers will be the most important private sector investment for achieving Goal 8 (Poll 4). Forum participants pointed to the benefits of providing students and youth with paid internships, apprenticeships, job shadowing, mentorships, and other such opportunities that expose them to real work experience—this is a win-win situation for all parties involved. Employer support for skills-based volunteerism is one way to show how companies are making a visible impact on communities. These types of programs could benefit from investment from governments to make them more accessible and financially viable to the private sector.

“ *All education and training should be demand driven. If organizations work with the education system to bring the latest in-demand technology, processes, tools, and equipment to educators, workers can find education and training that meets the demand of the workplace.*

– **Timothy Lawrence**, SkillsUSA

“ *Supporting students in their education journey can be very motivating for the current employees of a company. Skills-based volunteering of current employers creates an even more motivated and engaged workforce.*

– **Maureen Tholen**, 3M

## Case Study: 3M's Manufacturing Academic Partnerships (MAP) program

3M's MAP program partners with local communities and technical schools near its manufacturing facilities. The program promotes advanced manufacturing training and careers through thoughtful partnerships with leading national and global nonprofits, such as Project Lead the Way, which provides curriculum development at the K–12 level, and SkillsUSA's and WorldSkills' out-of-school-time programs that develop students' skills around the trades. The program helps to build a workforce with the skills the company needs, provides volunteering opportunities for employers in local areas, and involves collaboration with employers on the ground. Students benefit from the programs through training and support, and become motivated and dedicated employees committed to the success of the organizations they are employed by after the program. This creates thriving, successful communities where people want to live and work.

## Case Study: Dangote Group Academy (Nigeria)

Dangote Group, which has large-scale manufacturing capacities across Africa, faced difficulties in finding employees with the right technical skills. In partnership with the Nigerian Institute of Transport and Technology, the Industrial Training Fund, and the German Ministry of Economic Cooperation and Development, the Dangote Academy was developed to address the company's skills needs. The Academy provides management training, technical and vocational training for Nigerian youth, who will then become Dangote staff. This example demonstrates how corporate leadership, through partnership with domestic and international trade organizations and industry governance bodies, can develop a curriculum for industrial education and train hundreds of youth in the region.

## Case Study: European Pact for Youth

The Pact for Youth, initiated by CSR Europe, is a mutual engagement of business and EU leaders. The initiative recognized that young people who have experience with the working world during their education are less likely to be unemployed in the future, and this helps to make young people more attractive to employers. This initiative brought together representatives from business, education and youth, and institutions, to consolidate partnerships for employability and inclusion. From 2015–2017, more than 23,000 business education partnerships resulting in more than 160,000 traineeships, apprenticeships, or entry-level positions have been provided by the Pact. Leaders at the Pact for Youth developed three policy proposals to foster long-term solutions: 1. Make vocational education and training an equal choice for youth; 2. Make business-education partnerships the norm; and 3. Include entrepreneurship in learning.

## New training and education models

Forum participants agreed that educators should be encouraged to integrate applied and experiential learning from K-12 and beyond. Some examples include focusing more on longer-term projects that require complex reasoning rather than lectures and tests of memorized facts, as well as more authentic assessment approaches (e.g., writing a policy brief instead of an essay). These types of “learning by doing” approaches and project-based learning teach students initiative, responsibility, problem solving, and self-management while building their confidence, all of which tend to be a more effective ways to learn. This type of teaching will require educators to upgrade their own skills while they design and deliver policies and practices.

“ *At the University of Waterloo, the model of co-operative education invites employers into a students’ degree, blending the school-to-work transition. Students in a ‘co-op’ stream have the equivalent of two years of work experience within their four-year degree.*

– Nancy Worth, University of Waterloo

## A Framework for Business Engagement in Education

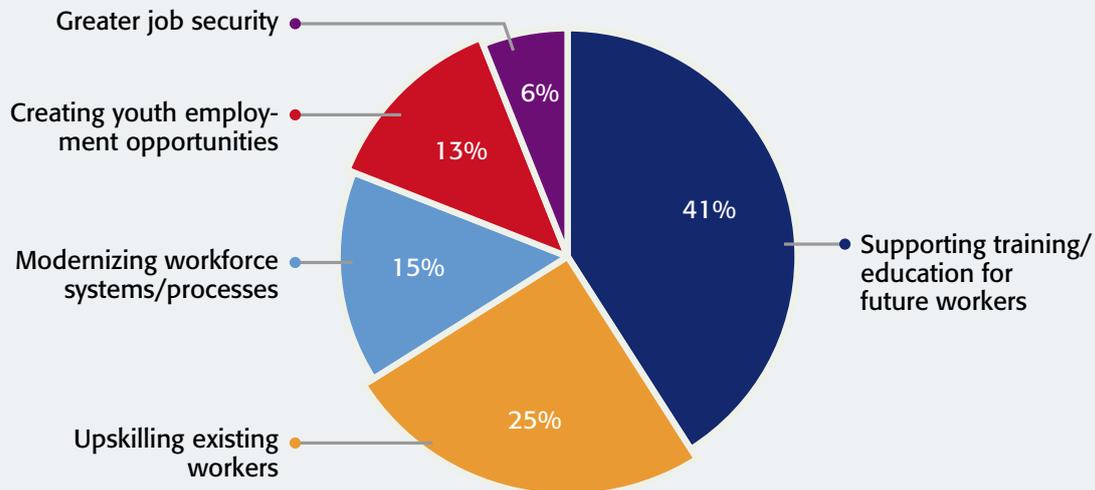
The UN Global Compact has developed principles that can guide business in overcoming the skills gap. The Framework for Business Engagement in Education outlines a three-part process to realize business benefits while advancing education goals.

In any scenario, the three components in the process are the cornerstones of effective engagement.

- 1. Make the business case:** Determine a reason to engage in education that aligns with long-term growth and business strategy, while also focusing on the company’s core issue areas for social investment.
- 2. Identify activities that improve education and benefit business:** These activities should realize the business benefits and resolve education challenges in line with local needs.
- 3. Be smart:** While designing activities, business should apply best practices in education rooted in international consensus and the experience of multi-sector partnerships.

## POLL 4

What kind of private sector investments will be the most important for achieving Goal 8? (n=53)



“ There is tremendous potential for the private sector to contribute to improving education around the world. Business investments in education tend to be small, short-term and uncoordinated. And they often are directed toward children and youth in middle-income societies with few investments benefitting the most marginalized. Education is the greatest equalizer—it offers all children, youth, and adults opportunities for success.

– **Anita Househam**, United Nations Global Compact

## Business responsibility to upskill and reskill employees

Forum participants agreed that businesses have a responsibility to safeguard workers' resilience. Firms will need to clearly understand the implications of technology adoption in the workforce. They will need to take a long-term view of what constitutes competitiveness and not relate this to labor costs. Both upskilling existing workers and modernizing workforce management systems and processes are important private sector investments.

“ *Businesses that fall behind in preparing employees for their businesses' shifting skills needs will simply fall behind—eventually failing to compete. Successfully competitive businesses will proactively prepare their employees for future needs. It is a self-serving investment with a return on investment.*

– **Holly Duckworth**, Kaiser Aluminum

“ *Lifelong learning is a key toward employability and is a shared responsibility to be structured between companies and the education systems and motivated by smart policy incentives.*

– **Stefan Crets**, CSR Europe

## Case Study: AT&T's Future Ready Initiative

AT&T initiated a \$1 billion retraining effort after discovering that nearly half of its 250,000 employees lacked the necessary STEM skills to keep the company competitive in the digital economy. This posed a dilemma for the company: hire new software and engineering people at a great cost or reskill the existing workforce. AT&T initiated a massive global retraining programing. This allowed the company to keep valuable institutional knowledge in place, while employees become more highly skilled and developed new skills. AT&T's Future Ready initiative is a web-based, multiyear effort that includes online courses, collaboration with academic institutions, and a career that allows employees to identify and train for the kind of jobs the company needs today and in the future. The company helps employees develop a roadmap of where they want their careers to go.

## Case Study: Evian's Modernized Bottling Facility

Evian modernized its bottling facility in the French Alps to be carbon neutral, as well as making multiple automation upgrades. Rather than issuing layoffs, the company opted to retrain workers. The retraining program was designed to empower employees for the future workplace and ensure they have a position in the new factories. The company offered a collective 30,000 hours of training to retain its current workforce and even added 200 new jobs. Evian had 28 consultations with the local union during its six-year construction project, all of which came back with a favorable result.

### Sound labor policies and actions safeguarding the resilience of workers

Forum participants recognized the important role that governments have to play in order to achieve Goal 8. Several participants pointed out that governments have varying capacities to deal with the upcoming transitions in the labor market. A consequence may be that policy and regulatory initiatives lag or fail to adequately support workers. Because of this, it is essential for governments to work more collaboratively with stakeholders in the development of sound labor policies and standards, and effective programs to support workers in achieving decent work. Governments need to provide institutional frameworks and infrastructure for workers and guide the transition to the Fourth Industrial Revolution. Participants brought up issues relating to wage stagnation, learning programs, and social policies and protection for those working in the gig economy as areas for governments to address.

“ *By implementing labor policies supporting decent work, governments send a two-fold message: the role of stewards of at-risk populations and the idea that this is a problem for all of us.*

– **Armando Justo**, George Washington University / Inter-American Development Bank

“ *We will need to be much more flexible and adaptive in our approaches, anticipating regular crises due to political, technological, and climate disruptions. The current capacities of governments are not up to the challenge. Concerted attention and engagement of businesses is essential.*

– **Barton Alexander**, Alexander & Associates LLC

## Accessibility and support for adult learning

A few forum participants noted that governments tend to focus on addressing unemployment rather than lifelong learning and education. There is a greater need for government institutions that support and train job seekers to work more collaboratively and closely with business organizations in the design of skills training initiatives. This will require more focus on helping workers to navigate job transitions by developing programs and financing models that address the skills gap and that meet the demands of the labor market. One expert highlighted the example of Austria's placement foundations which seek to place unemployed people with appropriate qualifications with available jobs; the foundations are partnerships between unions and employers (which are partly funded by government) where they identify skill needs and then develop a plan together to meet those needs to help people through labor transitions.

Adult learning initiatives are particularly needed for those who are low-skilled and who may be facing social barriers. Some panelists noted that governments could explore policy incentives to promote employer investments in the workforce. For example, The Aspen Institute has been exploring the idea of a Worker Training Tax Credit, modeled after the Research and Development Tax Credit in the United States, to provide incentives for small and large businesses to invest in training for their non-highly compensated workers. Another policy suggestion included the development of "lifelong learning accounts" that help to create the infrastructure for employers, governments, and workers to contribute to funding training throughout an individual's career

“ *Often, companies invest in their best employees because this is perceived to have the greatest return. Unions and governments need to step up to target the lowest-skilled workers to ensure that they also receive training.*

– **Stijn Broecke**, OECD

“ *Lifelong learning must be much more supported by government. We get a solid education in schools and universities before we start work. However, once in the workforce, the education sector is 'capitalized' and we either pay ourselves for expensive MBAs and executive programmes or our employers do. This is a privilege for those who are already well educated and paid employees. The state only tries to address unemployment but not lifelong education for all.*

– **Alisa Orlov**, BSD Consulting

“ *To me, it all starts and ends with cradle-to-career education investments, the return on social and economic capital. This directly impacts long-term poverty, health challenges, and other systemic barriers.*

– **Joshua Lachs**, Net Impact

## Partnerships with civil society

Forum participants acknowledged the important role of social partners such as NGOs and unions in addressing the skills gap. NGOs can influence governments and businesses and ensure that the voice of civil society is heard; these organizations often step up to champion causes and fill gaps when governments and the private sector have been unsuccessful. One participant noted that programs that closely engage social partners in governance and curriculum development (e.g., in vocational education training (VET) systems), have much better outcomes than systems that are solely managed by the state; this difference might become greater as technological progress accelerates.

Civil partners can help identify skill needs, and define and deliver training programs that help workers reskill and upskill. Civil partners and trade unions help to ensure that skills development is not only provided in relation to high-skilled jobs, but to low-skilled and lower-paying jobs as well.

“ *Educators, organizations, NGOs, and citizens will need to take a disrupting approach and use our human ability to transform the environment. We will all need to invest in education and transform the current learning paradigm into collective activities focused on problem solving and innovation.*

– **Armando Justo**, George Washington University / Inter-American Development Bank

“ *This environment creates a tremendous opportunity for industry collaboration and inter-sectoral partnerships to address the underlying issues. In the end, the greatest incentive may be the increasing risks of social unrest due to failure to act. And the tremendous productivity and innovation gains from the new economy will create the resources—if we choose to use them this way rather than to further concentrate wealth.*

– **Barton Alexander**, Alexander & Associates LLC

## Case Study: Empower Pragati, a Social Enterprise for Skills

Empower Pragati, a member of Business Call to Action, is an India-based private sector social enterprise specializing in livelihood skills development to empower India's disadvantaged youth. The organization's vocational and skills training programs seek to create sustainable livelihoods for the urban and rural poor and they work closely with the National Skills Development Corporation of India (promoted by the Government of India) to deliver a range of comprehensive specialized training. Empower Pragati has grown to a team of 120 training centers with 300 people who provide specialized management, monitoring, and active training and counseling with trainees and companies for prospective jobs. The company plans to scale up to 750 training centers across India over the next three years, and expand its specialized curriculum and work to pilot training services in other key regions including Africa in the near term.

“ *What's great is that they fully integrate dialogue among the three partners as a key activity, providing insights on curriculum, methods, and students' aspirations.*

– **Paula Pelaez**, United Nations Development Programme (UNDP)

## Part 4. Skills and Opportunities in the Future of Work

The World Economic Forum estimated in 2016 that 35 percent of the skills demanded for jobs across industries will change by 2020; another commonly cited figure estimates that approximately 65 percent of children entering primary school today will ultimately end up working in job types that do not yet exist.<sup>1</sup>

Poll 5 highlights the sectors that Forum attendees felt will face the greatest disruption by 2030. While forum participants acknowledged that it is difficult to predict exactly what the future of work will look like, workers are expected to be proficient in a wider range of skills and will need to continuously learn and upskill to remain competitive. This is particularly important as the greatest shift is yet to come with the introduction of intelligent systems in the workplace to replace repetitive and routine tasks.

A study conducted by the University of Moscow, resulting in the creation of the “Atlas for Emerging Jobs,” predicts that 186 new professions will emerge by 2030 and 57 professions will disappear.<sup>2</sup> However, experts agree that human capital will still be in high demand.

### Greater emphasis on transferable and soft skills

Life skills and transferable skills are critical for workers’ success. Educators should be purposefully equipping children with the social and behavioral skills that they will need as future workers. Workers will need to excel at the skills that indisputably set humans apart from machines, including creativity, empathy, flexibility, and judgement. Capabilities that combine skills such as leadership, decision making, and agile thinking will increase in importance, too.

“ *The historic lack of emphasis on teaching social and behavioral skills means that there is a scarcity of teachers able to do so, as well as a lack of familiarity with appropriate approaches and even terminology. These issues must be addressed to ensure that schools prepare their students for future-relevant skills.*

– **Matthias Thorns**, International Organization of Employment

“ *Governments and civil society will be working more collaboratively in broader partnerships and alliances. Partnership brokering and management will become more important in careers, and less prone to automation.*

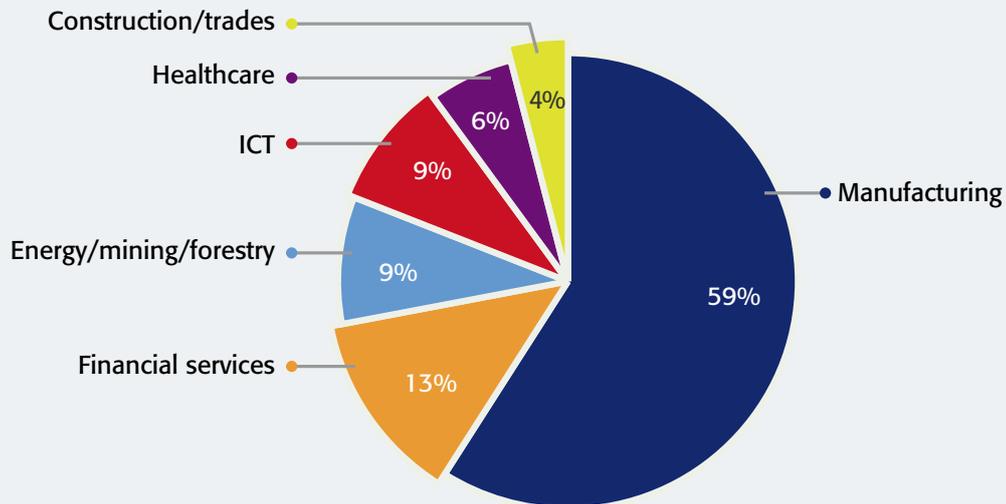
– **Serena Brown**, KPMG

<sup>1</sup> <https://www.weforum.org/whitepapers/accelerating-workforce-reskilling-for-the-fourth-industrial-revolution>

<sup>2</sup> <http://www.atlas100.ru/en>

## POLL 5

Which sector do you expect will face the greatest disruption to labor forces by 2030?  
(n=53)



### Continuing need for technical and digital skills

We should continue to expect that technical, digital, and other high-level skills will remain in demand. Technology will drive many new professions, including in the areas of cyber security, medicine, construction, production management and maintenance of technical information, and repair and maintenance of equipment driven by technology. Hence, STEM (Science, Technology, Engineering, and Mathematics) education will be needed and applicable across many sectors. The combination of technical and soft skills is important and should be incorporated in education from K–12.

Adults will also need to continuously improve their digital skills to be competitive. According to the OECD Survey of Adults, roughly half of adults have no ICT skills, or only those necessary to fulfil the simplest set of tasks.

“ *Continuously providing opportunities for children and teenagers to learn and motivate themselves on STEM topics will help corporations get what they need and the workforce to be prepared for what corporations need.*

– Luis Torres, Millicom International

## Skilled trades as a pathway to decent work

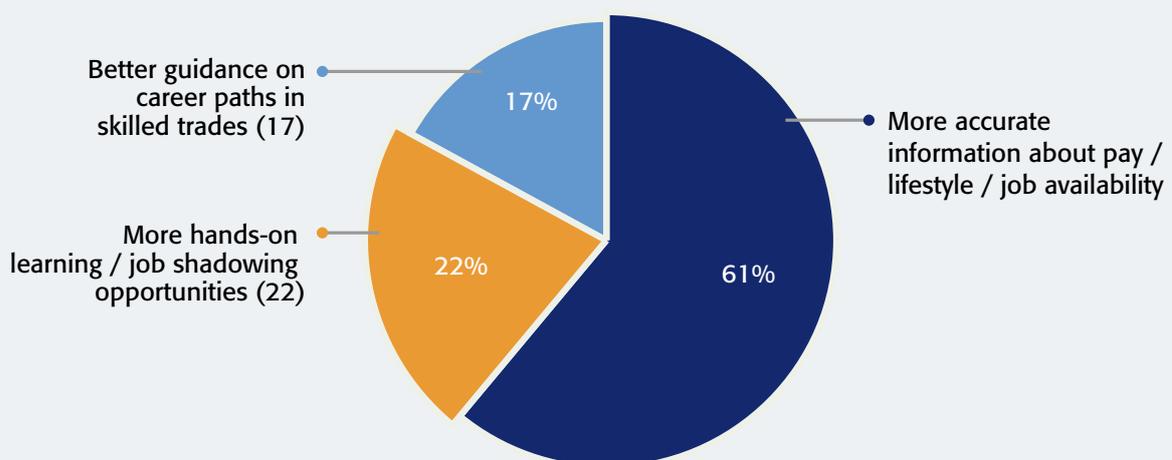
Forum participants discussed vocational education and training as a pathway to achieve decent work and a pathway to help close the skills gap. While there is a real need for skilled labor in many sectors, some companies have found that younger generations appear to be looking for work outside of those industries and trades where there may be vacancies. Part of the challenge is the notion that vocational education is considered a “second-class” education. Forum participants challenged this idea and stated that part of the problem is how we have been distinguishing between higher education and vocational education. What this points to is a need to elevate and upgrade vocational training, including more investment and a need to change perceptions of vocational jobs. Some experts caution that we should avoid pitching vocational skills only to communities that might be considered “working class,” but that we should also not discourage people who want to obtain an academic education.

“*Today’s technical education is high-tech, rigorous, and exciting. A campaign to change the stigma of ‘dark, dirty and dangerous jobs’ and to draw attention to the true opportunities that exist in the talent pipeline is much needed if perceptions are to change.*

– Timothy Lawrence, SkillsUSA

### POLL 6

Which is most effective in getting young people interested in pursuing careers in the skilled trades? (n=36)



Talent attraction in skilled trades has been a challenge in some markets, despite the high return on investment for this type of training. A poll of Forum attendees suggested that the best way to interest young people in pursuing careers in the skilled trades is to expose youth to more accurate information about pay, lifestyle, and future job availability for skilled trades workers (61%) (Poll 6). Resources such as the Good Jobs Project by the Center on Education and the Workforce at Georgetown University identify opportunities for people that do not necessarily require a four-year university degree.<sup>3</sup> The project website shows the concentration of good jobs for non-Bachelor degree workers and details the level of economic opportunity for workers without BAs across the United States. Exposing children and youth to a wide range of fulfilling work opportunities and providing more experiential and hands-on learning can help give them a more realistic picture of these potential career paths.

Forum participants suggested that young people need to see themselves represented more in the skilled trades. Gender barriers, including in education, hiring, and workplace discrimination in the trades also needs to be addressed in order to attract women in the skilled trades, among other factors such as harassment, equal pay, etc.

“ *Young people need to see themselves represented in the skilled trades. Having a female welder speak to women at a trade school can be a formative experience.*

– **Nancy Worth**, University of Waterloo

## Case Study: SkillsUSA, a Career and Technical Student Organization

SkillsUSA is a partnership of students, teachers, and industry working together to help develop a skilled workforce. It serves students in high school and college who are preparing for careers in trade, technical and skilled service occupations. One of the benefits of membership is that students are given access to curriculums developed by industry so that they know the type of skills companies are looking for in prospective employees. About 130 different occupational areas of study are represented in SkillsUSA. Students also have the opportunity to participate in skills competitions against their peers. These opportunities involve industry directly in evaluating student performance, help to build recognition for the students, and provide invaluable learning experiences. There is a high focus on helping students develop their technical skills as well as other personal and professional life skills, which in turn builds their confidence before they enter the workforce. SkillsUSA is part of the WorldSkills membership, represented by 79 countries and regions worldwide.

<sup>3</sup> <https://goodjobsdata.org/>

## Other opportunity sectors

The Forum participants identified several opportunity areas in the future of work. Some examples are listed below:

- ***Sustainability jobs and Education for Sustainable Development (ESD):*** Forum participants discussed the development of jobs relating to the circular or closed-loop economy given the resource limitations of the planet, as well as the emerging area of education known as ESD. Education for Sustainable Development is starting to be integrated in the national curricula in countries such as Germany and New Zealand. This type of education is part of the design and systems-thinking innovation that will be needed to refine products and services to transition to a circular economy.
- ***Opportunities through achievement of the Global Goals:*** Achieving the Global Goals opens up \$12 trillion of market opportunities by 2030 in food and agriculture, cities, energy and materials, and health and well-being, which in turn could create 380 million jobs as estimated by the Business and Sustainable Development Commission.
- ***Investment in the healthcare workforce:*** This is a cross-cutting sector that can help to overcome gaps in many areas and address social challenges. Investment in the health workforce—which is set to face a deficit of 18 million health workers by 2030—has close to a 10: 1 return on investment. Furthermore, because women make up to 70 percent of the health workforce, investing in training and resources in this sector yields strong gains in women’s economic empowerment and gender equality while also reducing poverty, improving health outcomes, and strengthening partnerships. See the SDG Leadership Series summary for [Goal 3: Good Health and Well-Being on Capacity Building of Frontline Health Workers](#).
- ***Raising awareness of careers in hospitality:*** Hospitality is the fastest growing sector, with one in every five new jobs being in travel and tourism. However, there is little awareness of the career opportunities that this sector offers, with half of the industry’s leaders starting in entry-level jobs. The industry is investing heavily in bridging the life skills gap which is critical in this sector.

## List of Expert Guest Contributors

We would like to thank the guest contributors who joined us and shared invaluable ideas and experiences from a wide range of backgrounds and geographies:

- Stijn Broecke, Labour Market Economist, Employment, Labour and Social Affairs, Future of Work, OECD
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- Holly Duckworth, Chief Learning Officer, Kaiser Aluminum
- Alvaro González, Lead Economist, Jobs Group, World Bank Group
- Anita Househam, Senior Manager, Supply Chain Sustainability & Decent Work, United Nations Global Compact
- Armando Justo, Performance Management and Career Development, George Washington University / Inter-American Development Bank
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- Luis Torres, Vice President, Global Talent Management, Millicom International
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- Nancy Worth, Assistant Professor, University of Waterloo

Thank you to all Forum participants for your contribution to the dialogue.



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