

Reimagining the Future of Work and Empowering Youth

Today's education model falls short: we must urgently do more to prepare the next generation to thrive in a changing world and create a better future. Education should nurture young people in a way that helps them discover and develop their agency, and empowers them to become changemakers in their work and in their lives. This calls for collaborative action across the education ecosystem—aligning employers, educators and youth themselves.



Executive Summary

This report consolidates the findings from a study conducted by Ashoka and A.T. Kearney into how businesses envision the workplace of the future, and the implications for young people in a rapidly changing world. These are the key findings:

Our world is being fundamentally disrupted by technological and socioeconomic changes, including the fact that people are living and working longer. This has significant implications for the work we do, the way organizations perform, and the overall well-being of people and the planet.

It is increasingly urgent to address a new and growing inequality. Those who can see change and rapidly adapt will thrive, while those who lack changemaking skills are at risk of falling behind. The paradigm for success is being profoundly transformed. Simply acquiring knowledge to have “the right answer” is no longer enough. In today’s hyper-connected environment, knowledge is highly accessible and increasingly commoditized, and rote learning and memorization are no longer relevant. Instead, we need to ask the right questions, take charge, solve problems, and reinvent. It is imperative to enable all young people with the right skills and experiences early on, so they can practice adapting and contributing to change for life.

The future focus of education and career development is learning to learn and adapting for the future. The linear nature of career development—from traditional education system to long-term employment—is fast becoming irrelevant. It will be crucial for society and workers to use new-found skills to manipulate knowledge for the greatest impact. These skills include changemaking, agility, self-direction and agency, critical thinking, problem solving, cognitive empathy, collaboration, and innovation.

Business leaders agree that we must do more to prepare our young people for the future, including modernizing the learning systems used in schools, universities, and other educational institutions. Many businesses interviewed offered exciting ideas for reshaping learning ecosystems through private and public sector collaboration, including transforming the way they attract, recruit, manage, and develop talent.

Business leaders identified barriers to systemic change, including employers’ risk-averse recruitment practices; traditional adult mindsets and behaviors around definitions and pathways to success; individualistic, dehumanizing cultures that encourage fear of failure; and lack of collective vision and collaboration.

Given all the above, cyclical education methods that simply react to the needs of industry and economic productivity may no longer be valid. Efforts to educate and empower young people to be changemakers may play a leading role in giving them purpose and social fluency. These efforts may also ultimately help balance the need to generate profit with the desire to create the biggest impact for the greater good of humanity. **It will take a collective vision and action by all stakeholders, and businesses have a key role in reframing traditional societal views of success.**

These insights into the future of work and the implications for education and youth were consolidated and validated at a working group meeting in Singapore in September 2018, and complemented by related interviews and research in the United Kingdom and France. We look forward to launching a global report on the study in 2019, and working with you as you help prepare our young people to thrive in a different future.

A Different Education Model for a Different World

Economic growth has long influenced the nature of our education systems. It has encouraged a focus on students acquiring the knowledge and developing the abstract skills that will create a productive workforce. Indeed, competitive wages and a relatively broad base of human capital with basic educational qualifications have enabled Asia's rapid economic growth in the past few decades. Schools, universities, and learning institutions have functioned as reactionary entities to fuel the relentless economic growth engine.

Now, with urgent and unprecedented macro disruptions, education needs to be at the very forefront of societal progress, far beyond the dictates of economic growth.¹ Education needs to be about empowering people to thrive in an increasingly volatile, uncertain, complex, and ambiguous (VUCA) environment. This VUCA environment has the following characteristics:

Accelerating technology and workforce disruption. We have seen the impacts of the technology and globalization revolutions across all countries, industries, and organizations, including the disruption of traditional employment models. It is estimated that technology will have displaced 28 million workers from Association of Southeast Asian Nations (ASEAN) countries by 2028, while also generating new demands for workers with different skill sets.² Estimates suggest that 65 percent of children entering primary school today will have jobs that do not yet exist and for which their education will fail to prepare them.³ This will exacerbate skills gaps and unemployment or under-employment. Today's active workforce of 3 billion people cannot adjust promptly to new workforce demands due to under-developed adult training and skilling systems.⁴

Simple steps like incorporating e-learning in the classroom or teaching skills like coding are far from sufficient. According to Charles Leadbetter, "we are in danger of educating a generation of children to become not very good at jobs that robots will do better."⁵ We need to shift focus from relentlessly trying to close skills and knowledge gaps, to fundamentally rethinking what jobs people want to do and can do well. New jobs and new economies are being rapidly created, too. The greatest challenge will be in developing a workforce that not only has the digital skills to keep up with technology but also exhibits "human skills." Humans have critical competitive advantages over machines, including their abilities to solve problems, think creatively and innovate, as well as display judgment and empathy. A lack of these skills could account for 32 percent of the total skills gap facing the US economy by 2027.⁶ Workers whose core purpose is to think critically and creatively, and make human connections, will thrive.⁷ Those workers define themselves by their ability to use and work creatively with technology, rather than compete with it.

Living and working longer. With steadily increasing life expectancy, the majority of children born in rich countries today can expect to live to more than 100 years of age. It will no longer be sufficient to follow education with a career of some 40 years and then retirement. Many of us will not be able to afford to retire at the age our parents did, but may need to work well into our 70s and even 80s. This may be detrimental to our mental and physical fitness, as well as our passion for work and living. The book *The 100-Year Life* describes a social revolution toward

¹ [Learning to Learn: Adapting to Continuous Workforce Disruption](#), A.T. Kearney & Ecosperity, 2018

² [Technology and the future of ASEAN jobs](#), Oxford Economics & Cisco, 2018

³ [Shaping the Future of Education, Gender and Work](#), World Economic Forum, 2017

⁴ [Shaping the Future of Education, Gender and Work](#), World Economic Forum, 2017

⁵ Quote by Charles Leadbeater, [Thrive: Schools reinvented for the real challenges we face](#), Valerie Hannon with Amelia Peterson, 2017

⁶ [The A.I. Paradox: How Robots Will Make Work More Human](#), Oxford Economics & Cisco, 2017

⁷ [The A.I. Paradox: How Robots Will Make Work More Human](#), Oxford Economics & Cisco, 2017

a multistage life model with more transitions, different phases, and far more diverse individual sequencing, depending on individual circumstances and preferences.⁸

Thriving in a different world. The Organisation for Economic Co-operation and Development (OECD) Learning Framework 2030⁹ recognizes that societies are changing rapidly and profoundly. They face significant challenges that are environmental (climate change and resource depletion), economic (new paradigms in value and wealth with the advent of technology), and social (socio-political and demographic shifts, widening inequality, and threats of conflict). It will require a different type of young person and future adult to deal with this disruption, and the very nature of work and well-being in this system will shift. Education cannot be just about developing abstract skills; it must also be about learning to live in new and better ways, while taking charge of and shaping the future.

Humanity has the power to drive societal and economic change by educating and empowering the future workforce. The current “great equalizer” is our willingness to let societal shared values take precedence over organizational policies. For the first time in history, educational development must spearhead our progress, not just as a productive economy but also as a society.

Leaders’ Perspectives

- “We are moving to an alternative economy. Several organizations in the small and middle space are closing down, a lot of people will start functioning like entrepreneurs, and we are shifting to shared services. But people are not being trained; the education system today isn’t preparing people for the jobs of the future. That’s a fact, and that’s one thing that needs to be changed. You will need rapidly changing skill sets, and to reinvent yourself every five years or 10 years to do something new and acquire some new skill sets, because the rate at which technology will come and go will change very rapidly. People who are able to do that, to adopt and be adept at technology, they will be far more successful in the future.”—**Farrukh Kazi, educational lead, Logitech**
- “It’s hard to think more than 18 months out. When I look 18 to 24 months out, when I think about what we do at present, what we should be doing now, and what we will need to do, the big insight is that it requires about 60 percent replacement or upskilling of the existing staff that we have in our business ... The industry still has a very traditional, hierarchical way of thinking. Maybe it’s someone who’s 18 and sees a way to completely turn the industry on its head ... it’s most likely what we would need because I’m not necessarily going to see it.”—**Joanna Catalano, APAC CEO, iProspect**
- “The direction society is heading in has to be based in where we want to be, independent of jobs and economic gain. Rather than productivity, our basis will now be the greater insight around what humanity as a whole needs to go forward.”—**Ajay Mohan, marketing director, Intel**
- “The education system fails in a big way, especially in some countries, in teaching what it means to live in a society. We are very good at teaching our kids mathematics, English, Shakespeare, and so on, but we don’t teach them how to live in a society. We don’t teach them values. We rely on the family to do that but sometimes that fails ... This is important because it will be so much easier to change the norms in doing business with social impact if people come with different mindsets. It’s a bit more difficult when they already have a self-centered mindset.”—**Professor Ilian Mihov, dean, INSEAD**

⁸ [The 100-Year Life](#), Lynda Gratton and Andrew Scott, Bloomsbury Business, 2017

⁹ [The Future of Education and Skills: Education 2030](#), OECD, 2018

Changemaking Skills Vital to the Future

Although literacy and technical skills will remain important, they will be far from sufficient in the future. Our interviewees identified a diverse range of skills and characteristics that will be crucial for our next generation to thrive in a vastly different future:

Agency and self-direction—the ability to find one’s own voice and power, thereby taking responsibility for instigating change with new ideas and solutions

Problem-solving and changemaking—the ability to creatively solve problems, and the resourcefulness to enable positive change

Leaders’ Perspectives

- “Changemakers are people who can see the patterns around them, identify the problems in any situation, figure out ways to solve the problems, organize fluid teams, lead collective action, and then continually adapt as situations change.”—**Bill Drayton, CEO and chair, Ashoka**
- “I’ve learnt 95 percent of whatever I know today on the job. Yes, you will need to know how to code, and learn Python or some statistical tools, but we don’t need it as a prerequisite, right, because we don’t think that it’s rocket science. If you put your heart into it and you’re smart enough, you’ll figure it out. So, it’s more about trying to get to the point where the prerequisite is the person, because every other knowledge you will either learn at school or online or some other way.”—**Danny Yong, CIO and founder, Dymon Asia Capital; founder, The Majority Trust**
- “If the judicial system is incapable of keeping up with rapid development, we need people who are compassionate, team players, and empathetic to self-regulate these kinds of developments ... Human aspects of development mean that we need people to be empathetic, understanding, and have a high EQ [emotional intelligence].”—**Laure de Panafieu, partner and head of Employment and Incentives, Linklaters**
- “With some routine tasks being taken over by technology, what does this mean for creativity, ideation, imagination? We need hybrid people who can bring everything together—multidisciplinary, multiconnected.”—**Chee Yan Yi, general manager APAC, BBH**
- “You need to create resilient and flexible workers who need to be constantly reskilled. That creates relevance for being human. We’re not able to unlearn everything we’ve learned, and robots will take those jobs. Lifelong learning is something I would love to see.”—**Naveen Menon, president of ASEAN, Cisco**
- “I want to have that entrepreneurial mindset as a skill, and ... build a confidence level in students. It’s important to know what you are talking about and to back it up. And the ability to have this grit, this drive, the ‘it’ that separates the curious from the serious. When you sit with someone, you can feel it, whether they have it or they don’t. It can also be a culmination of your life experiences or it can be a mindset that you have on your approach to problems and challenges. When somebody says ‘no,’ it doesn’t mean that you have to back down. You need to think about whether that’s the right person you are talking to, or if you are talking about two different things. It’s the ability to find your way around, to find resources, to create something ... It’s a go-getter mentality and not just easily giving up.”—**Jonathan Chang, executive director, Lien Centre for Social Innovation**

Empathy—the ability to understand the perspective of others and their contextual situations to effectively solve problems. A Global Empathy Index study found that the 10 most empathetic companies increased in value more than twice as much as those at the bottom of the index, and generated 50 percent more earnings.¹⁰ Empathy also has a clear impact on staff retention: 90 percent of employees are more likely to stay with an organization that empathizes with their needs

Agility and adaptability—the ability to constantly change and adapt to new challenges

Resilience—the ability to take on problems, take risks, adapt to change, persevere through setbacks, and be resourceful

Teamwork and collaboration—the ability to build the next generation of “connectors” and “weavers” who can bring multidisciplinary ideas and insights together, and bring people together across a diverse ecosystem

A learning and growth mindset—having a mindset that focuses on growth and learning for life, rather than specific knowledge or skills

Attitude and values—having motivation, trust, respect for diversity, and virtue, which are some of the important values identified in the OECD Learning Framework 2030

The ability to thrive and promote well-being—having healthy inner relationships with ourselves, authenticity, and the ability to instill trust in others and create safe learning spaces.

What Does This Mean for Learning?

In this context, educators need to consider how to:

Develop learning pedagogies and approaches that enable learners to discover their agency, voice, and passion. These approaches should allow learners to identify their intrinsic motivation and strengths, develop empathy, and identify the significant challenges they can address without fear of failure.¹¹ Developing a sense of possibility and agency is a quality that spans from education to employment, so this needs to bridge formal and informal learning environments. Almost all of today’s great entrepreneurs started their careers in their teens, including more than 80 percent of Ashoka Fellows. A survey of LinkedIn members found 66 percent of professionals started working on something in their teens, and these people were four times more likely to be a C-level leader, an entrepreneur, a founder, or a co-founder.¹²

Develop inspiring and inclusive learning environments. These environments should be holistic and enable multidisciplinary learning. They should enable learners to construct their own learning and find their agency. We should break down silos and enable different learning pathways. Learning environments across school, work, and social life can be blended, bringing together both formal and informal education—with different pathways to building knowledge, values, skills, and attitudes. For example, micro-accreditations and flexible-format online resources allow learners to undertake just-in-time learning on demand. Technology can be a powerful enabler here; for example, learning experiences driven by artificial intelligence can adapt to each individual’s interests and learning abilities. Education should also remain inclusive for disenfranchised individuals, or those who have developed via nontraditional learning pathways.

¹⁰ [The Most Empathetic Companies](#), *Harvard Business Review*, 2016

¹¹ [Strengths-Based Development](#), Gallup

¹² [Lead Young: Every child needs to be a change-maker](#), Ashoka

Rethink measures of success. Although knowledge will remain important, traditional metrics such as Programme for International Student Assessment math and science scores, or university drop-out rates, may not provide an adequate frame for evaluating educational outcomes. For the first time in history, a broad coalition of college admissions officers are encouraging high school students to focus on significant ethical and intellectual engagement. The aim is to promote meaningful contributions, reduce excessive academic pressure, and level the playing field for economically disadvantaged students.¹³ Likewise, employers should evaluate candidates to identify relevant skills for a role, beyond academic achievements.

Transform teachers' and parents' mindsets and behaviors. The transformation that occurs through learning requires the efforts of parents, teachers, and other adults. However, adults' fear of change and stigmatization of failure, though intangible, have been key barriers to systemic change. It is not enough to just implement the latest policies and programs, or to know when to get out of a child's way. We should encourage adults to reflect on what their education was like; recognize the value of their learning experiences beyond formal education (such as learning on the job); develop broader views of success and how to measure it; share these stories; and feel empowered to drive change.¹⁴

Leaders' Perspectives

- “Maybe this kid wants to have an internship in any of these firms who are willing to give him a shot, and they realize that actually at 15 years old you are mature, smart, and entrepreneurial enough that you can skip university and high school and whatever. If you want a job today, at 15, you can start. Why not? If someone from a university program joins an internship and doesn't come back, then that's a success. Because it means they are good enough that the organization wants to hire them.”—**Danny Yong, CIO and founder, Dymon Asia; founder, The Majority Trust**
- “Students that are beginning their education—like at six years old or 10 years old—shouldn't get ready for jobs yet. They should be ready for tomorrow, and readiness for tomorrow is a very open question. And so what does it mean to be ready for tomorrow? It's probably finding your *ikigai* [reason for being] and taking your time to explore. And so I think that we should let the youngest ones truly explore much more, and we should do several things. One is that research has shown there are two peaks of creativity, one around five years old, and one around the teenage years. And so ... we should help this exploration happen rather than force kids to memorize whatever yesterday's solution was, that we have been using to select kids ... Rather than to be able to answer yesterday's questions, we should invite them to address today's challenges and ask new questions and define tomorrow's solutions. So we should let them explore what it is that they like and basically let them explore their *ikigai*. But *ikigai* is mostly not even taught in schools. So I think that is one of the fundamentals that they should be learning, which is to identify what they like, what they are good at or can become good at, or what type of resources they can find to go for a challenge, and what sort of big challenges that world has that they want to address. We should teach them about sustainable development goals, and all sorts of local and global issues they can face and get prepared for.”—**François Taddei, co-founder, Center for Research and Interdisciplinarity**
- “The learning will be without borders. No borders and no walls. The learning happens in every part of your life. Students are learning how to see the world's problems. How to innovate, take action, and solve problems. These skills will be fluidly transferable when they enter the job market.”—**Clive Lee, CEO, Yidan Prize Foundation**

¹³ [Turning the Tide: Inspiring Concern For Others And The Common Good Through College Admissions](#), Harvard Graduate School of Education

¹⁴ [Social Innovation Mapping: Entrepreneurial Patterns for the Future of Learning](#), Ashoka and Lego Foundation

Protect young people and ensure their well-being. Many young people struggle with challenges such as anxiety, depression, curriculum overload, technology addiction, and cyberbullying. In England, for example, six times more children and young people have mental health conditions than the generation before them.¹⁵ Ways to encourage well-being include ensuring young people feel accepted and understood; have sufficient freedom and control over their lives; have interesting opportunities to learn and succeed; and have a sense of belonging to their family, school, and community.

Businesses as a Force for Good

Businesses can no longer thrive on conformity and standardization. They need to creatively adapt their workforce strategy and organizational practices to nurture and empower their workforces—from recruiting and organizing teams to providing training, setting pay structures, assessing performance, and retaining talent. Here are some things they can do to make this happen:

Enable a sense of purpose and fulfillment. Seventy-six percent of Millennials think that businesses of the future will need to have a genuine purpose, and 62 percent feel it is important for them to be known for making a positive difference in the world.¹⁶ To attract and retain talent, organizations need to be able to connect to their workforce's sense of purpose and desire to shape their lives and communities.

Disrupt recruiting and embrace diverse talent. Today's recruiting processes tend to be heavily driven by formal education qualifications, where employers can have a bias (conscious or unconscious) toward candidates with whom they share a trusted common school or background, such as an Ivy League college. This can create a very streamlined, stereotypical group. It also reinforces limiting views around narrow definitions and pathways to success, for parents, educators, and youth themselves.

Embrace changemaking to build a resilient business, and offer variety and flexibility.

Businesses must realize that although productivity can come from stability and continuity, they will benefit from creating space for creative and spontaneity, where employees are empowered to pursue self-transformation, self-authorization, and self-actualization. Certain disruptive industries, such as those in the shared or platform economy, offer a more level playing field and therefore a flatter organizational culture. Job descriptions of the future may focus more on problems to be solved and outcomes to be achieved, rather than prescribing detailed tasks. Company culture also needs to accept and embrace risk-takers and innovators. Embracing changemaking enables employees to anticipate industry disruption, quickly adapt and learn, and reimagine and transform the organization, thereby building a more resilient business for long-term success.

Invest strategically and realize it's not (just) charity. Founder-led private businesses such as Dymon Asia Capital are often agile and entrepreneurial, and willing to take risks such as disrupting recruiting. Founder Danny Yong emphasizes that this is not charity. "I genuinely believe that a 15-year-old kid, if trained on the ground at a very young age, could lead the organization by the time he is 23," he says. "He could take it to a totally different level that even I as a founder cannot, so I am placing a bet on all these different talents."

¹⁵ [Mental health issues in young people up sixfold in England since 1995](#), The Guardian, 2018

¹⁶ [Redefining the C-Suite: Business the Millennial Way](#), American Express and Kantar Futures, 2017

Listen to young people and enable collaboration. Reverse mentoring, where an individual contributor in the company mentors an executive or senior manager, is an increasingly popular way to provide an open and honest environment that sparks discussions on creating an inclusive work environment, and fosters a learning experience for all participants (see the Cisco case study in the Appendix on page 14).

Engage with educators to provide valuable learning experiences for young people.

Businesses must create a safe place to learn and fail. Examples include creating alliances between educators and businesses to provide internships or apprenticeships for youth learners and educators.

Businesses should also explore how they can combine profitability and purpose. Beyond fulfilling social and environmental obligations, there is a clear business case for winning consumer trust and attracting motivated employees. For example, Danone, a large French food company, states

Leaders' Perspectives

- “I think the path to thriving for companies will be this constant checking-in of their environment and themselves, and then adapting. So the ability to build systems that allow you to change relatively quickly, to build a mindset in the organization and throughout the organization of the same things that we are asking people to do ... The whole gig economy, people working independently, that means needing to attract the most talented people that the business must have as part of their culture—the whole way that they are set up, their purpose, their day-to-day environment, their culture, this feeling of the humanistic part.”—**Elaine Yew, senior partner and executive committee member, Egon Zehnder**
- “From an HR perspective there is a shift from ‘what school did you go to, what degree do you have and what brands have you worked for’ to ‘what is your purpose, what capabilities do you bring and how can you demonstrate these in the workplace to make a contribution?’ The tools and techniques that have helped us in the past for talent selection and development are not as helpful in the VUCA workplace context. On an individual level, we now need purpose-driven, values-led employees who display learning agility and resilience, and are looking to develop and grow but also looking to collaborate rather than compete in order to contribute to a better tomorrow. At a collective level, we are looking to shape high-trust environments where diversity, inclusion, and authenticity thrive in a psychologically safe setting that encourages innovation and risk-taking, and supports failing and experimentation. We need leaders who can identify, attract, and retain such individuals, and can shape and sustain such environments. This takes humility, authenticity, self-awareness, having more questions than answers, and most importantly, an ability to harness individual and collective potential for the greater good.”—**Rebekah France, head of HR, Asia Pacific, Johnson & Johnson Medical Devices**
- “The culture of the company is critical. In order to support your business model, which is going through so many iterations, you need your people to evolve and be willing to try new things. This means you’re going to need a culture that is pretty accepting of experimentation—and failure. That’s a very different type of culture than one which expects absolute perfection all the time, which might have worked in a more static environment. It doesn’t mean you don’t have high standards. It just means you are running a portfolio of initiatives in your company, some of which will work while others won’t. This requires an open culture which encourages trial and error, and fosters a spirit of curiosity ... When you talk about bringing business and education closer together, companies need to think differently about their talent pool; firstly, in terms of engaging those who are new to the workforce, and secondly, in terms of harnessing the potential of people as they reinvent themselves over the course of their lifetime.”—**Su-Yen Wong, board director, founder and CEO, Bronze Phoenix**

that “the purpose of this firm is not to create shareholder value,” but rather to get healthy food to as many mouths as possible, benefiting everyone from suppliers to consumers to owners. Another example is Johnson & Johnson, which aspires to profoundly change the trajectory of health for humanity across its company and extended value chain, and has embedded clear goals for citizenship and sustainability in its business strategy.¹⁷

Facilitating Systemic Change Through Collaboration

Businesses are a powerful and under-used force for change. Together with other stakeholders, they can drive transformative change in the education ecosystem. Here are some ways they go about it:

Inspire other employers and stakeholders (such as parents, educators and young people) to think differently. Businesses—be they public sector organizations, small to medium-sized enterprises, or large multinational companies—should share individual and organizational success stories and lessons learnt to inspire other employers. Evolved hiring practices also send a strong signal to parents, educators, and youth that pure academic achievement alone is no longer enough.

Leaders’ Perspectives

- “Thirty or 40 years ago we could look to the government for solutions, but we are now in a world where employers or corporations are running the system. If you want to change mindsets, employers become the key lynchpin, and if you can change that, the whole ecosystem will slowly respond. The solution isn’t (just) in education, it’s in the corporates ... And education must be all-encompassing. The problem is that we have measured education based on literacy today, but education is far more than that.” —**Martin Tan, executive director, The Majority Trust**
- “Companies and also the public sector should collaborate to create workplaces like FabLabs, which invent the making of tomorrow. But if you want to invent the health of tomorrow, or the learning of tomorrow, or the transport of tomorrow, or the food of tomorrow, you have to create spaces to do that. Big companies could create it within themselves, but then they will lack access to the collective intelligence. So the best way is to create open labs of tomorrow’s jobs that are open to the community, the younger ones, and to the people that want to create a start-up, people who want to reinvent themselves, and every category that wants to give it a try. While I don’t think anyone knows what the jobs of tomorrow are, many people might have an intuition about what they could be, and they might be able to bring one brick of a solution and recombine them and test it and see the complementary to it, and there will be more people who are bringing their own bricks, and together they can sort of build these jobs of tomorrow and companies of tomorrow with their own ability. So there are notions of ability and cooperation and creativity, critical thinking, and all these 21st-century skills. We should train the people that are currently employed to use them, otherwise they won’t adapt to the coming change ... We should give the 21st-century learners a voice, and certainly co-design the future of the learning ecosystems, including schools and families and technology, together with them.” —**François Taddei, co-founder, Center for Research and Interdisciplinarity**

¹⁷ 2017 Health for Humanity Report: Progress in Citizenship & Sustainability, Johnson & Johnson

Design flexible lifelong learning models. We need to establish and recognize alternative approaches to the traditional four-year full-time university model, providing young people and adult lifelong learners with greater flexibility to learn.

Allow young people to take charge of their own learning journey. Our students should be nurtured in a way that will help them discover and develop their full potential and agency as learners. They can explore new jobs being created in artificial intelligence and machine learning; use their changemaking skills to co-create and collaborate; or start up innovative enterprises to tackle societal challenges. Young people must be empowered to take charge and shape their own diverse pathways, and technology can enable this.

Engage with educators. Educators should stay connected and engaged with the new realities of the world—for example, through apprenticeships with companies. Educators should also adopt a “whole child for the whole world” approach to nurture learners with the knowledge, values, skills, and attitudes they need to live for the common good. The greatest challenge here involves developing adaptable, empathic teachers who are able to transmit these values through their learning environments in a practical manner.

Create collaboration spaces and hubs. Creating labs for tomorrow’s jobs that are open and welcoming to the community can enable cross-learning, agency, holistic development, and the well-being of children and youth. These have to be authentic learning spaces that fulfill the parameters of the OECD Learning Framework 2030. Businesses have begun working with schools on certain skills (for example, through coding boot camps) and developing dedicated hardware and software, but there are opportunities to provide more meaningful experiences. Examples include reverse mentoring and leadership programs that develop relationships between employers and high school students.

Breaking Down Barriers to Systemic Change

Barrier 1: Employers’ risk-averse recruitment practices continue traditional evaluation and hiring patterns, heavily influenced by grades.

Solutions:

- Reframe role descriptions in view of skills, problem-solving, and learning and development potential, rather than tasks for execution.
- Position HR roles at the forefront, as talent and people officers.
- Embrace diverse talent and experiences.
- Evaluate skills first; screen CVs later.
- Share stories of how CEOs learned on the job and outside formal learning environments.
- Share success stories of unconventional hiring practices.
- Provide more apprenticeship and internship pathways.

Barrier 2: Traditional adult mindsets and behaviors (among parents, teachers, employers, and policymakers) reinforce old models based around traditional definitions and pathways for success.

Solutions:

- Build awareness of 21st-century changemaking skills and evolving definitions of success through a media campaign.
- Share stories of individuals who have thrived via alternative pathways.
- Create a more holistic education by placing greater emphasis on the arts and non-competitive sports.
- Unleash teachers' creativity, including by exposing them to alternative methods.

Barrier 3: Individualistic, dehumanizing cultures drive competitive win-or-lose outcomes, alienation, and fear of failure.

Solutions:

- Redefine success and what it means to be a good person; celebrate unconventional stories and role models.
- Reduce fear of failure; encourage safe spaces for sharing and experimentation.
- Encourage authenticity in the workplace.
- Establish reverse mentoring programs.
- Leverage productivity increases to give people more free time to pursue their passions.
- Foster a shared identity based on community or humanity to solve complex, large-scale problems.

Barrier 4: There is a lack of collective vision and collaboration due to stakeholders' silos, and the way they perceive and address problems.

Solutions:

- Identify key stakeholders and elements, including employers, institutions, political structures, youth, educators, and parents.
- Create a collective vision relevant to everyone.
- Understand the complexities and identify critical failure points in the system.
- Identify champions of change across the system.
- Personalize communications.
- Engage young people in shaping the system.
- Provide spaces for collective cooperation, including safe spaces for open conversation, and test beds for newly generated ideas.

Are You Prepared for the Future?

In the business context, ask:

- What does the future of work look like for my industry and my organization? How are we being disrupted?
- What skills and roles will I need? Where can I source these?
- Does our work offer our people a sense of purpose and fulfillment? How can we deliver profits and purpose?
- What work environment do I need to create? Do we need to focus on the talent pipeline, intake and uptake, and processes and systems?
- As an employer, how am I listening to and engaging with youth, learners, and educators? How do I include them in the workplace in an authentic and holistic manner?
- How can I work with and learn from other employers?
- How do I help engage educators and parents to bring about collaborative change?

From the educator perspective, ask:

- What are the new ways and places children can develop and deepen their learning, in formal and informal learning environments?
- How much does my learning environment trust and empower young people to make active decisions and take action?
- How are our learning environments inspiring, accessible, and inclusive? What are new innovations that enable young people to achieve better outcomes with less?
- How do we measure success for policymakers, schools, parents, and educators? What are new ways to measure learning outcomes?
- How do we build safe spaces for people to fail, relearn, and unlearn?
- How are school leaders and educators making learning approaches relevant for the future? What are some new roles for educators and new ways of teaching?
- How am I engaging employers, school leaders, teachers, universities, students, and parents to bring about collaborative change, given our new paradigm?

About the Study

In 2018, Ashoka and A.T. Kearney led the first study in Asia focused on how businesses envision the workplace of the future, and the implications for young people in a rapidly changing world. Thirty-four diverse cross-sectoral leaders representing business, education, social entrepreneurs (Ashoka Fellows), and young changemakers in Europe and Asia, took part in in-depth interviews for the study.

Business leaders included C-level executives and heads of sectors in the fields of education and learning. Ashoka Fellows are exceptional individuals elected by Ashoka to lead entrepreneurial change in society. The community of more than 3,500 Fellows, including two Nobel Prize winners and 1,000 Fellows dedicated to education and youth empowerment.

Over the course of a 1.5-hour interview, each participant was asked five open-ended questions on the future of work, its implication for education, and actions to be undertaken going forward. These interview recordings were then transcribed.

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Appendix: Leading Initiatives

TANGENT: Hiring for results and fit, rather than education and experience

TANGENT is a flagship social initiative that The Majority Trust launched in January 2018 to transform conventional mindsets among employers, and unlock opportunities for individuals in Singapore regardless of their level of education or experience. The TANGENT model does not exclude based on educational background, working experience, pedigree, race, and gender; it works to remove the unconscious bias in current hiring practices and focus on the intrinsic qualities required to succeed in a job. Using analytics-driven technology, organizations can effectively identify and hire the quality talent they need: atypical yet talented Singaporean employees.

In August 2018, leading investment firm Dymon Asia Capital welcomed its first batch of eight TANGENT Associates in investment roles within the firm's various funds. Of nearly 1,200 applicants, 860 completed a 90-minute online assessment based on psychometrics and predictive analytics. The assessment is designed to measure up to 255 attributes to determine candidates' fit within a role or organization. The system shortlisted 80 applicants as fitting a benchmark profile, based on triangulated data from a sample of Dymon Asia's top-, middle-, and bottom-performing employees. These applicants ranged in age from 20 to 72, and one-third of them had no financial sector background. They were asked to submit a three-minute video explaining why they were different to other candidates. Forty were then invited to a face-to-face panel interview, and only then did they submit their resumes.

Cisco Global Problem Solvers

Over more than two decades, Cisco has built a world-leading IT training program—the Cisco Networking Academy—which has empowered millions around the world. Now it is taking this experience to younger learners with Global Problem Solvers: The Series (GPS: The Series), a new animated web series for kids that explores entrepreneurship, life skills, and how to use technology for social good. GPS: The Series features a team of superhero teens tackling potential real-world social, economic, and environmental challenges across the globe. In the first season, they develop a solution to provide clean drinking water to communities in Malawi. In the second season, the team finds a way for kids to continue learning when schools are closed after a hurricane hits the United States Gulf Coast.

Cisco recognizes the importance of starting young. Like a muscle, our capacity to strategically and creatively solve all types of problems must be formed, exercised, and used time and time again to stay healthy. By starting young, we can shape this muscle so that it becomes part of us, creating a new digital-savvy individual—a global problem solver who recognizes the powers of technology, social awareness, and creativity to create an inclusive and sustainable future. The middle school years might just be the perfect age to engage young people in social consciousness and entrepreneurship, and to educate them on the expanding role of technology in working for the good of society. These powerful adolescent years mark a critical period of development. Intellectually, cognitively, psychologically, socially, and emotionally, youth at this age are changing at a rapid pace. What they learn during this period can have a significant impact on their future.¹⁸

¹⁸ [Helping Tweens Become Tech-Savvy Global Problem Solvers](#), Cisco

Cisco Reverse Mentoring

Mentoring is an accepted way for less experienced employees to learn from more experienced colleagues. However, many companies are experimenting with reverse mentoring, in which junior employees teach their superiors. In 2011, Cisco launched a six-month reverse mentoring program to “provide an open and honest environment to spark discussions around creating an inclusive work environment.” Thirty-one pairs of mentors and mentees met to exchange knowledge related to communication style, cultural knowledge, better leadership, developing relationships with team members, and change management. The program was a success; mentors and mentees alike gained a greater understanding of how another team inside Cisco operates, motivates the team to strive for success, and the challenges that the organization faces.¹⁹

Ara Kusama, Moo’s Project²⁰

As far back as Ara can remember, she has loved cows. Her parents painted her room in the white and black spotted pattern of cow hide. She even wore cow horns on her hijab. By age 10, her bovine obsession reached an even higher level: she wanted a real cow of her own. She convinced her family to take a road trip through her home country of Indonesia to see cows. They traveled first to a privately owned farm in Solo (Surakarta), Central Java, where she saw 1,500 cows living in a clean environment. The farmers used integrated methods, which meant they processed everything, from the milk to the urine, and effectively reused waste and eliminated offensive smells and flies. This scene contrasted sharply with Ara’s next stop in Boyolali, also in Central Java. There, Ara experienced the overpowering smell of cow dung piled in corners, and she had to constantly duck swarming flies. The village consisted of 500 farmers, each of whom owned between three and 10 cows. Ara wondered, “What if we bring integrated farming to these farmers, too?” She decided to act by creating Moo’s Project, an initiative to teach village farmers about integrated farming. Building this dream was not easy for a 12-year-old, but she did it with the support of her family. The village eventually grew into Moo’s Camp, a prototype for integrative farming and an ecotourism site, where urban dwellers now come to experience village life. Ara had her power by her early teens; it was magical and it defined her. So she shifted her focus from cows to helping all young people access this power. Her current venture takes young people to see Ashoka Fellows and Youth Venturers, and other social entrepreneurs. This helps youth imagine potential life paths, and learn how to use their talents and develop contacts who can help them with their endeavors.

¹⁹ [How we plan to use Cisco’s Reverse Mentoring programme to encourage Inclusion and Diversity](#), Cisco

²⁰ [The New Inequality](#), Ashoka

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About Ashoka

Ashoka is the world's largest network of social entrepreneurs and institutional change leaders with more than 3,600 leading social entrepreneurs, 200 leading schools, 40 universities, and 100 corporate partners in more than 85 countries. Ashoka has developed and led social entrepreneurship, ultimately introducing this movement to the global mainstream. Its work demonstrates that the surest way to create lasting change in any area is to be prepared to thrive in today's rapidly changing world. The best way to achieve that goal is to create a society of problem-solvers by equipping everyone to act as an agent of change. For more information, visit www.ashoka.org.

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