## Better Skills, Better Jobs, Better Lives

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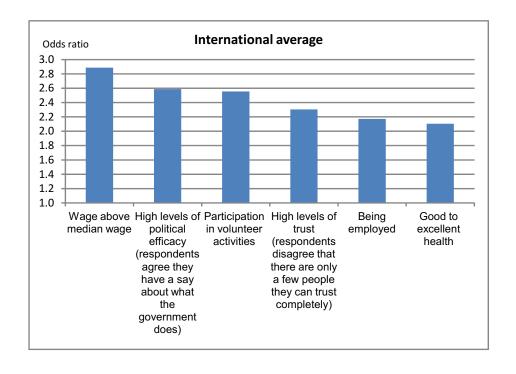
> Everywhere skills transform lives, generate prosperity and promote social inclusion. Skills have become the 'global currency' of 21st-century economies. But this "currency" can depreciate as the requirements of labor markets evolve and individuals lose the skills they do not use. For skills to retain their value, they must be continuously developed throughout life. To succeed with converting education into better jobs and lives, we also need to better understand what those skills are that drive outcomes, ensure that the right skill mix is being learned over the lifecycle, and help economies to make good use of those skills. The essential starting point for that is to better anticipate and respond to the evolution of skill demand in societies. Here the dilemma for educators is that the kind of skills that are easiest to teach and easiest to test, are also the skills that are easiest to digitize, automate and outsource. Preparing young people for their entry into the labor market with upfront education and training is only one facet of skills development; working-age adults also need to develop their skills so that they can progress in their careers, meet the changing demands of the labor market, and don't lose the skills they have already acquired. But even developing skills and making them available to the labor market will not have the desired impact on the economy and society if those skills are not used effectively. Skills mismatch remains a serious challenge that is mirrored in people's earnings prospects and in their productivity. High-quality career guidance services, complemented with up-todate information about labor-market prospects, can help people make sound career choices. Some countries also have effective active labor-market measures, such as counseling, job-search assistance and temporary hiring subsidies for low-skilled youth; and they link income support for young people to their active search for work and their engagement in measures to improve their employability. None of this will work unless skills become everyone's business: governments, which can design financial incentives and favorable tax policies; education systems, which can foster entrepreneurship as well as offer high-quality vocational training; employers, who can invest in learning; labor unions, which help that investments in training are reflected in better-quality jobs and higher salaries; and individuals, who can take better advantage of learning opportunities.

Everywhere skills transform lives, generate prosperity and promote social inclusion. And if there is one lesson the global financial crisis has taught us, then it is that we cannot simply bail ourselves out of an economic crisis, we cannot solely stimulate ourselves out of a crisis and we cannot just print money our way out of a crisis. A much stronger bet for countries to grow and develop in the long run is to equip more people with better skills to collaborate, compete and connect in ways that drive their lives and their societies.

OECD's Survey of Adult Skills shows that what people know and what they do with what they know has a major impact on their life chances (see Figure 1). For example, on average across countries, the median hourly wage of workers scoring at Level 4 or 5 in literacy—who can make complex inferences and evaluate subtle truth claims or arguments in written texts—is more than 60% higher than for workers scoring at Level 1 or below—who can, at best, read relatively short texts to locate a single piece of information that is identical to the information given in the question or directive, or understand basic vocabulary. Those with low literacy skills are also more than twice as likely to be unemployed. The survey also shows that this impact goes far beyond earnings and employment. In the countries surveyed, individuals with poorer foundation skills are far more likely than those with advanced literacy skills to report poor health, to believe that they have little impact on political processes, and not to participate in associative or volunteer activities.

Figure 1: Likelihood of positive social and economic outcomes among highly literate Likelihood of positive social and economic outcomes among highly literate adults (2012)

Increased likelihood (odds ratio) of adults scoring at Level 4/5 in literacy on the OECD Survey of Adult Skills reporting high earnings, high levels of trust and political efficacy, good health, participating in volunteer activities and being employed, compared with adults scoring at or below Level 1 in literacy (adjusted)



Notes: Odds ratios are adjusted for age, gender, educational attainment and immigrant and language background. High wages are defined as workers' hourly earnings that are above the country's median.

Source: Based on data from the Survey of Adult Skills (PIAAC) 2012

So in one way, skills have become the global currency of 21st-century economies. But this "currency" can depreciate as the requirements of labor markets evolve and individuals lose the skills they do not use. For skills to retain their value, they must be continuously developed throughout life.

Furthermore, the toxic coexistence of unemployed graduates and employers who say that they cannot find the people with the skills they need underlines that more education does not automatically translate into better economic and social outcomes. To succeed with converting education into better jobs and lives, we need to better understand what those skills are that drive outcomes, ensure that the right skill mix is being learned over the lifecycle, and help economies to make good use of those skills.

The essential starting point for that is to better anticipate and respond to the evolution of skill demand in societies. Government and business need to work together to gather evidence about skill demand, present and future, which can then be used to develop up-to-date instructional systems and to inform education and training systems. During the past few decades there have been major shifts in the economic underpinnings of industrialized countries and, more recently, of many emerging and developing countries, too. In the past, education was about teaching people something. Now, it's about making sure that individuals develop a reliable compass and the navigation skills to find their own way through an increasingly uncertain, volatile and ambiguous world. These days, we no longer know exactly how things will unfold, often we are surprised and need to learn from the extraordinary, and sometimes we make mistakes along the way. And it will often be the mistakes and failures, when properly understood, that create the context for learning and growth. A generation ago, teachers could expect that what they taught would last for a lifetime of their students. Today, schools need to prepare students for more rapid social change than ever before, for jobs that have not yet been created, to use technologies that have not yet been invented, and to solve social problems that we don't yet know will arise.

How do we foster motivated, engaged learners who are prepared to conquer the unforeseen challenges of tomorrow, not to speak of those of today? The dilemma for educators is that the kind of skills that are easiest to teach and easiest to test, are also the skills that are easiest to digitize, automate and outsource. Put simply, the world no longer rewards people just for what they know – Google and Weibo know a lot of that – but for what they can do with what they know. So rather than putting students up for competition with computers, they need to get ahead of it and develop a deep understanding of the *true*, the realm of human knowledge and learning; the *good*, the realm of ethics; the *just and well-ordered*, the realm of political and civic life; the *beautiful*, the realm of creativity, aesthetics and design; and the *sustainable*, the realm of natural and physical health.

Conventionally our approach to problems was breaking them down into manageable bits and pieces, and then to teach students the techniques to solve them. But today we create value by synthesizing the disparate bits. This is about curiosity, open-mindedness, making connections between ideas that previously seemed unrelated, which requires being familiar with and receptive to knowledge in other fields than our own. If we spend our whole life in a silo of a single discipline, we will not gain the imaginative skills to connect the dots where the next invention will come from.

The world is also no longer divided into specialists and generalist. Specialists generally have deep skills and narrow scope, giving them expertise that is recognized by peers but not valued outside their domain. Generalists have broad scope but shallow skills. What counts increasingly are the versatilists who are able to apply depth of skill to a progressively widening scope of situations and experiences, gaining new competencies, building relationships, and assuming

new roles. They are capable not only of constantly adapting but also of constantly learning and growing, of positioning themselves and repositioning themselves in a fast changing world.

Perhaps most importantly, in today's schools, students typically learn individually and at the end of the school year, we certify their individual achievements. But the more interdependent the world becomes, the more we rely on great collaborators and orchestrators who are able to join others in life, work and citizenship. Innovation, too, is now rarely the product of individuals working in isolation but an outcome of how we mobilize, share and link knowledge. So schools need to prepare students for a world in which many people need to collaborate with people of diverse cultural origins, and appreciate different ideas, perspectives and values; a world in which people need to decide how to trust and collaborate across such differences; and a world in which their lives will be affected by issues that transcend national boundaries. Expressed differently, schools need to drive a shift from a world where knowledge that is stacked up somewhere depreciating rapidly in value towards a world in which the enriching power of communication and collaborative flows is increasing.

One area where many nations could learn from countries like Denmark, Germany, Norway or Switzerland is to shift more of the premium in education from qualifications-focused education upfront to skills-oriented learning throughout life. OECD's Learning for Jobs analysis shows that skill development is far more effective if the world of learning and the world of work are linked. Compared to purely government-designed curricula taught exclusively in schools, learning in the workplace allows people to develop "hard" skills on modern equipment, and "soft" skills such as teamwork, communication, and negotiation through real-world experience. The experience of these countries also suggests that hands-on workplace training is an effective way to motivate disengaged youth to re-engage with education and smoothen the transition to work. They succeed with preventing school dropout by offering more relevant education and second-chance opportunities, and by offering work experience to young people before they leave education. Employers have an important role in training their own staff, even if some, particularly small and medium-sized enterprises, get public assistance to provide such training. Trade unions in these countries also help to shape education and training, protect the interests of existing workers, ensure that those in work use their skills adequately, and see that investments in training are reflected in better-quality jobs and higher salaries.

Preparing young people for their entry into the labor market with upfront education and training is only one facet of skills development; working-age adults also need to develop their skills so that they can progress in their careers, meet the changing demands of the labor market, and don't lose the skills they have already acquired. A wide spectrum of full- or part-time adult-learning activities needs to be available: from work-related employee training, formal education for adults, second-chance courses to obtain a minimum qualification or basic literacy and numeracy skills, language training for immigrants, and labor-market training programs for job-seekers, to learning activities for self-improvement or leisure. There is much that can be done to dismantle barriers to participation in continued education and training:

First, making the returns on adult education and training more transparent can help to increase the motivation of users to invest in adult education and training. Governments can provide better information about the economic benefits (including wages net of taxes, employment and productivity) and noneconomic benefits (including self-esteem and increased social interaction) of adult learning.

Second, less-educated individuals tend to be less aware of education and training opportunities or may find the available information confusing. A combination of easily searchable, up-to-date online information and personal guidance and counseling services to help individuals

define their own training needs and identify the appropriate programs is needed, as is information about possible funding sources.

Third, clear certification of learning outcomes and recognition of nonformal learning are also incentives for training. Transparent standards, embedded in a framework of national qualifications, should be developed alongside reliable assessment procedures. Recognition of prior learning can also reduce the time needed to obtain a certain qualification and thus the cost of foregone earnings.

Fourth, it is important to ensure that programs are relevant to users and are flexible enough, both in content and in how they are delivered to adapt to adults' needs. A number of countries have recently introduced one-stop shopping arrangements, with different services offered in the same institution. This approach is particularly cost effective as it consolidates infrastructure and teaching personnel and makes continuing education and training more convenient. Distance learning and the open educational resources approach have significantly improved users' ability to adapt their learning to their lives.

Cross-border skills policies are important, too. Countries may not have an adequate supply of skills because they have booming emerging sectors and not enough people trained in those fields, because their societies are aging and there are too few young people to replace retiring workers, or because they want to move major parts of the economy to higher value-added production, which requires a well-trained workforce. Similarly, while skills policies are typically designed nationally, an increasing number of employers operate internationally. Some countries have begun to invest in the skills of people abroad. This has the double advantage of providing well-trained workers to branches of firms located abroad and reducing the incentives to emigrate, especially among highly skilled individuals.

Also, while skills policies are typically designed nationally, an increasing number of employers operate internationally and must derive their skills from both local sources and the global talent pool. Some countries have therefore started to consider skills policies beyond their national borders and have begun to invest in the skills of people in other countries. This has the double advantage of providing well-trained workers to branches of firms located abroad and reducing the incentives to emigrate, especially among highly skilled individuals. Another way to encourage skills development globally is to design policies that encourage cross-border tertiary education. This can help a country to expand its stock of skills more rapidly than if it had to rely on domestic resources alone.

And yet, building skills is still the easier part; far tougher is providing opportunities for young people to use their skills. Employers may need to offer greater flexibility in the workplace. Labor unions may need to reconsider their stance on rebalancing employment protection for permanent and temporary workers. Enterprises need reasonably long trial periods to enable employers giving those youth who lack work experience a chance to prove themselves and facilitate a transition to regular employment. The bottom line is that unused human capital represents a waste of skills and of initial investment in those skills. As the demand for skills changes, unused skills can become obsolete, and skills that are unused during inactivity are bound to atrophy over time. Conversely, the more individuals use their skills and engage in complex and demanding tasks, both at work and elsewhere, the more likely it is that skills decline due to aging can be prevented.

But even developing skills and making them available to the labor market will not have the desired impact on the economy and society if those skills are not used effectively. The OECD Skills Survey shows that, in some countries, skills mismatch is a serious challenge that is mirrored in people's earnings prospects and in their productivity. Knowing which skills are

needed in the labor market and which educational pathways will get young people to where they want to be is essential. Skills mismatch on the job can be a temporary phenomenon: sometimes, for example, the demand for skills takes time to adjust to the fact that there is a larger pool of highly skilled workers available. Thus, not all types of skills mismatch are bad for the economy. Skills surpluses, which can result from an underuse of skills in specific occupations, can serve as a skills reserve that may be used in other, more advanced jobs and for building knowledge economies over the long term. However, the mismatch between workers' skills and their tasks at work can adversely affect economic and social outcomes. The underutilization of skills, in specific jobs in the short to medium term, can be a problem because it may lead to skills loss. Workers whose skills are underused in their current jobs earn less than workers who are well-matched to their jobs and tend to be less satisfied at work. This situation tends to generate more employee turnover, which is likely to affect a firm's productivity. Underskilling is also likely to affect productivity and, as with skills shortages, slow the rate at which more efficient technologies and approaches to work are adopted.

Successful entry into the labor market at the beginning of a professional career has a profound influence on later working life. The "scarring effects" of a poor start can make it difficult to catch up later. Strong basic education, in conjunction with vocational education and training programs that are relevant to the needs of the labor market, tend to smooth the transition from school to work; so do hiring and firing rules that do not penalize young people compared with other groups, and financial incentives that make it viable for employers to hire young people who require on-the-job training. Such policies can help to prevent skills mismatch and unemployment later on.

High-quality career guidance services, complemented with up-to-date information about labor-market prospects, can help young people make sound career choices. Some countries also have effective active labor-market measures, such as counseling, job-search assistance and temporary hiring subsidies for low-skilled youth; and they link income support for young people to their active search for work and their engagement in measures to improve their employability.

None of this will work unless skills become everyone's business: governments, which can design financial incentives and favorable tax policies; education systems, which can foster entrepreneurship as well as offer vocational training; employers, who can invest in learning; labor unions, which help that investments in training are reflected in better-quality jobs and higher salaries; and individuals, who can take better advantage of learning opportunities. Countries also need to take a hard look at who should pay for what, when and how. Governments need to design financial incentives and tax policies that encourage individuals and employers to invest in post-compulsory education and training. Some individuals can shoulder more of the financial burden for tertiary education, and funding can be linked more closely to graduation rates, provided individuals have access to income-contingent loans and means-tested grants.

Many countries still have a recession to fight, but the cost of low skills is high, and the equivalent of a permanent economic recession.