INNOVATIVE SECONDARY EDUCATION FOR SKILLS ENHANCEMENT (ISESE)

Skills for Employability:
The Need for 21st Century Skills

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**EXECUTIVE SUMMARY**

Youth unemployment has been at elevated levels around the world, and is expected to stand at 12.7% in 2012, translating to 75 million out of work youth (ILO, May 2012). As expected, this figure masks large regional variations: the rate is particularly high in North Africa and the Middle East (youth unemployment stood at 26.5% in the Middle East and 27.9% in North Africa in 2011), while the level in South Asia and the Pacific stood at 13.5%. The high level of youth unemployment can be partly attributed to a skills mismatch: there is a growing gap between employers’ needs and the skills that students acquire at the secondary and tertiary levels of education. In light of this, policymakers and advocacy groups in both high income and low income countries have worked to define the new ‘21st century skills’, and develop a framework for the development of these skills.

This paper examines the issue of skills development in four regions: Latin America and the Caribbean, Eastern Europe and Central Asia, OECD and North America, and the Middle East and North Africa. Common themes that emerge include the need for greater integration of non-cognitive skills in the school curriculum, and ensuring that students are able to develop interpersonal skills such as teamwork, communication, and leadership. Employers also need to be active participants and stakeholders as curricula are reformed or strengthened. Lastly, employers in certain regions (such as the ECA) are also looking for employees with technical skills, and yet, students are reluctant to enroll in vocational programs and training institutes at the secondary level. There is a need therefore to improve the image of the vocational track, and increase the flexibility between educational streams.
**INTRODUCTION**

In the past few years, policymakers in both high income and low income countries have worked to define the new ‘21st century skills’, and develop a framework for the development of these skills. This push for skills development has stemmed from two key factors: (i) the growing prevalence of Information and Communication technology (ICT), and (ii) the recognition that in today’s globalised world, rising youth unemployment is a real risk for those without the right skill-set.

First though, it is important to define what exactly we mean by the term ‘skills’ and ‘key competencies’. It may be helpful to start with the latter, as many experts agree that it is broader in scope and definition. According to the OECD, a ‘competency’ is more than just knowledge and skills; it is the ability to *apply* skills in a *specific* context to meet complex demands. The OECD’s DeSeCo’s project has defined three interrelated categories of key competencies: (i) ability to use tools interactively, (ii) ability to interact in heterogeneous groups, and (iii) ability to act autonomously. First, individuals not only need to have access and knowledge of tools, but they need to know how to most effectively use it. Workers need to be able to adapt tools and resources to their own purposes and needs. The second key competency concerns how individuals relate to others around them; it encompasses the ability to communicate, collaborate and engage effectively in teamwork. Lastly, the ability to act autonomously means that individuals are able to create their personal identity, and understand how they fit into the bigger picture (OECD, 2005). Meanwhile, there are usually acknowledged to be three dimensions of skill development: (i) cognitive, (ii) non-cognitive or behavioural, and (iii) technical. Buchanan (2010) notes that these are actually Mounier’s (2001) concepts of ‘three logics’ of skills, and that these three dimensions are always time and space-specific (Buchanan, J. et al., 2010). When considering skills development in this manner, it is clear why the importance of each dimension may vary by industry, age or market forces.

**Global relevance of skills development**

The prevalence of Information and Communication Technology (ICT) in our day-to-day life has exploded in the past few decades. It has led to a revolution in the way we work and live, which in turn has led to a deeper examination of the skills required for work in this globalised 21st century (Voogt, J. and Roblin, N. P., 2010). Policymakers and educators around the world are working to both define a key set of skills, as well as understand how students and youth can effectively learn these skills. This movement has been spearheaded by a variety of actors, ranging from multilateral agencies such as the World Bank, national organizations like the Partnership for 21st Century Skills (P21, based in the United States), or corporate collaborations like the ATC215 (the Assessment and Teaching of 21st Century Skills, headquartered at the University of Melbourne).

Meanwhile, the economic downturn and rising global youth unemployment mean that both high and low income countries are increasingly focused on ensuring that students are learning the relevant skills needed to join the workforce. The May 2012 ILO Youth Employment report notes that global youth unemployment rates remain elevated at 12.6% in 2011, and is expected to remain at the same level over the next four years. In other words, nearly 75 million youth are unemployed, and there are of course large regional variations. Youth unemployment rates are
above 20% in the Middle East and North Africa, which has led to political discontent and instability in recent years. Unemployment or underemployment rates are also high in the West: a Bloomberg Businessweek article (2011) estimates that in 2010, Canadian youth unemployment stood at 13.6%, while the situation was far dire in Greece, which had an estimated annual youth unemployment rate of 34.6%. Meanwhile, the racial disparity is also present: in the U.S., black teenagers (15-24 years) face an unemployment rate of 44%, while this figure dips to 23% for white teenagers. U.K. youth unemployment was at 19.1% in 2010 (up from 14.4% in 2007), and compares to an OECD average of 16.7% (O’Donnell, 2011). OECD data from December 2010 also shows that in the 34 OECD countries, about 16.7 million youth are not employed, in school or in training; most worryingly, about 10 million of these youth aren’t even looking anymore and have simply given up.

As troublingly, it has also been shown that youth bear a larger share of the unemployment burden, with youth unemployment rates at about twice those for the general population (O’Donnell, 2011). Employers may not be finding youth with the appropriate skill-set, and may not be willing to invest the time and resources needed to train new graduates.

Figure 1: Youth bear a larger share of the unemployment burden


It is clear the skills development occupies a growing space in the global education agenda, and in fact, the 2012 Education for All Global Monitoring Report (due to be released on 16 October, 2012) will focus specifically on skills development, and the impact of these programs in improving job opportunities for today’s youth.

**COMMON REGIONAL THEMES**

A literature review was conducted to examine youth unemployment and skill development needs in a mix of regions outside of Africa and Asia. Nearly across the spectrum, youth unemployment tends to be higher than the unemployment rate for adults, and it is clear that young people are bearing a larger burden of the economic contraction. The reasons cited for this include that youth may not be graduating with the right skill-set from secondary or tertiary institutions; employers are both hard pressed to find youth with the right skill-set and are reluctant to invest in on-the-job training programs.
So what are the skill-sets that employers are looking for? Research and surveys show that employers are increasingly looking for non-cognitive skills in addition to technical and cognitive skills. Corporations cite behavioral skills such as teamwork, communication, and problem-solving as key for working in today’s economy; it is precisely these skills that they feel graduates are not taught in the school setting. In many parts of Latin America and the Caribbean region (LAC) and Eastern Europe and Central Asia (ECA), while there has been increased access to school and higher enrollment rates, the focus must now be on ensuring quality of learning and curriculum relevancy. Indeed, the need for curriculum reform is also seen in high income countries in the OECD, and in the United States, the Partnership for 21st Century Skills (P21) is playing a growing role in this field.

Employers in certain regions (such as the ECA) may also be looking for employees with technical skills, and yet, students are reluctant to enroll in vocational programs and training institutes at the secondary level. There is a need to not only reform the vocational stream, but to ensure that its ‘image’ is improved. Policy reforms to increase the flexibility between the academic and vocational streams would also go a long way to increasing take-up of the vocational track.

It should also be remembered that the challenge in some regions may be more than just structural. For example, in the MENA region, while a skills mismatch may indeed exist, it may be equally important to ensure that policy reforms support private enterprise and entrepreneurship.

OVERVIEW OF REGIONAL FINDINGS

The section below provides an overview of findings from Latin America and the Caribbean (LAC), Eastern Europe and Central Asia, North America and Western Europe, and the Middle East and North Africa.

Latin America and the Caribbean

Youth unemployment rates in Latin America and the Caribbean (LAC) jumped during the economic crisis to 15.6% in 2009 (up from 13.7% in 2008), and then fell slightly to 14.3% in 2011 (ILO, May 2012). Despite this decline however, the youth unemployment rate is expected to remain somewhat elevated in the medium term.

Figure 2: ILO projections for youth unemployment rate (%)
Although access to education (measured by years of schooling) has increased across the region, it is clear that a gap exists between the skills that employers are seeking and the skills that students are obtaining in schools. Most recent data from the IADB puts the youth unemployment in the region at 13%, which is nearly three times that of adults and yet, a 2011 Manpower survey shows nearly half of all companies surveyed report difficulty in finding qualified candidates (IDB, March 2012). A recent World Bank report also points to evidence showing that earning premium for secondary education has been declining through the 1990s and 2000s. The World Bank report hypothesizes that this could be due to three factors: (i) an increased supply of higher qualified workers, (ii) a declining quality of education and a lack of on-the-job training, and (iii) diminishing relevance of skills taught within the school system (Aedo, C. and Walker, I. 2012.) Evidence shows that there may a slowdown in the demand for skills that workers currently have, and therefore supports the third hypothesis, which indicates that the lack of supply of workers with appropriate skill-sets may be constraining the region’s growth. Despite the fact that access to education in the region has risen in the past decades, the World Bank recommends that the focus should now be on improving the quality of learning, and ensuring, “the pertinence of education curricula for the needs of the labor market.” (Aedo, C. and Walker, I. 2012). Research shows that countries in the region do not have the necessary ‘new economy’ skills such as analytical and non-cognitive skills, and they must now work to develop curricula and training programs that emphasize the skills that 21st century employers are now demanding.

There are a growing number of private-public initiatives at the local level around the region that are working to improve the quality of education. The private sector is an important stakeholder in these discussions, as it is most cognizant of its own needs, and understands the importance of cultivating 21st century skills like critical thinking, problem solving and collaboration (EIU, 2008). Earlier in 2012, a new partnership called New Employment Opportunities (NEO) was launched by the Multilateral Investment Fund, the International Youth Foundation, and 5 leading employers in the region (Walmart, Caterpillar, Microsoft, CEMEX and Acros Dorados/McDonald’s). NEO aims to expand job training and work-placement opportunities, and targets 1 million youth over the next decade. The partnership hopes to develop large scale training programs that focus on both technical and life skills, and will attempt to bridge the skills-gap in the region (IDB, April 2012).

**Eastern Europe and Central Asia**

Youth unemployment in Central and South-Eastern Europe increased on the back of the economic crisis to 20.5% in 2009 (versus 17.0% in 2008), but has since fallen slightly to 17.6% in 2011 (ILO, May 2012). The ILO attributes this increase to heightened poverty in the region.
Recent research shows that while enrollment rates in the Eastern Europe and Central Asia region have increased, employers are still hard-pressed to fill openings at firms. Indeed, the Business Environment and Enterprise Performance Survey shows that employers believe workers’ education and skills are one of the top constraints to growth (Sondergaard, L. and Murthi, M., 2012). The skills gap is a growing problem in the region, and the weak quality and relevance of education may be a key source of youth unemployment.

There are two factors that compound the challenge, and that must be addressed urgently. First, although vocational schools rapidly decreased in the post-Communist transition period, evidence shows that some firms still want these technical skills. Feedback from employers reveals that graduates from both secondary and tertiary education have neither the necessary technical skills nor the necessary non-cognitive skill-set. In the current education system, critical thinking and problem solving may not be emphasized enough, and yet these are exactly the skills that employers need. Second, a lack of data and the legacy of central planning make it difficult to implement comprehensive changes and reforms at the secondary education level. Schools tend to lack the autonomy needed to improve the quality of education within their systems, as well as respond and adapt adequately to changing conditions (Sondergaard, L. and Murthi, M., 2012).

Research also shows that while over-education is a problem in the developed economies of Europe, skill shortages at the sector level are the main challenge in transition economies in Eastern Europe. The growth of the services sector has increased the need for skills such as communication and ICT skills. In Eastern Europe, the drastic structural change in recent decades may account for much of the skills gap, and older workers may be increasingly more affected (Bartlett, 2011). This indicates that not only should the focus be on reforming the curricula to ensure its relevance, but ‘reskilling’ programs should also be pursued.

It is clear that the region’s history plays a part in some of the skills challenges faced today. Effectively countering these challenges will require a mix of curriculum reform and adapting some of the institutional structures currently in place; above all though, it may require strong political will and the ability to enact decisive policy reform at the national level.
OECD and North America

Youth unemployment has risen significantly in the OECD area since the recession of 2008. OECD data from 2010 shows that in the third quarter of 2010, youth unemployment (with youth defined as those ages between 15 – 24 years) rates in the U.S. stood at 18.2%, and that in Europe was at 21.1%, close to a 25 year record high level (OECD, 2010).

Figure 4: Youth unemployment at elevated rates in the OECD

![Bar chart showing youth unemployment rates in OECD countries, Europe, the United States, and Japan.](source: OECD, 2010)

Source: OECD, 2010.

The OECD’s 2010 projections estimated that OECD youth unemployment rates would remain high at about 18% in 2011 and 17% in 2012. As expected however, there are regional differences. While Japan’s rate is expected to decline to reach 7.4% in 2012, in the U.S., youth unemployment is expected to be higher than 18% in 2011, and then fall to about 15.7% in 2012. In Europe, youth unemployment rates are expected to remain at about the 20% mark in 2011 and 2012. As mentioned earlier, youth bear a disproportionate burden of the average unemployment rate, and most worrying are those youth that have simply given up looking for work. In 2010, this figure (officially known as those Neither in Education nor in Employment or Training) was about 11% in the OECD region; again, when broken up by region, we see that this figure was about 12.1% in the U.S. and only 7.4% in Japan. Youth that are particularly at a disadvantage in the job market are those that have been “left behind” (for instance, they may not have a diploma or may come from a marginalized background), or those that are “poorly integrated” into the workforce (for instance, they may not have the adequate or relevant skills needed for the job, even if they do have a diploma) (OECD, 2010).

Given this stark scenario, there is a growing awareness in OECD countries about the need to ensure that students are learning relevant, 21st century skills to enable them to obtain jobs. In
the U.S., the Partnership for 21st Century Skills (P21) is a national organization that supports 21st century readiness and provides tools and resources to the U.S. education system. The organization is cross-sectoral, and consists of 39 members that include private businesses and educational organizations. The focus is on supporting the development of the 3Rs (Reading, Writing and Arithmetic) and 4Cs (Critical thinking and problem solving, Communication, Collaboration, and Creativity and innovation) in every school. P21 has developed a holistic framework that identifies key skills that students need for success in the 21st century.

**Figure 5: P21 Framework for Learning**

![P21 Framework for Learning](image)

Source: Partnership for 21st Century Skills

The Framework incorporates core subjects, the 4Cs, IT skills and life and career skills; indeed, this framework attempts to capture cognitive, non-cognitive and life skills. ‘21st Century Themes’ include health literacy, entrepreneurial literacy, and global awareness, while ‘Life and Career Skills’ include behavioural, or ‘soft skills’ such as flexibility, leadership and cross-cultural skills. P21 also provides the resources for effectively supporting this framework, and emphasizes that standards, assessments, curriculum, professional development and learning environments are equally key for pieces for its success.

P21’s Framework attempts to close the gap between what students learn in school and the skills that employers are increasingly demanding in the workplace. This Framework can certainly be adapted by other regions, and the basic concepts captured – the interconnection between cognitive and non-cognitive skills – are valuable for both high and low income countries.
Middle East and North Africa

Youth unemployment rates in the Middle East and North Africa are well above the global averages. In 2011, youth unemployment stood at 26.5% in the Middle East, and 27.9% in North Africa; in the latter region, youth unemployment increased about 5% between 2010 and 2011 following the Arab Spring (ILO, May 2012).

Figure 6: ILO projections for youth unemployment rates (%)

![Graph showing youth unemployment rates in the Middle East and North Africa](image)

Source: ILO Youth Employment Report, May 2012

In this region, youth also make up a very large share of the population, which further adds to tensions and unrest. For instance, 15-29 year olds comprise about 34% of the population in Iran, 29% in Egypt and 30% in Jordan (Businessweek, 2011). Indeed, 60% of the population is under 25 years old across the MENA region (UNDP, 2009). Added to this, the ratio of youth-to-adult unemployment rates are also particularly high in the region, standing at about 4% in the Middle East and 3.9% in North Africa (ILO, 2012). Furthermore, there is also a gender component to unemployment in the region: unemployment rates for women are much higher than those for men, and are one of the highest in the world (UNDP, 2009).

The UNDP’s 2009 Human Development Report outlines three factors for the region’s above average unemployment trend. First, high unemployment rates are due to the diminishing size of the previously large public sector, which employs more than 30% of the workforce. Second, the
private sector has so far been unable to pick up the slack, and there is an urgent need to both support its expansion and develop entrepreneurial talent (Gardner, 2003). Lastly, although youth in the region are relatively well educated, the skills taught at the secondary and post-secondary level are not the skills that employers want (Businessweek, 2011). Employers are demanding technical and vocational skills, and yet there is an inadequate supply of youth with these capabilities (UNDP, 2009).

Initiatives are underway to help correct the structural unemployment in the region, but these must go hand in hand with policy measures to improve the macro climate and foster an environment more conducive to entrepreneurship and private sector growth. There is a growing recognition in the business community that companies must play a part in correcting the skills mismatch in the region (McKinsey on Society). Moataz Al Alfi, Chairman of the Americana group, (one of the largest employers in the Middle East, with employees exceeding 65,000), believes that a public private solution is needed. Americana has developed training modules and on-the-job training programs in collaboration with the Ministry of Higher Education in Egypt to enable youth to develop practical, on the job skills before graduation from secondary school or university (McKinsey on Society). Other initiatives that are under way in the region include youth entrepreneurship programs in Egypt led by the Mastercard Foundation, and an e-learning curriculum developed by Microsoft and the International Youth Foundation.

**CONCLUSION**

It is clear that many different regions are grappling with youth unemployment and the need for skills development. The importance of ensuring the students are learning relevant skills for working in the 21st century is not simply a challenge facing low income countries, but is equally pertinent to policymakers in high income countries.

There are a number of different factors that affect a country’s ability to implement a holistic, 21st century skills framework. First, there must be consensus from a variety of stakeholders as to what exactly are the skills that may be missing from the existing curricula. For example, are life skills not emphasized, or are problem-solving skills not taught in a practical manner? Next, the question becomes how to effectively implement the teaching of 21st century skills. Should on-the-job training schemes be developed, and to what extent can new, innovative technology be integrated to the classroom? How can teachers be supported to better teach these 21st century skills? In countries with distinct academic and vocational tracks, how can we ensure that students in both tracks are learning relevant skills, and there remains flexibility to switch between tracks? The experience of the ECA region also shows the importance of ensuring that outcomes can be measured, and that data is collected to track student learning. It is vital to measure the quality and relevance of what students are learning, and understand how this compares to both other countries in the region as well as on a global level. Ultimately, measures that expand the relevance and breadth of what is taught at schools can play an instrumental role in not only reducing youth unemployment, but enabling today’s youth to transition more easily between job markets in different industries and regions.


