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Skills for Competitiveness, Jobs, and Employability in Developing Asia-Pacific

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Skills for Competitiveness, Jobs, and Employability in Developing Asia-Pacific

Abstract

[Excerpt] The ADB International Skills Development Forum, held at ADB headquarters in December 2012, discussed key policy priorities and actions for skills development. It built on the discussions and outcomes of the first ADB International Skills Forum in December 2011. Government representatives, technical and vocational education and training (TVET) institutional heads, researchers, international organizations, policy research think tanks, and private sector representatives discussed skills development for employability and sustainable livelihoods. Of special importance to the forum discussions were the presentations of major studies from five organizations on skills and jobs that were released in 2012. This brief has been prepared by drawing on presentations and discussions at the 2012 forum and other related materials. Links to forum resources are provided on the last page of this brief.

Keywords

skills development, employability, competitiveness, Asia, Pacific

Comments

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Key Points

- Talent and skills are crucial to competitiveness of industries.
- Skills development serving clusters of different but interrelated industries can increase efficiency and sectoral competitiveness.
- Skills credentials developed and endorsed by industry are crucial for successful transition from school to work.
- Educational institutions should engage industries to jointly develop skills assessment tools which help improve jobreadiness of students.
- TVET needs to cover broader transferable skills in addition to technical skills. Formal education also needs to foster transferable skills. A longer stay in formal school can help students to acquire general and transferable skills.
- The rise of technology in manufacturing requires "gray collar" or "knowledge workers"' for higher value-added products that enable economies to avoid the middle-income trap.
- Advanced skills are indispensable for a high-productivity economy while medium-skills workers are key for growth of laborintensive sectors.
- Developing skills for the services sector is important for Asia to improve competitiveness in knowledge-intensive services such as financial intermediation, computer and information services, legal and technical support, and business services.

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Skills for Competitiveness, Jobs, and Employability in Developing Asia-Pacific

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Introduction

The ADB International Skills Development Forum, held at ADB headquarters in December 2012, discussed key policy priorities and actions for skills development. It built on the discussions and outcomes of the first ADB International Skills Forum in December 2011. Government representatives, technical and vocational education and training (TVET) institutional heads, researchers, international organizations, policy research think tanks, and private sector representatives discussed skills development for employability and sustainable livelihoods. Of special importance to the forum discussions were the presentations of major studies from five organizations on skills and jobs that were released in 2012. This brief has been prepared by drawing on presentations and discussions at the 2012 forum and other related materials. Links to forum resources are provided on the last page of this brief.

New Sources of Growth and Competitive Advantage

Emerging markets in Asia continue their onward progress as drivers of growth in the region. Moving beyond erstwhile advantages as locations of cheap labor and low-cost manufacturing, emerging economies are now perceived as promising markets in their own right. It is estimated that 70% of global growth over the next few years will come from emerging markets (Ernst & Young 2013). The International Monetary Fund (IMF) forecasts that the total gross domestic product (GDP) of emerging markets could overtake that of the developed economies as early as 2014 (IMF 2010).

The continued advancement of emerging markets will influence the future global competitive landscape in a number of ways. First, domestic markets in emerging economies will assume far greater significance. As a result of rapid growth, developing Asia's middle-class population more than tripled from 565 million to 1.9 billion from 1990

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to 2008 (ADB 2010). Second, the steady rise of intraregional trade is likely to further grow in prominence (Ernst & Young 2013, ADB 2009) with higher anticipated flows of people, goods, services, and technologies. Third, corporations in emerging economies are gaining ground in global markets while also developing new products and services tailored to the needs of developing country customers.

TVET is now occupying a more influential place in development priorities. Global trends such as the rising prominence of services, a greater reliance on domestic markets compared with external markets, and the crossborder movement of workers accentuate the pressure on skills development systems. However, growth in Asia has been accompanied by worsening inequalities. Developing countries need to assure greater workforce participation for the poor and improved employment for informal sector workers. Developing countries must also go beyond the "business as usual" approaches to adopt innovative, forward-looking strategies to scale up skills development for inclusive economic growth.

Improved Skills will Increase Developing Asia's Competitiveness

Competitiveness is no longer associated only with exchange rates, industrial policies, labor costs, and natural resource endowments. Today, it also includes workforce skills, management of how skills are used, and government's ability to formulate and implement education, training, and skills-based policies. Developing Asia therefore needs a robust and marketdriven skills development system that contributes to competitiveness. In addition to production, there is need for investments in research and development (R&D), building brands, and marketing. There is inexorable pressure for middle-income countries to advance as knowledge economies to retain and expand their shares in global value chains. These call for investments in higherorder skills and capabilities.

In the past, industries had vertical supply chains, but now manufacturing activities cut across different industries. An example is the dynamic export economy of the southern People's Republic of China (PRC), built around activities that serve a wide range of industries. Companies located in close proximity to one another have formed synergistic networks and clusters of activity that yield significant economies of both scale and scope for export competitiveness (Navarro 2007). In the PRC, entire cities specialize in particular industries or industry segments. Skills development in such settings can help to serve a number of different subsectors.

Skills Strategy and Moving Beyond Middle-Income Levels

A well-planned skills strategy helps economies and regions to advance economic development. This requires effective mapping of industries in the economy, planning different corporate activities that go into those industries, and undertaking detailed assessments of bottlenecks and skills required to support the major industry groups. Countries

Box 1 Characteristics of a Competitive Skills Development System

How Systems Operate

- Align industrial, development, and skills policies.
- Develop skills development clusters that support different but interlinked industries.
- Provide multifaceted opportunities (formal education, vocational, in-company training).
- Identify and absorb "relevant best practice" from abroad but adapt to local contexts.
- Expand skills linked with needs of the economy and society.

How People Benefit

- A meritocracy system rewards skilled workers which incentivizes acquisition of skills.
- Trainers are able to keep up with new knowledge on an ongoing basis.
- Local community needs are integrated into skills training programs.
- Workers gain the right portfolio of skills within the workforce.
- Workers have access to multiple pathways to acquire and update skills and qualifications.
- Workers have opportunities for lifelong learning.

Source: Enright, M. 2012. The Role of Skills Development in Competitiveness in Asia. Keynote address delivered at Skills for Inclusive and Sustainable Growth in Developing Asia-Pacific: An International Forum, December 2012. Manila.

that have been successful in forecasting local and global economic trends have also managed to build the best skills development systems. For example, the Republic of Korea links its comprehensive economic plan with macroeconomic and industry forecasts and manpower planning. Singapore has an established vocational and technical education model that is linked to the priorities established by the economic development board. Both countries also established good industrial and skills forecasting systems.

Asia has had a successful run as the "factory of the world." In recent times, there is increasing assimilation of information technologies in the manufacturing environment; for example, the manufacturing giant, Foxconn Technology Group intends to deploy 1 million robots in its factories (Curtin 2011). Traditionally, white-collar occupations belonged to managers and engineers, typically with 4-year university degrees. Blue-collar occupations consisted of factory floor workers who mostly had TVET certificates or diplomas. With the assimilation of new technologies, a third group-gray-collar or knowledge workers-has emerged in the contemporary manufacturing environment. These tech workers program, operate, troubleshoot, and maintain the increasing number of computer- and network-driven manufacturing devices. A new cadre of qualifications that match the higher-order skills and training expected from such workers is an important consideration.

Moving beyond the "factory" model to higher value added products and services is required to transcend from middle income to high income levels. Knowledgeintensive industries require upgraded skills to strengthen R&D, branding, development of niche products, and marketing. Responsiveness to change is crucial. Singapore's vocational and technical education system is subjected to regular reviews and restructuring so that it responds to ever-changing global contexts, not just to survive but to achieve even greater strength through advance preparation. To avoid the middle-income trap,¹ countries in Asia need to progress to higher added value with high-tech products accounting for a large share of exports. Only a handful of Asian economies have been able to go on to high income levels: Hong Kong, China; the Republic of Korea; Singapore; and Taipei, China. A highly skilled workforce holds the key to the region's

Moving beyond the "factory" model to higher value-added products and services is required to transcend from middle income to high income levels

quest to produce and export more sophisticated high-tech goods (ADB 2013).

Ramping Up Skills Development for the Services Sector

Seven of the top ten locations for outsourcing of global services for delivering information technology business process outsourcing (IT-BPO) and voice services in 2011 were in Asia (AT Kearney Global Services Location Index 2011). While services are growing in size, they suffer from low labor productivity. For most economies in the region, labor productivity is less than 20% of that in advanced economies (ADB 2012). Enabling the shift from traditional services to knowledge-intensive services is essential to closing the productivity gap, in addition to modernizing traditional services. The shift, in turn, requires highly skilled workers, who are currently in short supply in Asia. There is need to develop curriculum, courses, and certification for a whole host of servicerelated occupations as well as investment in broader, transferable skills² that are required for higher-level occupations and are demanded by employers.

2012: A Year of Global Reports on Skills and Jobs with Several Common Messages

Several global reports on skills and jobs were launched in 2012. Table 1 summarizes their respective analyses of various issues and recommendations. A number of common perspectives emerge from these studies, such as the importance of foundation and transferable skills, job-relevant training, and creating jobs for both low- and high-skilled workers.

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¹ The middle-income trap is a development stage that refers to countries unable to compete with low-income, low-wage economies in manufactured exports and with advanced economies in high-skill innovations, such countries cannot make a timely transition from resourcedriven growth, within low cost labor and capital, to productivity-driven growth (ADB 2011).

² The 2012 EFA Global Monitoring Report, with the theme Youth and Skills: Putting Education to Work, defines transferable skills as "the ability to solve problems, communicate ideas and information effectively, be creative, show leadership and conscientiousness, and demonstrate entrepreneurial capabilities" these skills are required for young people to be able to adapt to different and changing work and life environments (UNESCO 2012).



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Table 1 Global Reports and Some Perspectives on Skills Development

Global Report	What skills are needed for productive employment?	How to create and develop skills?	How to activate and use skills?	General Recommendations
OECD Better Skills, Better Jobs, Better Lives (2012a) and Skills Development Pathways in Asia (2012b)	Craft skills, cognitive, interpersonal skills, and higher-level skills. Skills are generally divided into "hard" skills such as technical skills and using modern equipment, and "soft" skills such as teamwork, communication, and negotiation.	Involve social partners, employers, and trade unions in education and training programs to ensure investments in training are reflected in better-quality jobs and higher salaries. Incorporate hands-on workplace training to motivate disengaged youth and facilitate transition from education to work.	Activate inactive and underrepresented groups in the labor force, dismantle nonfinancial barriers such as inflexible working hours; retain skilled people in the labor market longer (e.g., through wage subsidies to older workers). Create financial incentives such as better pay for higher skills.	Enhance evidence base to design more effective policies, and implement state-of-the-art national, regional, and local skills strategies. Countries should build "skills intelligence" to situate their strengths and weaknesses across dimensions of skills strategies and evaluate policy alternatives for skills development.
UNESCO EFA Global Monitoring Report: Youth and Skills: Putting Education to Work (2012)	Foundation skills—literacy and numeracy, which are prerequisites for continuing in education and training, and also for acquiring transferable and technical and vocational skills. Transferable skills such as problem solving, communication and leadership. Technical and vocational skills—specific practical skills that prepare one for a particular job.	Collaborate with businesses and trade unions to ensure that skills training efforts are relevant to employment. Promote longer stay in school and formal education that can help in acquiring transferable skills. Ensure that TVET offers flexible routes. Provide career guidance and access to training on entrepreneurship and financial management. Use basic technology, such as radio, to disseminate information and provide skills training for people in remote rural areas. Enhance ICT training prospects for urban youth.	Skills training to be supplemented with job placement or career advice services. Young people and women should get access to funds and other support to start up businesses. There is need to understand the issues of the informal sector with good data so that informal sector associations and cooperatives can provide access to training and jobs to youth, particularly urban youth.	Provide second-chance education for those with no or low foundation skills. Increase access to secondary education and its relevance to work. Link skills training with social protection for the poorest. Prioritize the training needs of disadvantaged women. Harness the potential of technology to enhance opportunity of young people. Improve planning by strengthening data collection and coordination of skills programs.
World Bank World Development Report: Jobs (2013)	A core set of basic skills, both cognitive and social, necessary for productive employment and earnings. Vocational and life skills. Modern and higher-level skills required in skills- intensive services, such as financial intermediation, computer and information services, legal and technical support, and other business services.	Schooling is fundamental for the further development of cognitive and social skills. Social skills remain malleable through adolescence and the early adult years. Young adults can continue into more specialized skills building, including at tertiary levels. Generic skills form the basis to learn and adapt to different tasks and problem solving. Such general skills are especially important in more dynamic economic environments.	Since it is the private sector that creates jobs, the government needs to ensure that conditions are in place for strong private-sector-led growth and mitigate constraints for the creation of good jobs for development. Establish policies for active aging, ensuring that the most productive members of society, including the highly skilled elderly, can work.	Active labor market programs, such as training, employment services, wage subsidies, and public works to facilitate job matching, mitigate the negative impacts of economic downturns and fill the gap when employers or workers underinvest in training. Jobs policies for youth at risk can incorporate counseling and training in conflict resolution. Public works programs can facilitate community participation. Policies need to focus not only on the number of jobs, but on expanding job opportunities for excluded groups.

Global Report	What skills are needed for productive employment?	How to create and develop skills?	How to activate and use skills?	General Recommendations
McKinsey Global Institute The World at Work: Jobs, Pay and Skills for 3.5 Billion People (2012)	Advanced skills needed to drive a high-productivity economy; medium-skills workers needed to fuel growth of labor-intensive sectors. Service sector (high) skills, particularly in health care and business services.	Advanced economies could avoid the shortage of high- skilled workers by doubling the growth rate in tertiary education attainment (while also increasing the number of science, engineering, and other technical graduates), retraining mid-career workers, and allowing more highly skilled workers to immigrate. In developing nations, capacity of high schools and vocational schools should grow at 2–3 times their current rate. Combine work and training to increase connections with the world of work.	Narrow the skills gap by raising labor force participation rate of college-educated women and keeping older high- skilled workers in the labor force. Developing economies need to double or triple labor-intensive exports and investments in infrastructure and housing construction to employ low-skilled workers. Create more jobs for low-skilled workers.	Improve the capacity to provide job-relevant education and training. In both developing and advanced economies; new approaches to job creation for low- and middle-skilled workers are required. In advanced economies, opportunities to create new jobs for low- and middle-skilled workers are in service sectors like the health industry and through "marketization." Developing economies can create demand for less-educated workers by encouraging the expansion of labor-intensive sectors.
ILO World of Work Report 2012: Better Jobs for a Better Economy (2012) and A Skilled Workforce for Strong, Sustainable and Balanced Growth: A G20 Training Strategy (2011)	Skills that enhance the capacity to take advantage of job opportunities and improve personal bargaining power in the labor market.	Ensure the broad availability of quality education; match supply to current and future demand for skills; help workers and enterprises adjust to change; expand access of quality education and training to promote social inclusiveness. Support school-to-work transition and ensure youth remain attached to the labor market. Work with employers and workers organizations from policy making to training delivery.	Use skills as a key driver for value chain upgrading and business diversification. Close the gaps: between education, vocational training, and the world of work; between training providers and employers at sector and local levels; between skills development and industry, trade, technology, and environmental policies.	There is a need to recognize the importance of placing jobs at the top of the policy agenda and ensuring coherence between macroeconomic, employment, and social policies. This requires a significant change in domestic and global governance, which will be rewarded with better job prospects and a more efficient economy. Realize the potential benefits of training and skills development by triggering job-rich growth.

The Role of the Private Sector in Developing Skills Relevant for Employment

The growing importance of the private sector in contributing to skills development that is suitable for employment was highlighted in many different ways at the forum. The following two examples illustrate how the private sector can play an effective role in market-driven skills development.

Business process outsourcing in the Philippines focuses on talent transformation

The IT-BPO industry in the Philippines grew from a virtually zero base in 2000 to revenues of about \$13 billion

in 2012, with potential revenues of \$25 billion in 2016 on an accelerated scenario of development of the industry. This would translate to a potential of 1.3 million direct and 3.2 million indirect employment. However, the greatest challenge is the talent pool: demand far exceeds supply. Industry reports suggest that 90%–95% of job applicants do not make it due to inadequate education or training suitable for the IT-BPO and global in-house center (GIC) industry (Ayala 2012).

The industry body IT and Business Process Association of the Philippines (IBPAP) has developed an industryacademia-government partnership model to address demand for talent. IBPAP identified required skills and competencies and devised an industry-based assessment



using the Global Competitiveness Assessment Tool (GCAT), tailored to the specific needs of the IT-BPO industry. GCAT-qualified candidates are hired by IT-BPO companies while nonqualifiers get further chances through IBPAP's bridging programs.

IBPAP is partnering with colleges and universities to develop requisite talent. The Philippines Commission on Higher Education has approved the 21-unit service management program course jointly developed by industry and academia for the IT-BPO sector, which includes schools and 46 industry practitioners. BPAP will also establish partnerships with the Philippines Open University and the Asian Institute of Management. Further tools like the Basic English Test and the Advanced English Proficiency Pre-Employment Training have been developed. Eleven schools identified by the Department of Science and Technology's Science Education Institute, 13 state colleges and higher education institutions are likely to run both of these tests in 2013 for jobs in the BPO sector.

Standards for skilled seafarers in the global maritime industry

The maritime industry is important because over 90% of global trade by volume is transported by sea. By 2016, the entry of 5,800 new vessels is expected, which translates to 58,000 new jobs, of which the Philippines could contribute 25% of crew deployed globally. Similar to the BPO industry, the maritime industry requires skilled workers—seafarers with relevant skills and competencies, including green skills given the increased commercial interest in building and operating cleaner, more efficient fleets. The role of education and training is crucial given the growing sophistication of vessels that includes new design, power plants and on-board satellite driven navigation systems, and computer-based cargo handling equipment. The industry is also calling for establishing an independent quality audit system for education, training, assessment, and certification of maritime professionals in line with international standards. Through combined efforts of the government and industry, qualified and competent maritime professionals can pursue promising maritime careers. This will reinforce existing programs of training of seafarers at different occupational levels. The industry seeks to develop an economic intelligence program that will profile supply and demand in the shipping industry. The maritime industry is advocating public-private partnerships to create a maritime training cluster that can promote development of skills required in ship repair, ship building, or financial support activities in an integrated fashion (Borromeo 2012). Focusing on skills in an economically strategic sector such as the maritime industry will enhance better skills matching while supporting economic growth.

The Way Forward

The 2012 forum brought together participants from nearly 30 countries. Representatives from developing member countries in which ADB has ongoing or planned projects in TVET participated in the forum. The forum was held in partnership with the Government of the Republic of Korea (Ministry of Finance and The Export-Import Bank of Korea). A pre-forum meeting was held in cooperation with OECD to explore specific issues countries in Asia face.

Table 2 provides a selection of proposed policies and strategies to strengthen the link between skills, competitiveness, and jobs. ADB intends to continue discussions on policies and strategies particularly on exploring new and effective approaches to skills development for employment. ADB plans to continue the skills forum as an annual flagship event.

Table 2Skills for Competitiveness, Jobs, and Employability in Developing Asia-Pacific
An Evolving Framework of Policies and Practices

Policies and Strategies	Rationale	Possible Benefits	
Establish skills development clusters close to industrial corridors in collaboration with employers.	The skills needs of a group of industry sectors need to be served effectively for economy-wide competitiveness.	Skills development that can serve multiple but interrelated industries means that the workforce can move across different industries based on demand.	
Skills development across the value chain from simple to sophisticated skills levels.	Competitiveness in the main industry may rely upon the competitiveness of the supply chain industries; skills development upstream and downstream are valuable.	Workforce with skills at different levels can be productively deployed. There is more effective development and utilization of the skills at different levels.	

continued on next page

Table 2 continued

Policies and Strategies	Rationale	Possible Benefits
Develop a cadre of "tech workers," along with suitable credentials, to meet the skills needs associated with higher-value and precision manufacturing standards, and qualify for global value chains.	There is a growing trend of assimilating information technologies in the manufacturing environment, with increasing requirements for precision standards.	Economies can move up the value chain with more sophisticated manufacturing capabilities, which are needed to avoid the middle-income trap.
Blend the development of higher-order manufacturing skills with higher-order services sector skills.	Economies could develop full-sector competitive strengths in manufacturing and downstream services sectors. Higher- order manufacturing capabilities open the way to develop higher-order services sector capacities.	Along with manufacturing, economies can simultaneously build capabilities in high-value knowledge-intensive skills for the services sector, such as branding, advertising, and other knowledge- oriented services.
Develop skills that facilitate linking suppliers and customers, and communicating across cultures.	In an increasingly globalized world, effective communications are crucial for the competitiveness of companies.	Economies can create borderless workforces capable of supporting global value chains; broader and transferable skills are also developed in addition to technical skills.
Invest in increasing skills and knowledge intensity in small and medium firms.	Informal labor markets dominate the Asian region; small and medium firms do not have adequate resources to invest in building and upgrading skills.	Small and medium firms are vital to increasing creativity and innovation in the economy; therefore, skills development for the small and medium enterprises sector will have good spin-offs.
Create a skills development system that provides multifaceted options for skills development—formal, informal, vocational, and on-the-job training—for both initial skills and skills upgrading.	A flexible and open system for skills development that includes "second chance" education and training and pathways for upskilling are needed for the productivity of the workforce.	Adequate opportunities for entry-level skills development, skills upgrading, workplace-based training, and modular training allow the regular updating of skills needed for changing economies.
Develop skills credentials, qualifications, and assessment systems in partnership with industry.	There is evidence of growing problems of skills mismatch even though investment in education and training has been increasing.	Industry and employer-validated credentials, together with assessment systems, reduces the gap in the transition from training to the work place.

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Links to Forum paper and related resources:

Skills for Inclusive and Sustainable Growth in Developing Asia-Pacific: An International Forum 2012. http://www.adb.org/sites/default/files/skills-forum-2012 -agenda.pdf

Skills Development for Inclusive and Sustainable Growth in Developing Asia-Pacific

http://www.adb.org/publications/skills-development -inclusive-and-sustainable-growth-developing-asia -pacific?ref=sectors/education/publications

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Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

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