Stepping up skills for more jobs and higher productivity

The global imperative for more jobs, and more productive jobs, is a major challenge for development. Global unemployment, estimated by the ILO at 212 million in 2009, is at an all-time high. Growth remains sluggish, with output per worker either stagnant or declining in most regions. Young people, particularly vulnerable, have the hardest time finding new jobs, with unemployment rates three times higher than those of adults—and four times higher in South-East Asia and the Middle East and North Africa.

Skills are at the core of improving individuals’ employment outcomes and increasing countries’ productivity and growth. This is particularly relevant as today’s developing and emerging countries seek higher sustained growth rates. Most of them face serious demographic challenges—from a “youth bulge” of new job-seekers in Africa and the Middle East, to a demographic transition of shrinking labor forces in Eastern Europe and Central and East Asia.

Making the most effective use of workers—using all of them, and using them to their greatest productivity—is vital. And while insufficient demand for workers remains a problem in many parts of the developing world, persistently high unemployment rates are partly a function of skills mismatches, the result of workers inadequately equipped for the demands of employers. This is sometimes because of insufficient education, but also because education and training did not provide the skills that employers want. Low returns to work effort—from some forms of self-employment as well as wage work—may be due to inadequate demand for high-productivity work or insufficient complementary factors such as technology and infrastructure. But low skill levels associated with low-income work are also responsible.

As countries become richer and move up the value-added chain, the skills demanded will change. Bottlenecks will become more evident, constraining growth. Increasingly, labor productivity will depend on high-level cognitive skills (such as analysis, problem solving, and communication) and behavioral skills (such as discipline and work effort). These higher productivity skills are what employers now demand. Evidence from the United States shows that, as economies develop, the demand for interactive and analytical skills in the workplace increases steeply and continually, while that for manual and routine cognitive skills falls. There is also evidence that as middle-income countries become richer, more employers consider skills an important constraint on business development.

In this context, it is indispensable to have comprehensive and adaptive systems to build skills.

The STEP framework

A simple conceptual framework—Skills Toward Employment and Productivity (STEP)—can help policymakers, analysts, and researchers think through the design of systems to impart skills that enhance productivity and growth (figure 1). Pulling together what is known about the elements of a successful skills development strategy, it can guide the preparation of diagnostic work on skills, and subsequently the design of policies across sectors to create productive employment and promote economic growth. The framework focuses on five interlinked steps:

Step 1. Getting children off to the right start—by developing the technical, cognitive, and behavioral skills conducive to high productivity and flexibility in the work environment through early child development (ECD), emphasizing nutrition, stimulation, and basic cognitive skills. Research shows that the handicaps built early in life are difficult if not impossible to remedy later in life and that effective ECD programs can have a very high payoff.

Step 2. Ensuring that all students learn—by building stronger systems with clear learning standards, good teachers, adequate resources, and a proper regulatory
Figure 1. The STEP framework shows that skills needed for productivity and economic growth require a sequenced combination of education, training, and labor market activities.

<table>
<thead>
<tr>
<th>Step</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Getting children off to the right start</td>
</tr>
<tr>
<td>2</td>
<td>Ensuring that all students learn</td>
</tr>
<tr>
<td>3</td>
<td>Building job-relevant skills</td>
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<tr>
<td>4</td>
<td>Encouraging entrepreneurship and innovation</td>
</tr>
<tr>
<td>5</td>
<td>Facilitating labor mobility and job matching</td>
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</tbody>
</table>

Environment. Lessons from research and ground experience indicate that key decisions about education systems involve how much autonomy to allow and to whom, accountability from whom and for what, and how to assess performance and results.

**Step 3. Building job-relevant skills that employers demand**—by developing the right incentive framework for both pre-employment and on-the-job training programs and institutions (including higher education). There is accumulating experience showing how public and private efforts can be combined to achieve more relevant and responsive training systems.

**Step 4. Encouraging entrepreneurship and innovation**—by creating an environment that encourages investments in knowledge and creativity. Emerging evidence shows this demands innovation-specific skills (which can be built starting early in life) and investments to help connecting people with ideas (say, through collaboration between universities and private companies) as well as risk management tools that facilitate innovation.

**Step 5. Matching the supply of skills with the demand**—by moving toward more flexible, efficient, and secure labor markets. Avoiding rigid job protection regulations while strengthening income protection systems, complemented by efforts to provide information and intermediation services to workers and firms, is the final complementary step transforming skills into actual employment and productivity.

STEP is not a blueprint for reform or a fixed set of recommendations for countries to follow. It is a framework that can help countries understand the challenges they face in building the skills needed for growth and productivity and find the solutions that work in their own environments. It is also a call for a comprehensive approach that resists the temptation of seeking single-minded solutions in the expectation that they will address the skill development gaps.

The value of each individual step is well known to researchers and policymakers. The unique contribution of the STEP framework is to emphasize that building
effective skills for employment and productivity needs to harness the synergies among these steps by recognizing three closely linked elements in building effective skills systems: behavioral skills, path dependence, and labor market clearing.

Behavioral skills
In many economies, employers are searching for workers who possess behavioral skills such as teamwork, diligence, creativity, and entrepreneurship, essential to thrive in today’s rapidly evolving, technologically driven globalized economies. Thus, just improving workers’ technical and vocational skills will not always meet employers’ needs—systems that build skills will also have to ensure that these added behavioral attributes are in place.

Path dependence
The efficacy of training later in life is heavily influenced by workers’ early years. Behavioral skills needed for higher productivity jobs, built through learning from families and schools, are difficult to impart later in life. The ability to acquire higher cognitive skills such as creativity and entrepreneurship critically depends on the amount and quality of stimulation and education received in childhood. As a result, workers who have poor early childhood environments or inadequate or insufficient basic education will be less able to flexibly acquire the higher level skills employers need and are less likely to be employable or fully productive.

Labor market clearing
Just having the right skills may not be enough—what also matters is having a labor market that fosters finding and using these skills. This may require reforms to the existing labor market regulations and operations—to better match job-seekers and employers and to allow workers to move to higher productivity jobs.

Using the STEP framework
The specific elements of any country’s strategy will depend on its situation, its ambitions, and its constraints in choosing policies. The success of any strategy depends, however, on tying together the five steps of the skills agenda. These steps work across sectors (education, training, labor, social protection, and broader economic policy) and across generations (today’s workers as well as today’s children and youth who could be tomorrow’s

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**Figure 2. Implementing STEP as an integrated set of programs across workers’ life cycles**

<table>
<thead>
<tr>
<th>Step</th>
<th>Preschool Age</th>
<th>School Age</th>
<th>Youth</th>
<th>Working Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Facilitating labor mobility and job matching</td>
<td>Apprenticeships, skills certification, counseling</td>
<td>Intermediation services, labor regulation, social security portability</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Encouraging entrepreneurship and innovation</td>
<td>Fostering inquiry</td>
<td>Universities, innovation clusters, basic entrepreneurship training, risk management systems</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Building job-relevant skills</td>
<td>Basic vocational training, behavioral skills</td>
<td>Vocational training, higher education, apprenticeships, targeted programs</td>
<td>Firm-provided training, recertification, reskilling</td>
</tr>
<tr>
<td>2</td>
<td>Ensuring that all students learn</td>
<td>Cognitive skills, socialization, behavioral skills</td>
<td>Second chance education, behavioral skills</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Getting children off to the right start</td>
<td>Nutrition, psychological and cognitive stimulation, basic cognitive and social skills</td>
<td>School health and remedial education</td>
<td></td>
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</tbody>
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skilled workers). And central to building a longer term and sustainable system of skill production are policies targeted toward those held back by inadequate investments in skill formation earlier in their lives.

The STEP framework allows policymakers to design flexible, responsive, and comprehensive systems of skills development that operate in two timeframes:

- In the short run, concentrate on steps 3 and 5, by re-skilling vulnerable workers who are unemployed or underemployed, addressing bottlenecks through flexible training institutions and on the job-training—and creating systems that facilitate job search as well as the search for and hiring of workers with different skill profiles. Step 4 is also part of the mix, building entrepreneurial skills and fostering creativity. But elements of steps 1 and 2 are also important for “second-chance” opportunities for those who may not have received sufficient early childhood development or education.

- In the medium and long runs, improve the entire system producing skills—from the parents to the schools, universities, and training programs. For this, effective policies for early childhood development, education, training and innovation will need to be coordinated with focused labor and social protection policies that facilitate labor participation, mobility, and the matching of skills and jobs. Only then can the supply of skills adjust to continual changes in demand and contribute to productivity, growth, and innovation.

Several specific reforms and programs can be part of a comprehensive agenda (figure 2). They can be targeted at a point in time to populations in different age groups. But they should also form the basis for a longer term program that spans time and builds on the achievements of workers who have benefited from previous steps. And to remedy gaps and avoid leaving the disadvantaged behind, a range of programs—from school health and remedial education to second-chance education for school dropouts and training programs for unemployed youth—can ensure that country’s human resources are fully used.

What might the STEP framework mean in different contexts? Consider three:

In one country even the basics are not in place. Malnutrition is high, and early childhood development programs are only being set up. The educational system is poor, and many students are completing primary school without learning to read or do math. There, the biggest returns will be from steps 1 and 2. Steps 3 and 4 will still be relevant, but commanding less in the way of budgets and other resources, working at the margins with training for elites and relying more on external resources to fill gaps. Step 5 is not the most binding constraint.

In another country steps 1 and 2 are well covered, except for the poor. But the training and innovation systems are weak because of poor governance and financing. And labor markets, though less than ideal, are functioning. There, more can be done to extend early childhood and school programs in poor areas. And more can be done on matching workers and jobs. But the big returns will come from steps 3 and 4, shaking up the training institutions and dealing with the incentives for innovation. Again, step 5 may be less binding as a constraint.

In a third country labor markets are simply not working—for youths, for a region, or even for the entire country (step 5). So, investments in steps 1–4 will have much lower returns than otherwise. There, more effort has to go toward strengthening institutions, particularly those providing information, and the incentives for workers and employers to match skills offered with skills needed (step 5).

Even where things are mostly right, they might not be right much of the time. So if there’s a backlog of kids performing poorly, the message is “fix it.” And if people have missed out in taking one of the steps, it should be a priority to give them a second chance—by identifying their needs and targeting programs that help them take the next step.