# **Europe & Central Asia**

56702

# **Knowledge Brief**

May 2010 ◆ Volume 20

The World Bank



# Skills, Not Just Diplomas: The Path for Education Reforms in ECA

Mamta Murthi and Lars Sondergaard<sup>1</sup>

# **Key Messages**

- In the post economic-crisis world, restoring and sustaining growth in ECA countries require reforms to boost competitiveness and increase labor productivity.
- Firms in the region report a "shortage of skills" as being a significant bottleneck (second only to tax regimes) to growth.
- A large number of students complete upper secondary and tertiary education in ECA countries but too many of them graduate without the right skills needed by industry; the quality of education is, for the most part, poor.
- Apart from a few countries in the EU, there are few opportunities for adults to retrain, upgrade their skills or acquire new skills. The system of life-long learning to build new skills in later years is underdeveloped in the region.
- Reducing the shortage of skills requires a fundamental change of approach in the education systems so that they aim for, and deliver, higher quality education for the vast majority of students.
- Countries need to focus more on measuring and using information on learning outcomes. They also need to use incentives provided by financing, institutional autonomy, and accountability mechanisms to steer their systems towards producing better education outcomes.

#### Introduction

ECA countries are currently emerging from the deepest

<sup>1</sup> This brief is based on a flagship report prepared by a team led by Lars Sondergaard, including Mamta Murthi, Dina Abu-Ghaida, Christian Bodewig, and Jan Rutkowski. recession among all developing regions. In the post economic-crisis world, financial resources are more limited and more expensive and export growth is restrained by potentially slower growth in the destination countries. Restoring and sustaining growth in this context require reforms to boost competitiveness and increase labor productivity. This is all the more important given the shrinking of the working age population in many countries Earlier boom years in ECA exposed of the region. significant bottlenecks to growth, particularly with respect to skills of the labor force (World Bank, 2009). Paradoxically, for a region with relatively high educational attainment, the shortage of skills emerged as one of the two most important constraints to firm expansion (the other being the tax regime). This makes it important, as countries plan for recovery, to undertake reforms to reduce the skills shortages that the earlier growth episode exposed.

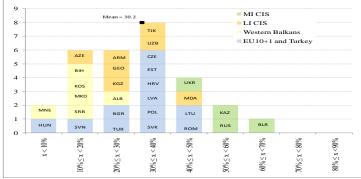
# The Skills Challenge in ECA

ECA had a well-regarded education system prior to the end of central planning. While the intervening years have taken some of the shine off this reputation, the countries continue to have some strong achievements in the field of education. Notably, enrollments are high at all levels of education. The socialist legacy is particularly visible in the low income countries in the region which show the highest secondary enrollments in the world for their income level. Tertiary enrollments have grown rapidly in the past two decades and are also high relative to income with a few exceptions to this general pattern in the low income CIS countries (Azerbaijan and Uzbekistan).

Despite high enrollment and high attainment on average, skills shortages have become an important constraint on growth in the region. The EBRD-World Bank Business Environment and Enterprise Performance Surveys (BEEPS) provide successive snap-shots of the self-reported

constraints to expansion by firms in ECA.<sup>2</sup> The surveys show a dramatic change in firm perceptions of the skills constraints starting around 2005. By 2008 skilled labor shortages had moved up to being the second most commonly reported constraint to growth across all countries in the region, second only to tax regimes. The distribution of countries according to the frequency with which firms reported "major" to "severe" constraints in the supply of skills is reported in Figure 1. On average, 30 percent of firms considered education and skills to be a major or severe constraint in 2008. The highest proportion of firms reporting constraints were found among the middle-income CIS with upwards of 40 percent of firms dissatisfied with the availability of skilled workers. A smaller proportion of firms in the Western Balkans reported to be constrained while there was significant variability in proportion of affected firms in the EU10+ 1 and Turkey (World Bank 2009a).

Figure 1: Skills Constraint on Firm Expansion by 2008 (% of firms that consider workers' skills a major or very severe constraint)



Source: Turmoil at Twenty, World Bank 2009a

# Why Education is Failing to Produce Skills for All

The emergence of skills shortages in the face of high and rising enrollments suggests that the problems lies not so much with access as with quality of education:

Few education systems in the region recognize that they are failing a large number of students. School systems still focus on sorting and streaming students, breeding excellence for a few at the top while worrying less why many fail. Few school systems in the region measure success in terms of increasing the proportion of students who meet key competencies by the end of basic or secondary education. When students fail, their failure is seen as the failure of the individual student and not of the system. The needs of market economies point toward an approach that focuses on increasing the skills of the vast majority of their students.

Despite high levels of enrollment, education systems in the region do not produce enough graduates with the right skills. Students often graduate with diplomas, but not with necessary skills. The systems are still making the transition from teaching the basics (factual content often via rote-learning) to inculcating higher order skills such as critical-thinking and problem solving. As a result, too many students graduate without the skills that are increasingly in demand in modern manufacturing and service industry. The need for such skills is not confined to a few high-tech sectors or upper middle income countries alone (surveys of employers in countries like Kazakhstan and Macedonia point in the same direction).

International assessment tests such as PISA measure certain dimensions related to critical thinking and problem solving. With the exception of a handful of EU countries, students in ECA score significantly below the OECD mean. A 40 point difference on the PISA scale approximates to the competency increase from one additional year of schooling. Figure 2 suggests that 15 year-old students in the region are "behind" the OECD average for reading competency by up to 1 year for Croatia and Latvia, 1-2 years for Russia and Turkey, 2-3 years for Bulgaria, Romania, Serbia and Montenegro, and more than 3 years for Azerbaijan and the Kyrgyz Republic. Similar "deficits" are observed with respect to competencies in mathematics and science. It is no surprise then that many firms find it difficult to find workers with the right skills.

The legacy of central planning inhibits school systems in other ways. The key actors tasked with delivering learning (school principals, local education authorities, etc.) operate in a stifling managerial environment in most ECA countries, providing schools and local authorities with little or no autonomy to make decisions that might improve learning outcomes. The Ministries of Education often impose detailed norms that determine levels of staffing and other inputs. Resources are inefficiently used and mostly tied up in (poorly maintained) buildings and (underpaid) staff. The neglect of teachers, the most crucial input into improved student learning, has resulted in a profession which is overaged, under-trained, part-time and poorly paid.

Apart from a few countries in the EU there are few opportunities for adults to retrain, upgrade their skills or acquire new skills. The system of life-long learning to build skills in later years is underdeveloped in the region. Opportunities for learning later in life are extremely important for those who may have finished or left school with only the most basic of proficiencies or those who were educated under the regime of the planned economy and now find themselves without the skills needed to sustain employability (such as computer skills or language skills).

<sup>&</sup>lt;sup>2</sup> The EBRD-World Bank Business Environment and Enterprise Performance Surveys (BEEPS) have been conducted in virtually all ECA countries in 1999, 2002, 2005 and 2008. The samples are constructed by random sampling from the national registry of firms (or equivalent) and cover industry and services.

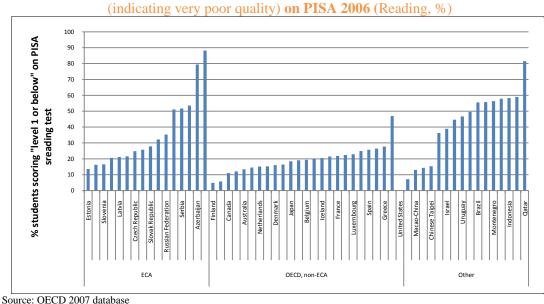
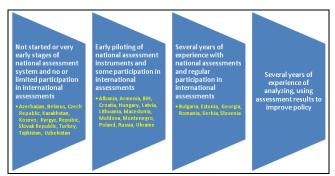


Figure 2: Not Reading Well Enough to Learn? Share of Students Scoring "Level 1 or Below"

### The Path Ahead

Reducing the shortage of skills requires a fundamental change of approach in the education systems in the region so that they aim for, and deliver, higher quality education for the vast majority of students.

Figure 3: Scope for Improving National Assessment Systems to Measure Learning Outcomes in School



Source: Authors' assessment of ECA's progress with using external assessment to improve policy making.

Measuring Learning Outcomes: Countries need to focus much more on measuring outcomes and using this information to improve policy. At the level of basic education there is greater consensus on what are key skills and competencies, and the standardized tests to measure them.<sup>3</sup> Many countries in the region participate in international assessments, which should be complemented with national assessments. Most school systems in the region have national assessment systems although many are

in the early stages of development (Figure 3). Developing student learning assessment systems that measure learning competencies at key points in the learning cycle should be a priority, as should using the assessment data to improve teaching and learning both at the institutional and policy making levels. In many countries, assessment centers are "niche" departments with no influence on policy making.

*Using Incentives:* Policy makers need to rely more on providing incentives to the various actors in their education systems – the kind of incentives that will "steer" the systems towards better outcomes. This implies two things for central governments: that they have a vision which can be translated into measurable goals, and that the vision carefully balances three interrelated instruments which are at the disposal of governments to influence the behavior of local managers (Figure 4):

- Financing incentives to increase the focus on desirable outcomes such as higher graduation rates, greater learning, etc.;
- Autonomy for educational institutions to allow for greater flexibility in curriculum, teaching methods, resource use, institutional mission etc. so as to improve learning outcomes of students and to move away from the "inspection-control" regime currently used to monitor inputs into learning; and,
- Accountability to stakeholders to ensure that the other two instruments are being used in such a way as to improve student learning.

These policy dimensions are intrinsically linked and policy makers will have to work on making progress on all three fronts. The balancing act is ultimately about providing enough freedom to providers to *innovate* and respond quickly to new demands versus enforcing enough

<sup>&</sup>lt;sup>3</sup> While the use of learning assessment tests is not uncontroversial, testing methodologies have improved, making these tests better and more useful for assessing student learning than previously.

# ECA Knowledge Brief

compliance with rules and regulations to ensure that they innovate and respond in a way that produces desired education outcomes in a cost-effective way. Providing local managers with more autonomy to make decisions could tip the scale in the direction of *innovation*, while strengthening accountability measures could risk tipping it toward too much *compliance*. Similarly, the modalities governing the way local managers receive their financing can also tip the scale in one or the other direction, depending on how much they restrict the behavior of local managers.

Figure 4: There are Three Classes of Instruments to Provide Incentives for Improving Educational Outcomes



Source: Authors' analytical framework.

This balancing act has important implications for policy makers because there is no single recipe for getting the three elements right. Even successful countries constantly have to re-assess whether they need to strengthen accountability, expand autonomy, or revisit financing mechanisms and such fine-tuning might involve scaling back some elements of autonomy or re-centralizing some duties; country circumstances (which are constantly changing) will have to guide them.

However, in general, in the school system this would mean a move away from inflexible line-item budgeting towards a greater use of delegated budgets with incentives to maintain enrollment and attendance (per-capita financing), a path on which over half of ECA countries have already embarked. Schools need to be made more accountable for improving the learning outcomes of the bulk of their students. Significant improvements will be difficult to achieve without a serious attempt to address the malaise in the teaching force – addressing the serious overstaffing in the sector and improving pay, professional development, and work conditions.

In higher education, countries need to go further by introducing incentives to encourage graduation and performance-based contracts to enhance quality and relevance. This needs to go hand in hand with greater autonomy over institutional governance and management. The biggest challenge however is strengthening accountability for outcomes. This requires a two-pronged approach of both strengthening of national quality assurance systems as well as enhancing transparency and information to encourage migration to quality.

Improvement in Adult Learning: Countries need to become serious about developing and implementing a strategy that increases the opportunity for adults to upgrade or acquire new skills. For many countries, participating in OECD's Program of International Assessment of Adult Competencies (PIAAC) would be an important first step in the process of understanding the skills and competencies of their work force.

#### Conclusion

Whatever measures countries take, it would be important to continue to build learning assessment systems and monitor and evaluate the impact of the reforms on desired outcomes. This is the only way of telling whether the adopted measures had the intended effect and whether course correction is needed. The education reform agenda ahead of the countries in the region is an extremely important one as it lies at the heart of their competitiveness. The reform will take time, suggesting that there is no time to lose to make a start.

#### About the Authors

Lars Sondergaard, Senior Economist, and Mamta Murthi, Sector Manager in Education, Human Development Sector Unit, Europe and Central Asia Region, World Bank

