
Executive Summary

Demand for secondary education is soaring worldwide owing to the confluence of at least three factors. First, as more countries achieve universal primary schooling, demand for education is moving to higher levels of the education system, and the world is witnessing an explosion of individual and family aspirations for secondary education. Second, the largest-ever cohort of young people is clearly going to make a difference for the future of many countries, especially in the developing world. The way to turn what many perceive as a global risk into a global opportunity is by building and harnessing the values, attitudes, and skills of young people through quality secondary education, thus ensuring that they will become active and productive citizens of their communities. Third, economies increasingly need a more sophisticated labor force equipped with competencies, knowledge, and workplace skills that cannot be developed only in primary school or in low-quality secondary school programs. In short, provision of secondary education of good quality is seen as a crucial tool for generating the opportunities and benefits of social and economic development.

For all these reasons, secondary education is a focus of increasing policy debate and analysis worldwide. This debate is framed by the need to respond to the twin challenges of increasing access to secondary education and, at the same time, improving its quality and relevance. For several decades now, most of the education reforms proposed and implemented throughout the world have focused on the compulsory and postcompulsory levels of secondary education. This centrality of secondary education will persist in the foreseeable future and will certainly be reinforced.

One outcome of the past decades of reform is that secondary education has evolved in such a way that one could speak of a change of partners within the overall structure of education systems. Secondary education was born fully attached to and coupled with higher education: curriculum, pedagogical practice, and legal framework; teacher recruitment, selection, and status; and student background were the same as in higher

education. In the past 40 years, however, significant changes have taken place:

- Secondary education has become more and more coupled with primary and basic education.
- The curriculum is less specialized and evolves toward arrangements closer to those in primary schools.
- Teachers in secondary education tend to be trained and recruited in the same way as primary school teachers; and pedagogical practices are converging as participation rates in secondary education increase.

All this has been a direct result of the democratization of education. In the poorest countries of Africa, the Middle East and North Africa, Latin America, and Asia, secondary education reform is becoming an integral part of Education for All (EFA) efforts. This increases pressure on the public budget in an already constrained public financial environment.

Globalization, the increased importance of knowledge as a driving force in economic development, and the consequent skill-biased nature of technological changes in the workplace are putting additional pressure on national governments to modernize and revamp their secondary education systems in order to produce graduates who are well prepared for work and for further learning. At the same time, the realization of democracy demands citizens who are equipped with the values, attitudes, and skills that will enable them to participate actively in their communities. Secondary education plays a central role in preparing students to become active citizens.

In addition to its contribution to economic growth and to formation of social capital, secondary education makes a crucial contribution to primary and tertiary education. It is the articulation node between those levels of formal education and between education and the labor market. In playing that articulating role, secondary education may serve as a pathway for students' advancement, or it may be the main bottleneck preventing the equitable expansion of educational opportunities. Indeed, the particular shape of the articulation between primary and secondary education and between secondary and tertiary defines the overall role, features, and priorities of the school system of any given country. Whereas EFA policies de facto place lower secondary education within the realm of basic and compulsory education, emphasis on increasing the number of secondary graduates qualified for entry into tertiary education restores and indeed heightens the value of the traditional preparatory function of upper secondary school. Thus, the policy choices for secondary education are quite different for the lower and upper secondary levels, particularly in low-income countries. The double face of secondary education, and its

political ambiguity and complexity, become more visible as education systems expand.

Challenges in secondary education vary among countries. Despite all the efforts made in recent decades in the developing world, secondary education remains a bottleneck for the expansion of educational attainment. In most countries inequity in access to quality secondary education is a major barrier to human development, economic growth, and poverty reduction. Whereas the primary school completion gap between rich and poor countries has diminished, the gap in the proportion of the population with secondary education has widened in the past 40 years.

Sub-Saharan African countries, along with other low-income countries, face the greatest challenge. Those countries have to contend with a growing population that puts pressure on basic educational services, and many of them are likely to have to struggle to meet the goal of providing quality basic education to all school-age children by 2015. In addition, the AIDS pandemic is devastating the teaching force and undermining the entire educational fabric. In South Asia the relative success that countries have had in expanding primary school enrollment, combined with the fact that most of these countries are still in the midst of a population explosion, is generating considerable demand for expansion of secondary education. An additional source of pressure in the region is the large proportion of girls and of the very poor who are not yet enrolled in secondary education.

Middle-income and transition countries, in particular those in Eastern Europe, Latin America, and East Asia, have already achieved high enrollment levels in secondary education. Their main challenge is to improve quality, relevance, and efficiency to better align their education systems with those in open democracies and to respond to the rapidly changing demands of increasingly globalized economies.

Purpose and Messages of This Report

The purpose of this report is to set forth policy options for supporting developing countries and transition economies in adapting their secondary education systems to demands arising from the successful expansion of primary education and the socioeconomic challenges presented by globalization and the knowledge-based economy.

Despite the importance of these matters, the World Bank has not until now issued a policy statement on secondary education. The need for more analytical work in secondary education has been felt for a long time. After the substantial emphasis that had been placed on primary and tertiary education, the time and the opportunity has arrived to address the missing link of secondary education. The 1999 World Bank Education Sector Strategy already reflected a more holistic conception of education, including the need to tackle many of the issues specific to the secondary

level. The 2005 update of the strategy confirmed the need to take a sector-wide approach and to integrate education into the country context.

Preparation of this report involved an extensive consultative process that began with the creation of an external advisory panel made up of six high-level international experts on secondary education. World Bank staff working in all regions of the world, colleagues from other international organizations, and counterparts from ministries of education contributed in ad hoc meetings and through exchanges of written communications. This consultation process was complemented by an extensive literature review and the commission of background papers, all of which resulted in a rich information base for the preparation of the report.

The report analyzes the key issues facing secondary education in the 21st century and, on the basis of global experience, presents a policy framework to guide decision makers in their efforts to transform and expand secondary education systems. It focuses on six main messages, as outlined next.

1. Secondary education has taken on a mission of its own, one that has the policy peculiarities of being at the same time terminal and preparatory, compulsory and postcompulsory, uniform and diverse (chapters 1 and 2).

- For young people all over the world, primary education is no longer enough. Secondary education provides a specific set of competencies and skills that enable students to participate in the knowledge society. It can also contribute decisively to social cohesion and civic participation by increasing individual propensity to trust and be tolerant, thus enabling youngsters to become active members of society.
- The United Nations Millennium Development Goals (MDGs) for education can only be achieved through systematic policies for postbasic or postcompulsory secondary education. In fact, expansion of secondary education creates a powerful incentive for students to complete primary education. Longer schooling carries significant social benefits; for example, increased female participation in secondary education is positively associated with significant reductions in infant mortality rates.
- Secondary education has a special part to play in HIV/AIDS prevention in affected countries because of its role in equipping youths with greater ability to process information and in bringing about long-term behavioral change.
- Demand for quality secondary education is increasing in all countries. Political consensus concerning secondary education reform is, however, particularly difficult to build up, as the constituencies and champions for the subsector appear to be weak or nonexistent.

2. Expanding equitable access and improving quality to ensure relevance are the twin challenges of secondary education worldwide (chapters 3 and 4).

- Developing countries are investing more today in secondary education than their counterparts in industrial countries did when they had similar levels of income. Yet the gap between rich and poor nations, in coverage and in quality, continues to widen.
- The formula used in the past to expand access to primary education is not necessarily applicable to secondary education today. Access to secondary education cannot increase without major changes in service delivery and without addressing simultaneously the quality and relevance dimensions. Moreover, expansion of access can only happen if significant inefficiencies such as high repetition and dropout rates at the primary and lower secondary levels are drastically reduced.
- There is no single best formula for expanding secondary education; multiple and simultaneous strategies are needed to target an increasingly heterogeneous school population.
- In countries that have achieved rapid and sustainable expansion of secondary education, investment in democratization of secondary education has gone hand in hand with “extra-support” policies to reach the adult population with only primary education.
- Rapid and significant expansion of secondary education is generally perceived as having a cost in terms of quality. Implementation planning must therefore take quality issues explicitly into account. Quality, grounded in diverse institutional responses to a growing range of individual demands, emerges as the most important long-term challenge for secondary education in all countries.
- Evidence on the linkage between education and economic growth points to the importance of balanced expansion of access to quality education. Ensuring universal basic primary education coverage and quality should come first, but this requires a simultaneous and cumulative effort to expand secondary and tertiary education.
- Unchecked and unbalanced expansion of secondary education can lead to increased social, gender, and ethnic inequality. A key policy objective is to ensure that access to quality secondary education is enhanced for those strata of society that have been excluded because of poverty, ethnicity, gender, and other related factors.

3. In the context of the knowledge society, changing work patterns are leading to radically new approaches in the way curricular knowledge is selected, organized, and sequenced (chapter 5).

- Although countries exhibit different trends in the relative supply and wages of workers who are secondary education graduates, there is

evidence of increased demand for skilled workers, reflecting skill-biased technological change.

- Curriculum-based reform of secondary education in the 21st century is prioritizing skills and competencies that go beyond and cut across the traditional general-vocational divide. The frontier between general and vocational curricula is shifting and fading, and the heretofore hard-to-strike balance between vocational and general education at the secondary level is becoming increasingly irrelevant.
- There is a gap between what is currently being taught in secondary schools and the knowledge and skills required if countries, firms, and individuals are to be competitive. New subject matters and types of knowledge have become socially and economically meaningful and compete to occupy a place in the secondary curriculum. The challenge is to determine the best alternatives for enriching the curriculum without worsening the prevailing overload of the secondary education curriculum.
- Information and communication technologies (ICTs) offer new avenues for expanding access to quality secondary education and can be used as levers for curriculum reform and innovation. They can, however, trigger new forms of inequity, as is evident in the significant digital divide within many countries and among countries.

4. Qualified and motivated secondary school teachers are critical to the success of reforms of secondary education (chapter 6).

- There is a profound mismatch between learning needs, competencies, and skills demanded from students in the knowledge society and the teaching skills of secondary teachers after their passage through teacher training colleges and in-service training programs.
- There are no low-cost shortcuts to training high-quality teachers. Preservice academic training of secondary school teachers continues to be vital, but school-based training and mentoring for novice teachers have proved more effective and less costly than traditional preservice training for developing core teaching and professional skills. Experimentation with new ways of balancing preservice and school-based in-service training could yield positive results in teacher education policy.
- Teacher shortages negatively affect the quality of secondary education and create a barrier to expansion of access to secondary education. This challenge is severely compounded in AIDS-affected countries, which are suffering from the loss of massive numbers of teachers.
- Comprehensive incentive policies to attract and retain high-quality teachers should be devised, especially in countries that are losing their most experienced teachers to richer nations. Such policies should factor

in professional development issues, teacher deployment and class size policies, and accountability systems.

5. Multiple sources of funding and efficiency-enhancing measures should be considered to cover the significant financial investments required to expand access and improve the quality of secondary education (chapter 7).

- Many developing countries will have serious problems bearing the full financial burden of expanding access and improving quality in secondary education. These countries need to put in place cost-sharing strategies and to complement supply-side interventions with demand-side financing mechanisms.
- Although governments are expected to make substantial contributions to financing the compulsory phase of secondary education, families and communities should play a more active role in financing the postcompulsory phase. Public-private partnerships can contribute in an important way to making mass secondary education affordable.
- Demand-side financing mechanisms such as stipends or scholarships are sometimes the best and only means of attracting and retaining in secondary education children from poor families and minority communities. This approach has proved successful in promoting girls' education.
- The countries that have succeeded in expanding secondary enrollment in the past two decades are characterized by balanced ratios of per-student public spending across the three levels of the education system. Spending per secondary student is, on average, only 1.4 times higher than spending per primary student, and spending per tertiary student is only about 3 times the expenditure per secondary student. In contrast, in less successful countries the respective ratios are 2.6 and about 9.
- Public and private sector resource mobilization efforts in developing countries will need to be complemented by substantial financial contributions from multilateral and bilateral partners. Countries can also profit from multilateral funding for HIV/AIDS education because of the potential impact of secondary education on AIDS prevention.

6. Traditional modes of state intervention and public management strategies need to be reformed in order to promote delivery of high-quality secondary education services (chapter 8).

- To produce good educational outcomes, secondary schools need to move away from the "factory model of producing education," in which young adolescents are put on a conveyor belt and moved from one individual teacher to the next, to be doused with unconnected course material administered in six or more lessons a day. Creating a teaching

and learning environment that breaks away from this pattern is the real mission of secondary school management.

- Significant changes in the economic and political conditions that once framed government action have cleared the way for new forms of interaction between the state, communities, and markets in the provision of secondary education. The changes have not made the state's presence in secondary education less significant. On the contrary, governments are increasingly being required to play a leading role in steering, monitoring, and supporting service delivery to ensure equity and quality in the provision of secondary education.
- Clear, achievable goals and a transparent system of incentives and accountability mechanisms help improve delivery of secondary education services. Unlike the prescriptive mechanisms of the past, the new ones, rather, set goals and provide guidance.

World Bank Involvement in and Support for Secondary Education

Over the past two decades, the World Bank's strategy for the education sector has given less attention to secondary education than to primary and tertiary education. If anything, secondary education was considered a priority only in middle-income countries, provided that they had already achieved universal access to primary education. An important turn in this long-standing trend came in 1995, when the strategic focus moved from primary to basic education, which in many cases included the lower secondary school grades. In low-income and some middle-income countries this change was accompanied by efforts to achieve Education for All as part of the Millennium Development Goals. The shift in emphasis entailed a major change in the approach to secondary education in terms of lending priorities and practices: it was seen more as an extension and upgrading of basic primary education than as the preparation of an elite for higher education.

Since the mid-1990s, several factors have prompted a rapid increase in the share of lending for general secondary education. One has been the growing demand for secondary education places resulting from rising graduation rates in primary education. Another factor, especially in low-income countries, has been the challenge to provide equitable and sustainable financing of secondary education, which entails the design of new structures and regulations that can cope with the growing demand for lower and upper secondary education. A third is the reassessment of the role of secondary education in economic and social development, in a context defined by new labor market demands stemming from mounting pressure to increase competitiveness and by changes in the workplace driven by rapid shifts in technology. A final factor is the effort to enhance

the potential response of secondary education to HIV/AIDS prevention through both education lending and the Multi-Country AIDS Program (MAP).

The main areas of World Bank support to secondary education projects can be grouped in six categories (World Bank 2004b): (a) expanding access and absorbing the rising demand that is being experienced as a result of progress on the education MDGs and on EFA policies; (b) alleviating poverty and promoting equity; (c) supporting gender equality in access; (d) focusing on qualitative improvements; (e) rehabilitating physical facilities; and (f) improving efficiency and management in secondary education.

World Bank supported secondary education projects (listed in table J.1 in appendix J) have performed relatively poorly in low-income countries. Evaluations have attributed this outcome to factors such as excessive complexity of projects in relation to capacity for implementation and insufficient attention to social and labor market demand and to rising recurrent costs. These shortcomings reflect the need for more country-level analytical work to match strategies closely to specific country conditions. Lessons from secondary education projects in the 1990s suggest that greater attention is needed to implementation capacity and to realistic phasing and sequencing of interventions (World Bank 2004b).

Directions for Future World Bank Support

Future World Bank support for secondary education should consist of intertwined and complementary activities that include lending, financial assistance to pilot programs, analytical work, promotion of global partnerships, and systematic evaluation of programs and projects. Together with continuing support for universal provision of high-quality primary and basic education, the World Bank should increase its support for the expansion and democratization of high-quality secondary education. Future lending must be based on in-depth analysis of country situations and systematic consultative processes that enable a good understanding of the direction in which the country's economy and social institutions are moving.

An example of the kind of work needed can be seen in Africa, where the World Bank is partnering with African countries and other donors in the Secondary Education in Africa (SEIA) initiative. This multiyear (2002–06) study is designed to contribute to the debate on secondary education in Africa and to assist countries in developing sustainable national strategies for increased access and improved quality. (See the SEIA Web site, www.worldbank.org/afr/seia.)

Some key areas for analysis and research that deserve further attention are

- institutional linkages between labor market institutions and secondary schools, with special emphasis on school-to-work transition issues and youth employment
- the impact of expansion and quality improvement of secondary education in a given country on productivity and the introduction of new technologies
- the nature of bottlenecks in secondary education and how they affect the provision and completion of education in many developing countries
- benchmarking of secondary education systems along dimensions related to efficiency, effectiveness, organization, and management
- the educational aspirations and demands of young people, with a view to making secondary education more relevant to their needs and motivating them to continue in and graduate from secondary education.

Organization of the Report

The report begins, in chapter 1, by outlining the historical background of secondary education, examining how particular sociocultural and economic conditions shape its definition and structure, and highlighting the secondary education policy paradox. Chapter 2 then examines the direct benefits and externalities of secondary education; chapter 3 describes the magnitude of the challenges developing countries face as they seek to upgrade the quality and relevance of secondary education; and chapter 4 proposes an analytical framework to help identify the main socioeconomic factors that shape specific country responses to the challenges. Chapter 5 addresses the response to the twin challenges of expanding access and improving the quality of secondary education by presenting the new ways in which curriculum knowledge is being selected, organized, and sequenced and the changing role of monitoring and evaluation policies. Chapter 6 looks at the response from the perspective of the teaching profession, including issues related to teachers' education and professional development, recruitment, and deployment. It also discusses the potential perils and promises linked to the use of information and communication technologies (ICTs) in secondary schools. Chapter 7 explores options for increased and more sustainable financing of secondary education, concentrating on features that make funding at this level a somewhat different problem from financing primary or tertiary education. Chapter 8 examines governance issues, analyzing how relationships between the center (national and provincial government) and the local level (local authorities and schools) are being redefined in order to respond to the twin challenges and exploring the

key organizational characteristics of effective secondary schools. Finally, the epilogue argues that the task of expanding access and improving the quality of secondary education demands a radical transformation of policies and of institutional practice; doing more of the same is definitely not the way to deal effectively with the twin challenges. The appendixes present additional data on secondary education, discuss selected topics in greater detail, and review the World Bank's involvement in support for secondary education.