

Emerging Education Trends and Strategies

Earlier sections of this booklet analyzed the behavior of education systems within the context of economic, demographic, and social change. This section turns to education trends and strategies. It begins with issues of governance before turning to issues of quality. It also stresses the need for improved indicators and information.

Education Governance and Management

One type of education reform that cuts across all county groupings and is found in most, but not all, DMCs is the movement toward some form of education decentralization. Although the motivation and expectations for the reform vary across countries, the locus of education action is moving away from the center “downward.” These changes appear to invalidate further exclusive reliance on traditional centralized planning as a mechanism for developing and maintaining effective education systems. The role of the state in DMCs, especially in terms of responsibility for the governance, planning, and management of education, is changing rapidly and is being dynamically redefined. Adjustments are being made in assignment of responsibilities in areas such as:

- planning (strategic planning and budgeting, school-level use of resources);
- education finance (financing of current and capital expenditures);
- curriculum (development, design and content, production and distribution of teaching materials);
- teachers (recruitment, qualifications, training, salaries);
- supervision (supervision of academic performance in school, assistance in improving performance);
- facilities (school construction and maintenance); and
- evaluation (testing of student achievement, dissemination of results).

The merits and limitations of decentralization of education responsibilities will be the foci of continuing national discussion and debates. A related debate, and subject to change as new insights emerge from experience, concerns assignment of responsibilities, and decision-making authority at different administrative levels.

Policy 1. Strengthening of Institutional Infrastructure in the Center

Such strengthening is needed generally to promote efficiency and transparency in decision making and, more specifically, because new functions and responsibilities are being transferred from central governments as education policy and planning are decentralized.

Strategies:

- *Articulation and communication of the national vision and strategies for the reform to personnel at all levels in the education sector, other government sectors, and to the public.* National ministries associated with education, because of their understanding of the purpose, content, and management implications, are in the best position to mobilize support from other government agencies, inform the public, and develop opportunities for citizen input. If the full support of local communities is sought, then the national vision should demonstrate a respect for the potential of communities as partners.
- *Development of supporting laws, policies, and guidelines, and provision of strategic and implementation plans for ongoing technical assistance to local management levels.* An initial action in the center could be the restructuring and streamlining of central education offices to eliminate overlapping of functions, to reconfigure directorates and subdirectorates, and, as necessary, to retrain personnel. Second, the necessary technical skills for planning and managing for the new responsibilities may be in short supply at the provincial and district levels. Large-scale, monitored training and continuous technical assistance will likely be needed. Distribution of excess skilled staff from the central offices to provincial and district levels may help overcome human resource shortages. Since reforms and financing go together, local governments are likely to need central assistance in generating resources and may need authority to raise revenues. Planning for resource provision may need to be differentiated by variations in the resource-generating capacities of local governments.
- *Further development of research and development, monitoring, and evaluation functions in the center.* As the decentralization process evolves, center institutions will move from roles that emphasize policies, plans, and control-oriented administration toward roles that focus on decision-oriented research, setting new standards, creating the conditions, and providing resources for developing demonstration and experimental programs. Generating and applying knowledge on the behavior of the education systems is a requisite for successful management of programmatic and institutional changes.

Policy 2. Improving Education Planning and Policy Capabilities of Provincial and District Institutions

Provisional and district leadership in some areas of planning and management are evolving. The difficulty and complexity of decision making and management are not diminished by moving the locus of education decisions downward. New problems emerge related to resource generation and allocation, personnel (which may include teachers and administrators) selection and placement, and evaluation of schooling. In planning and organizing education change, provincial and local education authorities may need to cope with a social and political environment that includes an entrenched structure of political power, competing interests among stakeholders, and patterns of social divisions that inhibit consensus-based decision making. A well-planned implementation process can be expected to include opportunities for concurrent staff development and a piloting phase of the reforms.

Strategies:

- *Policies and regulations developed to specify policy and planning authority established at the province and district levels.* Devolution of education responsibilities and authority moves vertically and sometimes horizontally. These processes are well under way in several DMCs, and cases of authority transfers to provincial and district levels currently can be found in various countries, including PRC, India, and Pakistan.
- *Plans and programs for development of training in a range of new individual skills and institutional capacities to assess education needs, monitor progress, and provide supervision.* Given that technical skills, monitoring systems, sets of indicators, and information systems do not guarantee a successful process of planning and sustaining of effective education programs, also needed may be conditions to create and maintain dialogue involving local stakeholders and participants. Absence of dialogue among stakeholders rather than the lack of resources may be the major inhibiting factor. A more participatory planning process with involvement of stakeholders is no guarantee either of higher-quality schooling nor of expanded education opportunities. However, if centralization amounts only to the application of new control mechanisms of the central government, then parents and communities remain powerless and potentially apathetic to acceptance of additional responsibilities. Increasingly in those countries where local forms of education responsibility are sustained, there will be a need for strengthening district and community capacity for quality control, monitoring, and evaluation. In this process a number of organizations, e.g., United Nations Children's Fund (UNICEF), UNESCO, and international and national NGOs with experience of local governments and community organizations, can play an important role. Also worthy of consideration are partnerships with universities and other research and training bodies.

- *Development of communication and information networks across provinces, districts, and schools.* Some of the leadership activities at the central level, e.g., public dialogue, coordinating critical support groups and organizations, are replicated at the provincial level. And, with provincial monitoring, the district in some DMCs is evolving into a key level for planning and facilitating collaboration across schools, communities, and school clusters.

Policy 3. Restructuring School-Level Management

Some of the planning and most of the action of school improvement takes place at the school and community levels. Decentralization places additional expectations on school management at the site and community levels. Planning and sustaining changes in classrooms and schools depends on the ability to develop collaborative relations with the community; monitor school quality and efficiency; generate, understand, and utilize information on interventions in progress; and to respond to the emergence of new priorities. Principals and citizens' committees may need to (i) promote access and equity by adjusting costs to ability to pay through modification of fee requirements, development of student loan programs, reduction of opportunity costs by incorporating income-generating activities into the curriculum; (ii) adapt the quality and relevance of the curriculum by including local materials, providing initial instruction in the child's home language, and developing self-instructional and modular materials; and (iii) develop school programs to respond to community problems – by sharing school resources, information, ideas, and labor.

A central question to be addressed by local planners and managers is how parents and communities can be helped increase capabilities to plan and assess education choices, mobilize, and monitor options. This question suggests actions for which school principals, teachers, and parents typically are inexperienced, have few support resources, and have too little information to make informed decisions (Chapman 2002).

Strategies:

- *Retraining of principals in new requirements for managing schools or districts, including financial management, instructional supervision, and community liaison.* A basic objective is to assist the principals, teachers, and other school staff to be more independent and more creative in improving schools as places of learning.
- *Development of local systems for monitoring education quality, including needs assessment technologies, use of indicators, and development of data analysis capabilities.* Local strategic planning will be needed to analyze local conditions, set objectives, and mobilize community efforts. Implementation of instructional, management, and assessment procedures requires action plans.

Policy 4. Regional Research and Training Role for ADB

It is important that ADB recognize that the process and actors in policy making, planning and, to a degree, education evaluation are changing, even though the extent and results of change are not easily predictable. The need to determine the role of ADB as a partner in this reform should be an ADB priority. The importance of this partnership is based on the assumption that a focus on support for country, regional, and local policy reforms through assistance in planning, evaluation, management, and institutional capacity building can potentially influence the quality, efficiency, equity, and relevance of all subsectors of the education systems. ADB's response to and involvement in this trend may include encouragement and assistance in providing a research and information base, and helping to build institutional capacity for planning, managing, and evaluating local education programs. Central to this task will be assessment of training needs and the technical and professional upgrading of education personnel at all levels of management.

Strategies:

- *Exploration of the potential for cross-country research and training related to evolving patterns of decentralization.* ADB, with its regional concerns and expertise, may consider encouraging a regional, cross-country dialogue and a program of supporting research to synthesize the insight being acquired from the implementation of evolving patterns of decentralization. One focus on research and training could be on the impact of decentralization on local communities with the purpose of empowering local groups to cope with the new problems and opportunities. If requested, ADB, in collaboration with DMCs and other international agencies, could assist in organizing such research and training and become a world center for Asian research on implementation of new modes of education governance.

Developing and Sustaining High-Quality, Equitable, and Adequately Financed Education Systems

Education systems are made up of interdependent levels and institutions. Policies and investments focusing on only one education level to the exclusion of others may create distortions (Heyneman 1997). An example from the past would be the strong priority given by some countries to higher education at the expense of other levels. Similarly, investment in basic education should be viewed as a necessary but insufficient condition for the development of education systems. The interdependence of levels and programs of the system is readily demonstrated in the necessity for articulation of curriculum and examinations between system levels. Indeed, the quality and efficiency of each successive level is strongly influenced by those characteristics in preceding levels. It is further shown, because the system is staffed by its own products, that the quality of higher education affects teaching and administration

throughout the system. In planning their futures, DMCs should seek not only high-quality basic education, but also high-quality secondary and tertiary education.

Policy 1. Developing Effective Basic Education

Traditional arguments for giving priority to basic education include:

- the rate of return on investments in basic education, particularly in less developed countries, is higher than for secondary or tertiary education;
- basic schooling, again particularly in less developed countries, has a high, independent impact on the academic achievement of children; and
- at least prior to the latter stages of universalization, basic education may contribute to social mobility.

Thus, there appear to be both economic and social equity reasons to justify priority. If it may be assumed that expenditure per student has a direct relationship with quality, then the quality gap between high- and low-income countries is increasing. Appropriately, improving education quality is an expressed goal in all DMCs. Education quality in terms of level and utility of what pupils learn in schools is demonstrably poor in most low- and middle-income countries.

There remain populations of significant size in several countries and in the poorer areas of most DMCs without access to basic education in any form. Some of these populations have initially enrolled for a brief period in school, and others have never attended school. The disadvantages of the absence of education last a lifetime for members of this group. This condition also lessens the overall quality of society and most particularly creates a vicious cycle of fewer employment opportunities, less income, and fewer chances for advancement in the job. It also creates families less able to afford education for their children. The problems of equity involve not only girls but also the rural and urban poor, linguistic and ethnic minorities, and populations in remote areas. This situation is particularly acute, for example, in Bhutan, PRC, India, Nepal, and Pakistan, and in certain island populations in Indonesia and the Philippines. Provision of increased education opportunities to this population will be relatively costly, and will test the seriousness of commitment to equity of both governments and international agencies. If the concept of equity is extended to include not only access to schooling but also equitable outcomes in terms of access to resources, participation, leadership, and reward in society, then discriminatory practices are found in every country. Increased education opportunities are but one, and perhaps the easiest, of several necessary ameliorating policies.

Priorities and Strategies for Basic Education

- *A sector or subsector analysis of the requisite everyday and work skills most needed by citizens, and the capability of schools to provide such skills.* The issue for any given country becomes: What kind of basic education? Leaving aside the question of the validity of the research underlying the justification for investment, emerging economic and workplace conditions suggest the need for a redefinition of basic education. For countries that are primarily agricultural and utilize a low level of technology, the meaning of basic education may be different from those more technologically advanced. For countries moving rapidly into industrialization and mechanized agriculture, a different, more complex – although still high-priority – basic education will be needed. Priority interventions should focus on such areas as teachers and teaching, teacher motivation, curriculum, school management, community support, and alternative delivery systems.
- *Development and implementation of a national instructional development strategy elaborated through input by local administrators and teachers.* Such a strategy or policy may be crucial for the planning of the quality aspect of basic education, and should respond to new skill and knowledge requirements of economic productivity and to continuing or new social and familial objectives. The strategy should be informed by international and national research on effective schooling to help determine a core set of interventions worthy of evaluation within local contexts. Included in such a policy could be strategies related to the use of instructional time; instructional materials and instructional style; strategies for coping with individual differences; minimum teacher standards; guidelines and support for principals; and the development of school-level indicators to measure multidimensional learnings, not merely academic achievement. The learning implications of trade-offs between inputs, e.g., poorly paid teachers with small classes versus adequately paid teachers with larger classes, should be explored.
- *Special programs of financial and instructional support for the poor.* Problems of access, equity, quality, and finance tend to be particularly severe among the poor and in remote areas. Children are unable to attend school, or drop out of school, for a wide variety of reasons. Although basic education may be defined differently by country, it is assumed to include all children, if feasible for a country's resources. International experience provides lessons on a broad array of scholarships and other financial assistance schemes targeted at the support of poor children. Special instructional support may need to include some form of distance education to reach peripheral populations.
- *Special scholarships and other assistance for girls from poor families.* Access percentages are not an adequate measure of gender equity. Education authorities have a responsibility to work with other govern-

ment agencies to create the circumstances and conditions for gender parity in educational and social opportunities.

- *Education opportunities for the physically and learning impaired.* With encouragement from the center, the education authorities may take leadership in creating integrated programs in nutrition, health, and special education for this population.
- *Experimentation with new delivery systems, e.g., multigrade classrooms, distance teaching, low-cost technologies.* Resources may not be the critical constraint in school improvement. Allocation of additional funds does not necessarily lead to more effective schools. Education systems vary greatly in the learning gains acquired from similar levels of investments. Initiation of programs implemented in highly industrialized countries may prove too costly for less developed countries.

Policy 2. Developing Effective Secondary Education

Allocation of funds between levels of education will be a persistent issue. However, policies and programs for improvements in secondary education and higher education development cannot wait until objectives of high-quality basic education are fully achieved, since the latter are dependent on the former. Moreover, rapid expansion of basic education accompanied by an influx of enrollments into secondary education creates new problems for secondary and higher education. Risks of unemployment or low income may no longer be confined to early school-leavers, and may include those with secondary and higher education certification without adequate basic skills. Reports from DMCs indicate a growing concern with the current effectiveness of secondary education. Growth is taxing the adequacy of public sector funding. Decision makers may face a dilemma of allocation of resources to existing higher-quality secondary schools or extending funding to create more delivery options and expanding the supply of schools in rural areas. The weak link of secondary education to employment has encouraged the search for workable linkages with industry and the reduction of traditional distinctions between education and training.

A distinction needs to be made between countries that have largely achieved universal primary and basic education (Groups 2, 6, and several countries in Group 3) and those that have not (Groups 4 and 5). The former are likely to give priority to the demand for upper secondary and higher education for the growing population of youth completing basic education.

Priorities and Strategies for Secondary Education

- *Planning and assessment of secondary education in terms of its contribution to the cohesive structure of the system.* Entrance and exit standards may need to be created in keeping with national and local preferences and congruent with the initial and tertiary levels of education.
- *Initial planning for extension of basic education through junior secondary schools.* Especially for countries in which universalization has

not been attained, the priority may be to achieve high-quality primary education. Nevertheless, the planning for the extension of basic education into eight or nine years requires a considerable lead time to avoid crises in quality of staff.

- *Further development of the quality and relevance of secondary education in terms of evolving economic conditions.* This strategy would especially apply to those countries undergoing rapid industrialization, and those in transition to market-driven economic systems. As enrollments expand, several pathways should be developed for secondary education and training, while protecting the transferability across programs. A variety of delivery modes – public and private, formal and nonformal, general and specialized – will be needed to meet the range of demands for secondary education, testing the creativity and capabilities for coordination of central and local governments. Many of these options will necessarily include academic senior secondary schools, general types of vocational education, existing vocational and technical schools and training centers, highly specialized vocational secondary education, apprenticeships, a wide variety of school-enterprise arrangements, and new combinations of general and work-related programs. The challenge to policymakers is to achieve diversification of programs within acceptable levels of cost effectiveness.

Since youth violence and delinquency are on the rise in several DMCs, particularly in urban centers, secondary schools should participate in and perhaps take the leadership of national youth policies. The opportunity to volunteer service and meet community obligations may add to the personal development of youth and encourage their respect for schooling.

- *If necessary, reservation of a number of school places for girls, and information on the number of such places should be widely disseminated.* If conditions so require, single-sex schools should be created. The long-term goal is to equalize access and graduation rates for males and females at all three levels of education.

Policy 3. Developing Effective Tertiary Education

The expansion of the system has already reached higher education in the economically more advanced countries in East and Southeast Asia. Among the three levels of education, from 1990 through 2010 higher education will show the greatest growth. As higher education ceases to be a privilege for a small elite, the market returns from diplomas and other certification will be reduced. A major planning, management, and political question emerges: Who coordinates growth and change in this interdependent system to ensure that there is articulation between levels and the whole system is of acceptable quality? Although various professional organizations may monitor components of the education sector, much of this task will reside with central or provincial agencies.

Priorities and Strategies for Tertiary Education

- *Development of responsiveness of tertiary education to other parts of the system in terms of standards, admission criteria, and curriculum.* Easy transfers across programs and inter-institutional transfers and exchanges should be facilitated. A policy framework may be needed that encourages autonomy by providers, responds to demand, and supports continuing development of teaching and administrative staff. Multiple channels of funding should be utilized. However, governments must decide where public responsibility ends and where private responsibility begins. The funding sources and their management may be different for tertiary education than for other levels. Like other levels, however, tertiary education has a responsibility to help develop public willingness to make education investments. Women's access and treatment in higher education continue to be a special concern. Enrollment projections demonstrate a significant continuing gap into the 21st century in tertiary education between males and females. In addition to exploration of the feasibility of a variety of scholarship schemes, places set aside for women may be needed.

Developing Better Indicators and Information

The devolution of education dialogue and decisions, and the emergence of local strategic education planning, require that new kinds of data, information, and indicators be made available and analyzed at provincial, local, and school levels. Local, national, and cross-national data for informed decisions are commonly not available in many DMCs. This is true at all levels of education policy making, planning, and evaluation from the central education bureaucracy to the school.

The current information systems in DMCs, even if well developed, typically have been designed primarily to support centralized education policy making, planning, and administration. Accordingly, information on schooling moves vertically from school to district to province, then finally to the central level. As planning and implementation of education reform gradually shift to the lower levels of the education bureaucracy, and as new local institutions and networks emerge, information is needed for decision making at these levels. Some of the information needed may already be collected at the school level. In the past, however, little analysis has taken place at this level.

The commonality among education reforms suggests that regionally designed indicators would facilitate cross-country dialogue and research. The preparation of, and exploratory use of, well-developed education indicators could be a valuable continuing training experience for policymakers, planners and researchers.

Policy 1. Strengthening the Policy Relevance of a Regional System of Education Indicators

Better education indicators can help policymakers, administrators, and citizens to monitor national education changes and facilitate cross-country comparisons. When available, carefully constructed indicators allow countries to see themselves in light of performances of other countries. Of equal importance, the local, national, and regional information generated by indicators can inform policy and program dialogue. The monitoring and evaluation of education at all levels is crucial in effective system development, and requires a theoretically grounded and operationally viable indicator system. One of the best sets of education indicators is being developed by the Organisation for Economic Co-operation and Development (OECD). These indicators, and the dialogue that led to their development and use, go well beyond current practice in most Asian DMCs, and provide information on crucial aspects in education policy (OECD 1997).

Strategies:

- *Development over time of (i) a regional education indicator system, (ii) new information collection and processing capacities at the provincial and district levels, and (iii) on-site assessment and monitoring capabilities at the school level.* Regional collaboration with ADB as one partner could help develop a set of indicators to guide much improved country databases. It would provide important insights into the development of the sector and subsectors of education, allow better monitoring of national education changes, and facilitate cross-country comparisons. This undertaking should be a cooperative effort involving ADB, the World Bank, UNESCO and perhaps other international agencies, ministries of education, scholars of education, planning bodies, and national bureaus of statistics (see Chapman 2002). The indicator set should include attention to each major policy area, but also probe deeply into areas where other indicator sets are weak, such as the learning environment, education and work, home conditions, and student achievement.