Dominant Issues of the Next Decade

Nine issues can be expected to dominate the education landscape over the next decade. They provide a backdrop against which to examine issues that education managers must be prepared to address. These issues are:

- a new emphasis on quality improvement;
- increased pressure for efficiency;
- a continued push toward decentralization;
- the evolution of a new balance between public and private responsibility for delivery of education;
- the effective use of information systems in decision making;
- teacher unionization;
- gender diversity in the leadership of the education system;
- securing and allocating resources; and
- the search for effective teacher incentives.

These issues have implications at every level of education management, from the central ministry down to the school. This section will concentrate on eight of these issues, since financing is addressed in a separate booklet in the series (Bray 2002). The section concludes by asking why weak management capacity persists despite the efforts to improve the situation.

A Push for Better School Quality

The rapid influx of students over the last two decades put considerable pressure on school quality. As enrollments shot up, teachers and administrators were hired faster than they could be adequately trained. The leveling of enrollment growth at the primary level across many countries provides an opportunity to reallocate resources to quality improvement (see Box 3). Offsetting this is the possibility that the attention *to improving the quality of primary education and to the growth of secondary education* may clash in a competition for resources.

Implications for Education Managers

Even when resources are available, the problem that administrators face in improving school quality is knowing what inputs and actions will lead to the results they seek. There is little understanding of how to convert these additional resources into improved learning experiences for students. That conversion

Box 3: Quantity and Quality: The Case of Lao PDR

The reduced population growth rates in the region now present an opportunity to reallocate attention and resources to improving quality. Consider the case of Lao PDR, where upper secondary enrollments increased by 1,267 percent between 1975/76 and 1987/88.

Lao PDR: Growth in enrollment in general education between 1975/76 and 1987/88 (percent)

Kindergarten	12,246
Primary	178
Lower secondary	352
Upper secondary	1,267

Source: ADB 1993a.

depends largely on the reasons for the low performance in the first place. If low performance is due to inadequate inputs (e.g., insufficient textbooks or instructional supplies), raising performance might be relatively straightforward. However, low achievement often stems from a more complex constellation of problems. For example, if low student performance reflects some combination of poor teacher performance, low student motivation, poor instructional supervision at the school level, and lack of parental encouragement, it may not be clear how the money can be best spent to resolve the problem – fixing any one weakness may not be sufficient to resolve the multi-source problem.

Increased Pressure for Efficiency

One of the main pressures on education managers throughout Asia (and the world) is to improve the *efficiency* of the education system in which they work. Their efforts encounter two problems. First, many front-line education administrators do not really understand efficiency or how it can be improved: the notion is fraught with confusion. Second, many administrators do not have the authority to make the changes that would be needed to seriously improve efficiency. This section provides an overview of the meaning of education efficiency, how education managers will need to operate to improve efficiency, and the implications for the preparation of those individuals.

What is Education Efficiency?

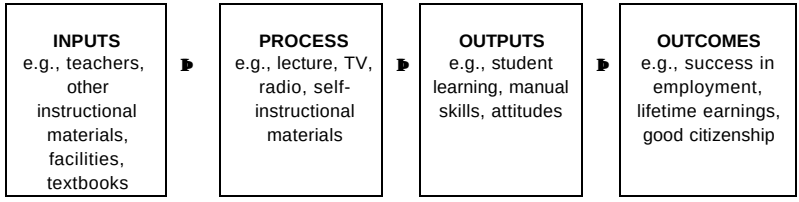
In its simplest terms, efficiency means achieving the desired goals of education at lower cost, or achieving more of those goals without increasing costs. But in reality it is not that simple. Understanding efficiency requires that education leaders work from a model of the education process. One widely used approach

is to think about the education process as consisting of four major parts (as illustrated in the Figure).

Many aspects of efficiency can be understood in terms of the relationships among the components of this model (Windham and Chapman 1990). For example:

- *The interaction of inputs and processes determines education costs*. Presumably, costs can be lowered either by reducing the level of inputs (e.g., fewer teachers, classrooms, textbooks) or by selecting a delivery technology that has a lower cost (e.g., use of programmed instructional materials instead of radio, radio instead of teachers). However, in some countries, serious limitations exist on the availability and quality of inputs and on the range of practical and affordable technologies.
- While education is undertaken primarily to attain desired outcomes, an *education system is typically only held responsible for the outputs of education*, since the outcomes of education are long term and depend heavily on concomitant economic, social, and political conditions.
- *An activity is effective when it leads to the output (or mix of outputs) that should be achieved*. The desired outputs of an education system include academic achievement, positive attitudes, and the development of job skills.
- *Efficiency compares effectiveness to cost*. The concept of efficiency already includes the concept of effectiveness. Hence, it is not necessary

Figure: Flow Diagram of the Education Process



Inputs are the resources used in the production of the education experience, e.g., teachers, textbooks, other instructional materials, school facilities.

Process refers to the means by which education inputs are transformed into education outputs, e.g., lectures, self-instructional materials, small-group work, use of radio.

Outputs are the direct and immediate effects of the education process, e.g., student achievement, attitudes, skills.

Outcomes are the long-term impact of the education process. They are the less direct and immediate results of schooling, and emerge from the interaction of education outputs with the larger social environment.

to talk about the effectiveness and efficiency of a program because, if we say a program is efficient, we are already asserting that it is effective.

- *A program cannot be efficient unless it is effective*. To improve efficiency, we cannot only consider the cost of an activity: we must also consider the quality and effectiveness of the activity. Efficiency can be improved by raising quality, by reducing cost, or through a combination of the two.

Efficiency is commonly confused with lower cost. *It is a mistake to believe that a lower-cost activity is necessarily more efficient.* Similarly, it is a mistake to believe that just lowering the cost of education improves efficiency without considering the quality of the activity. Sometimes lower cost leads to higher efficiency, but not always. Where there are excessive expenditures and waste, greater efficiency and lower costs can happen at the same time. However, where more costly inputs lead to proportionately greater productivity, efficiency may involve higher costs. The key point is that the efficiency of an activity can only be determined by considering the quality of the output, not just the cost of the input.

Throughout Asia, education managers are under enormous pressure to increase efficiency. Unfortunately, this is more often interpreted as a mandate to cut costs than to improve quality. Three reasons help explain this preference for reducing expenditures:

(i) Expenditures tend to be more directly under the control of administrators, while changes to instructional quality require administrators to work indirectly, through teachers.
(ii) Cuts in cost are more quickly obvious than increases in quality.
(iii) Increasing efficiency by improving quality requires a far fuller understanding of the teaching and learning processes than many education administrators have.

The Drive for Efficiency – Implications for Education Management

Education managers mediate education efficiency in the manner in which they allocate expenditures, in the programs they introduce, and in the trade-offs they make between them. If the move toward greater efficiency is to mean anything more than crude cost slashing (with its concomitant threat to quality), administrators need to operate from a clear understanding of *(i) which inputs and processes of instructional delivery contribute to greater student learning*, and *(ii) which inputs and instructional processes can be reduced without serious drops in student learning*. More than that, administrators must be articulate about what they know in order to explain it to the multiple constituent groups with which they work. The temptation is to trade off an effective method of instruction for a lower cost but "promising" one, or to yield to conventional wisdom about what works rather than to rely on more systematic means of assuring that the mix of inputs and instructional strategies being used actually results in the desired outputs. Education managers need to know a great deal about education process as well as about management.

Disincentives for Efficiency

One of the most compelling incentives for greater efficiency in management at *the ministry level* is the belief that resources saved can be reallocated to higher priority needs. This is not always the case. Teacher salaries in some countries amount to over 90 percent of the recurrent budget of MoE, making a reduction in personnel the single most attractive way to recover funds. However, there is usually no assurance that the funds freed up will remain available to MoE to reprogram. In the tight fiscal climate of the last decade, many government savings have been reabsorbed by the central government to reduce budget deficits. This has created an incentive within the education sector to hold on to whatever personnel and resources it has. A reduction does not necessarily lead to greater efficiency, just more work for those who remain.

Increased efficiency *at the school level* is generally less an issue of reducing resources. At the school level, it is more often sought through the introduction of practices aimed at improving instructional quality without a concomitant rise in costs. Increasing efficiency, then, requires education managers to have a substantial knowledge of the instructional process.

Decentralization

Virtually every country in Asia has formulated official policies endorsing some level of decentralization. Although there is considerable variation in the form that action takes, two important forms are: (i) the devolution of authority and responsibility for schools from central-level administration to intermediate-level organization and ultimately to schools, often relying more on local communities for school financing; and (ii) the removal of barriers to private education. These have been widely discussed elsewhere (e.g., Bray 1996b, 1999a; Hannaway 1995; Hannaway and Carnoy 1993; Rondinelli and Puma 1995).

Despite being one of the most heavily researched topics in the education management literature, the merits of decentralization are strongly contested. Advocates argue that decentralization shifts decision making to those closer to the community and school, which in turn leads to decisions more responsive to local conditions and needs. They believe that it is a way to encourage greater community participation and financial support for schools. Opponents suggest that decentralizing authority and responsibility may only shift the same old problems to levels of the system that are less well prepared to cope with them, and that decentralizing management invites corruption and inefficiency. They point out that since communities do not necessarily speak with a single voice, decentralization has sometimes increased tension at the local level. Both groups are probably right to some degree. Whether decentralization is a force for more relevance or an invitation to confusion, it will be determined largely by the leadership at the district, community, and school levels.

Even in the most enthusiastic settings, not all functions are decentralized. Curriculum and testing remain central functions virtually everywhere. However, districts, communities, and schools are taking more responsibility for such activities as teacher selection and deployment, selection of textbooks and other

instructional materials, facilities construction and maintenance and, most importantly, financing.

It is not yet clear that decentralization can legitimately be regarded as an *education* innovation. That is, it is not clear that it results in different experiences for students in classrooms or in how much students learn. Similarly, the impact of greater community financing depends on whether the new funds are in addition to current levels of government funding or are merely displacing it. Much of the value *to education* of greater decentralization will be determined by how communities and schools use their greater autonomy. The wise use of resources to improve the quality of schooling will demand school managers who understand the elements of good instruction and who are not drawn off by pressures to spend money on show rather than substance.

From the literature and international experience with decentralization, four generalizations stand out:

(i) The motives for decentralization are not necessarily related to education. It is often undertaken to increase community financial contribution as a means of easing the financial burden on central government (hidden taxation). In Papua New Guinea (PNG) and Solomon Islands, for example, it has been undertaken as a way of diffusing regional political tensions. There is relatively little evidence to suggest that decentralizing an education system changes the experience of children in classrooms. This is not to suggest that decentralization is not a desirable goal, but only to suggest it may not address education outcomes.
(ii) Many countries have had *de facto decentralization* for a long time due to weak management at the central level or poor communication across all levels. In these settings, local schools have always had to rely on their communities to provide what central government has been unwilling or unable to provide.
(iii) Rather than feeling empowered by decentralization, some communities feel exploited. They are asked to contribute more resources but do not see a corresponding improvement in the quality of education.
(iv) Decentralization places quite different demands on administrators at all levels – at the top, because they have to relinquish authority, and at the local level, because they have to assume greater authority and responsibility.

Implications for Education Managers

In the move toward decentralization, head teachers face three issues. First, in only a few countries do head teachers have the training or background to meet this challenge. Across much of Asia, massive support and training will be needed if decentralized school management is to lead to positive outcomes. Ironically, one of the most widely touted reform efforts shifts enormous new responsibilities to the group of education managers probably least equipped to handle them. Whatever education value decentralization may hold is largely lost if head teachers cannot translate it into concrete actions within their school.

Second, decentralization may lead to greater community pressure for transparency and accountability on the part of school and system managers.

These administrators may have limited experience in understanding what this means or in knowing how to comply.

Third, to the extent that decentralization shifts decision making back to the community, it may stifle education reform. Communities tend to be conservative. Even well-intentioned changes to instructional materials, teaching methods or tests can arouse considerable opposition. Opponents are often unwilling to risk their children's futures on new ideas about what students should study, how teachers should teach, or how learning should be measured. Parents and teachers may perceive it as threatening the balance of advantage. Those who do well under the existing system may resist changes that put their advantage in doubt. Parents are generally interested in seeing the quality of education improve, but they are often *more* interested in protecting whatever comparative advantage their own children might already have gained from their schooling. They want to make sure that their own children do not lose their positioning for whatever benefits may accrue from their education. A corollary of this observation is that *parents, teachers, and head teachers may not always be natural allies in efforts to raise education quality, at least if there is perceived short-term risk to their children*.

The experience of the Philippines was that centrally planned decentralization did not necessarily produce either local-level control or greater resources at the school level (Laya 1987). Lockheed and Zhao (1992) found that locally sponsored (and financed) schools were not managed in the same manner as either government or private schools. Per-student expenditures in local schools were significantly lower than those in government or private schools, with the result that few resources were available about which to make decisions. Local schools reported little local control over either teaching or school management (much less than private schools reported). By comparison, administrators in private schools had significant resources over which to exercise control and significant control over decisions regarding teaching and school management. Administrators of undersupplied schools cannot easily compensate for absence of material and nonmaterial inputs by managerial sleights of hand. They need the basic inputs with which to manage. These results suggest that policies for decentralization alone do not necessarily change what goes on in schools.

Decentralization (and the closely related elements of increased community participation and increased community financing of education) has profound implications for education management. Administrators at lower levels of the system need greater skills in strategic planning and the ability to integrate program elements. As decisions shift to the community and schools, head teachers will assume greater responsibility for financial and program management and consensus building.

Decentralization also can bring unintended problems that education managers at levels above the school need to anticipate. For example, decentralization fosters inequities. One reason that countries centralize some education functions is to ensure an equitable distribution of resources across communities of different economic means. Decentralizing and pushing local communities to take more financial responsibility for their own schools can lead to greater inequities within a country as richer communities are able to finance their schools at a much higher level than poorer communities. It will fall to district,

regional, and central administrators to ensure that decentralization does not undermine equity.

Privatization

Privatization is a form of decentralization, but significant enough in the region to deserve special attention. DMCs are showing new interest in allowing (in some cases encouraging) private schooling, partly in response to the push for decentralization, partly to reduce demand on public education, and occasionally because of evidence that private schools may offer a better education for less money (see Bajracharya, Thapa, and Chitrakar 1997; Research Institute for Higher Education Problems 1997). As Table 8 indicates, private education is more prevalent at the secondary than the primary level of schooling. In Indonesia, for instance, private schooling accounts for 60 percent of secondary school enrollment countrywide.

The dominant arguments for private schooling are that it:

- is of higher quality,
- increases the number of school places,
- is more efficient, and
- encourages additional private moneys in support of education.

However, these arguments are not equally strong. Whether private schools offer better quality instruction or operate more efficiently depends on the type of private school. Bray (1998) distinguishes four types: (i) the elite private schools that generally provide good-quality education at a high price; (ii) schools run by religious or other not-for-profit organizations that provide an alternative to the public system and that may be superior, comparable, or inferior in quality; (iii) low-quality, low-cost institutions that cater to excess demand and give a second chance to those who are unable to get into (or stay in) the public system; and (iv) low-cost institutions that cater to students who could go to public schools but are discouraged from doing so by financial levies or other obstacles.

While private schools usually do increase the number of school places, the impact of those places depends on whether they serve children who would otherwise not be enrolled in public schools or merely provide an alternative opportunity for children who would be enrolled anyway. The evidence supporting their greater efficiency, however, is mixed. Some studies have found private schools to be more efficient than public ones, partly because managers of private schools have more incentives to be efficient and because they are able to employ part-time and other less costly teachers (Bray 1998). The efficiency of elite private schools is subject to question because, while they provide high-quality education, it is typically at a substantially higher price than public schools. In the PRC, for example, private schools are more richly staffed than the public schools. Private schools average one administrator for every four teachers, compared with 1:25 in community schools and 1:7 (overall) in public schools (PRC 1997). The quality of instruction in the low-cost private schools varies widely, but often is

Table 8: Relative Role of the Private Sector in Education
(percent)

Country	*Private primary*	*Private secondary*
India	25	52
Indonesia	13	60
Japan	1	15
Philippines	5	38
Singapore	35	1
Thailand	11	32

Source: James 1993.

poor. Nonetheless, in comparing price against quality, the family contribution for public schooling may be higher than is generally realized, in which case private education might have the advantage. Recent analysis of parent contributions to their children's public education in several East Asian countries found high levels of private funding (Bray 1996a, 1999b). This research suggests that there is more de facto privatization in education than is widely recognized.

There are essentially four ways to increase the proportion of private schools within a country: (i) transfer the ownership of public schools to private individuals or groups; (ii) allow private schools to develop while holding the number of public schools constant; (iii) give direct government support to private schools; and (iv) increase the private financing of schools that remain under government control. The most common strategy across Asia is to loosen regulations on private schools and allow market forces to operate. The education ministry generally still determines the curriculum, but the private schools can implement it in the ways they think best.

Implications for Education Managers

Eventually there could be a loss of administrators and teachers from public schools as private sector alternatives improve. However, the growth of private schools is not yet rapid enough for this to pose a great problem. Perhaps more important is that if private schools are to work effectively, those school administrators need new skills in working with multiple constituent groups – the same skills needed by public school administrators in systems that are encouraging more community-level involvement in schools.

Education Management Information Systems

The quality, availability, and timeliness of information for decision making often has been identified as a key constraint on effective ministry-level management. Only as the dimensions of an education system and the problems that beset it are understood can appropriate planning and management of the education system occur. This has led to a massive attention and resources being devoted to improving national data systems. For example, Cambodia, Indonesia, Malaysia, Nepal, and Philippines have all made substantial efforts to improve their Education Management Information Systems (EMIS) within the last few years

(see Adams and Boediono 1997; Cambodia 1997; Chapman and Dhungana 1991). As a result, many DMCs have made dramatic gains in improving the availability, relevance, and timeliness of data on their education system. The fear now is that the victory may be hollow (Chapman and Mählck 1993). Growing evidence suggests that education managers (and others) do not know how to use the information to improve education processes. The increased ability to collect and analyze information has not necessarily led to improved education practice at the level where it matters most – in the schools and classrooms where the real processes of education occur.

One reason for these shortcomings is that education ministries have collected *too much* information, creating the paradox of EMIS: in too many instances, when senior officials lack data they order that more be collected. The additional data overwhelm the capacity of staff to analyze, interpret, or report, leaving senior officials lacking the information they need. The problem is misunderstood by the senior managers who think the lack of data signals a need to collect yet more, which, when collected, only swamp the system further. The solution is the wiser use of data that is already collected. DMCs have made progress in this direction, but the pace needs to quicken.

Another reason for the disappointing results of EMIS efforts is that advocates have failed to understand the organizational contexts in which education improvement takes place. Education reform is as much a political undertaking as it is an exercise in rational planning. When information systems yield results that do not support the prevailing political views, the data are sometimes suppressed (Chapman and Mählck 1993; Chapman, Mählck, and Smulders 1997).

For all the problems EMIS has encountered in the region, effective planning and management of the education system will require relevant, accurate, and timely data on which to make decisions. The experience of the last decade offers considerable insight into how future information systems might be designed and implemented to support the management of education better.

Implications for Education Managers

Many education administrators lack expertise in interpreting and effectively using data in decision making. At best, projections, trends, unit costs, and cycle costs are a mystery; at worst, they are tools for political opponents. Yet education systems are getting too large and too complex for intuitive management grounded in a network of personal relationships. Administrators will have to learn how to work with data and make data work for them. This is not the stuff of one-week workshops once a year. Because effective use of data is such a fundamental building block in other education improvement efforts, developing a thoughtful strategy for training school and system administrators in the effective use of data for planning and program management has to be one of the highest priorities of the next decade.

Teacher Unionization

Many of the fast growing economies of East Asia have a high degree of unionization. In Taipei,China, for example, 35 percent of the workforce belongs to a union. In the Philippines, unions have special protection under the law. As teachers' unions become stronger, they can be expected to champion members' needs more aggressively for better salaries, benefits, working conditions, and career mobility. While their demands may be appropriate, the pressure brought by unions will constrain the range of options open to education managers.

In particular, unions may object to government initiatives to "reform" education. For example, teachers and their unions have often resisted efforts toward decentralization (Reimers 1997). Teachers fear that communities will place new, greater, and perhaps unreasonable demands on them, and that they will have no recourse or protection. Unions recognize that collective bargaining is easier and more powerful when teacher employment is centralized.

A further issue is that teachers' unions in some DMCs have become highly politicized. They are viewed as partisan in national politics. One consequence is that the needs of teachers (and education more generally) may be either ignored when other political parties are in power or pandered to when their party is in control. Neither situation necessarily benefits the long-term development of education. The needs of teachers as a constituent group, education as an area of national development, and the dynamics of national party politics get confused.

Gender Diversity among Education Administrators

Women are not well represented in administrative ranks, even in countries in which most teachers are female. In Japan, for example, women constitute only 7 percent of primary school principals, 1 percent of lower secondary school principals, and 2 percent of upper secondary school principals. Only 9 percent of the head teachers in Cambodia are female, and most of those are located in major urban areas. In the PRC, though 38 percent of junior secondary teachers are women, only 24 percent of the administrators are female (Table 9).

This underrepresentation of women in administration is a waste of national resources at a time when talented administrators are desperately needed. As the economic development of the region results in increased career options and mobility, efforts to attract and retain qualified education administrators will intensify. Education authorities need to consider the costs of overlooking (or undervaluing) the talent and capacity of women in school and system administration.

Table 9: PRC: Female School Administrators in General Secondary Schools, 1997

	Junior secondary teachers	*Senior secondary teachers*	*Total junior and senior secondary teachers*	*Administrators*
Total	2,892,688	572,071	3,464,759	493,523
Number of women	1,107,288	173,032	1,567,331	120,573
Percentage of women	38	30	37	24

Source: PRC, Department of Planning and Construction 1997.

The Search for Effective Teacher Incentives

The essential task of managers is to allocate resources in ways that move the organization toward its goals. However, given the serious fiscal constraints in many less developed countries, their ability to enhance the most direct incentive, salary, is severely limited. This has led to considerable interest on the part of education policymakers and administrators in identifying nonmonetary, low-cost incentives that would allow them to improve education quality and efficiency with little or no additional monetary cost to government (Kemmerer 1990). Examples of teacher incentives potentially available to education managers to award are presented in Table 10.

Unfortunately, incentive systems have not worked well, for three reasons: First, research in other parts of the world suggests that teacher incentives can increase teachers' job satisfaction and may help reduce teacher attrition as happier teachers choose to remain in teaching. However, there is little evidence to suggest that incentives of the type shown in Table10 actually lead to changes in teachers' classroom practice, and some evidence suggests that they do not (Chapman, Snyder, and Burchfield 1993). The main reason is that, at the level of a national teacher incentive system, the linkage of incentives to behavior is indirect. Second, the management of incentives has often required a stronger management information system than countries have or can easily create (discussed earlier). For example, the use of a future preferential assignment or training opportunity as an incentive for teacher behavior requires the managers to be able to track teacher assignment and training in ways that allow them to anticipate and plan future assignments. Third, the widespread use of a reward will eventually erode its incentive value. If an incentive becomes standard practice, its reward value will drop. Teachers will come to expect the provision of housing, special allowances, or training opportunities. Withholding something that began as an incentive but became widespread will be a problem for management of education.

Why Does Weak Management Capacity Persist?

Weak management capacity is one of the most widely cited critiques of the education systems of DMCs. Virtually all national and regional studies of education systems in the last decade include a call for more management and

Table 10: Types of Teacher Incentives

Remuneration Salary • Beginning salary • Salary scale • Regularity of payment • Merit pay Allowances • Materials allowance • Cost of living • Hardship • Travel In-kind salary supplements • Free or subsidized housing • Free or subsidized food • Plots of land • Low interest loans • Scholarships for children • Free books Benefits • Paid leave • Sick leave • Maternity leave • Health insurance • Medical assistance • Pension • Life insurance • Additional employment	Benefits (continued) • Additional teaching jobs (e.g., adult education) • Examination grading • Textbook writing • Development projects Bonuses • Bonus for regular attendance • Bonus for student achievement • Grants for classroom project **Instructional Support** Instructional materials • Teacher guides - on time - in all subject areas - in appropriate language • Student Textbooks - on time - in all subject areas - in appropriate language - classroom charts • Science equipment • Copy books • Pencils • Chalkboard	Instructional materials (continued) • Safe storage for materials • Pencils • Chalkboard • Safe storage for materials Supervision • Observation • Feedback • Coaching Teacher training • Classroom management • Materials use • Lesson preparation • Test administration Career opportunities • Senior teacher • Principal • Supervisor • Post-service training **Working Conditions** • School facilities • Classroom facilities • Number of students • Age range of students • Collegiality

Source: Kemmerer 1990.

administrative training as a prerequisite to continued system development. Given that weak management has so often been identified and is so widely recognized as a problem, why do such serious deficiencies in management persist? And why are so little data about education managers and administrators available? While virtually every education sector study in the region calls for more training of school head teachers and system managers, few studies report the numbers of individuals working in system or school administration, the amount or nature of their training, or the particular skills in which they need more training. Moreover, it is not uncommon for national data summaries to lump together all noninstructional staff, making it difficult to distinguish district education officers from gardeners and cooks.

Since virtually every national and regional education study in the last decade cites the need to establish more effective strategic planning, better staff deployment, budgeting, program implementation, and generally strengthen education management, why does effective education management remain such a persistent problem? Three reasons should be considered:

(i) Management of the education sector has improved over the last decade, but the problems have become more difficult. Such factors as the intensified and compelling competition for resources by other sectors, the move toward decentralization, and the increasing power of unions have placed new demands on education managers.
(ii) Good management has enemies: some constituents benefit from poor efficiency of an education system; some achieve personal gain. One manifestation is when decision makers do little or nothing to fix redundant or confused lines of responsibility and authority across different units of a ministry. The political costs of deciding (and antagonizing a potential ally) are perceived to be greater than the costs of allowing the confusion to continue.
(iii) Turnover of trained staff has been a persistent problem. Furthermore, effective training only exacerbates the problem. Training changes the opportunity cost of remaining in education, as administrators develop skills that make them more competitive for better-paying private sector employment. Training is not, then, something that can be delivered once and considered done.

Most studies conclude by calling for more training to solve "the management problem." But training is the solution only if lack of training was the problem. In many DMCs, relying only on training to improve management represents a misunderstanding of the problem. While undoubtedly more management and leadership training are needed, training tends only to impart technical skills in specific facets of management (e.g., budgeting, analyzing trend data, evaluation). Education decision making, however, is a political process. Managers have not always been able to implement their new knowledge due to the political constraints within which they work. They have not necessarily been given the tools with which to work. If they control no meaningful incentives or disincentives, moving the education system toward greater quality and efficiency is a losing proposition. There is a concern that training is sometimes used as a stall: by offering training, governments appear to be offering a solution, but without committing to fix the underlying problems that beset education management.

Table 11: Anticipated Impact of Major Trends in Asian Education on Education Management

Trend	***Impact on central government management of education***	***Impact on intermediate levels of education ministry management***	***Impact on school-level management***
Quality	• Requires staff who have considerable technical knowledge about the education process (e.g., what inputs are likely to improve student learning).	• Requires staff who have considerable technical knowledge about the education process (e.g., what inputs are likely to improve student learning).	• Head teachers may need to get more involved in instructional supervision.
Efficiency	• May lead to a reduction in central staff. • Requires staff who have considerable technical knowledge about the education process (e.g., what inputs are likely to improve student learning). • Central staff must find effective ways of working cooperatively with teachers to ensure that new initiatives are implemented at the school level.	• May lead to a reduction in staff. • Staff need to have stronger technical knowledge about the education process.	• Head teachers are pressured to find new local resource streams *and* to provide more effective teacher supervision. • Head teachers need more training in community relations and in the technical aspects of teacher supervision.
Decentrali-zation	• Threatens incumbents with loss of authority and prestige. • May result in central staff being reassigned to regional or district education offices. • Requires staff who can negotiate and work effectively with multiple constituent groups.	• Could increase work-load in some areas of responsibility. • May require a shift in relationships with local schools, away from enforcement of rules, toward the provision of advice and assistance. • Credibility of intermediate-level officials may shift from being grounded in authority to perceived expertise in being able to assist local schools and communities.	• New responsibilities are piled on head teachers. • May encounter teacher resistance. • Creates conflict with teachers, who want to be able to bargain collectively. • Increased conflict among constituents at local level as disagreements with national policy gives way to local debate. • Head teachers will have to know more about what actions (and expenditures) improve student learning. • Head teachers will have more responsibility for initiating school improvement efforts. They must be able to design programs.

Table 11 (cont'd)

Trend	*Impact on central government management of education*	*Impact on intermediate levels of education ministry management*	*Impact on school-level management*
Increased community financing of schools	• Central government funding of education may drop if communities are seen to be picking up more financial responsibility. • Inequalities among schools and districts increase.	Not applicable	• Head teachers need to know how to handle and account for money. • Head teachers need to know how to spend money in ways that lead to better student learning.
Unionization	• Less latitude in mandating policies that affect teachers' conditions of work.	• Less latitude in mandating policies that affect teachers' conditions of work.	• Head teacher actions are constrained by teacher union rules.
Information	• Officials at all levels come under more pressure to articulate rationale and justify decisions. • Officials have less opportunity to make decisions based on self-interest. • Changes power relationships in the ministry, favoring those who know how to interpret and use data. • Threatens informal communication system.	• Officials at all levels come under more pressure to articulate rationale and justify decisions. • Changes power relationships in the ministry, favoring those who know how to interpret and use data.	• Requires most head teachers to learn new area of content. • More pressure to provide data to central ministry.
Improved communication technology (cellular phones, Internet, etc.)	• Officials can communicate policies and programs to school more easily; schools can direct questions directly to central ministry staff.	• Officials can communicate policies and programs to school more easily; schools can direct questions directly to central ministry staff.	• Schools lose some of their independence as central ministry oversight becomes easier.
Push to expand secondary education	• Growing competition for resources between primary and secondary subsectors.	Not applicable	• New career opportunities in management as number of secondary schools expands.
Increasing private cost of higher education	• More pressure for public subsidy to contain or reduce private costs.	Not applicable	• Student protests and conflicts over higher fees and other costs.