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Trends in Educational Administration in Developing Asia

David W. Chapman

The success many Asian countries have experienced in expanding access to and quality of basic education over the past three decades has been due largely to a declining enrollment rate, a booming economy, and national development strategies that favored education. However, new pressures created by urgent needs in health, environment, and population combined with an economic slump are fueling a rapid move toward more decentralized education systems. Decentralization in turn is placing new pressures on the school headmaster that few are prepared to meet. Across much of Asia, two of the most urgent challenges of the next decade will be to first strengthen and then support school level administration.

At no time in history in no region of the world have education systems expanded as fast or as effectively as have those in Asia, particularly East Asia, in the past 30 years. Enrollment rates in many countries have now reached nearly 100%. Some East Asian countries lead the world in cross-national comparisons of student achievement. Although the successes of the region have fueled enormous world interest in how such accomplishments were achieved in such a relatively short time, the concern within the region itself is how those successes can be sustained and extended. Indeed, countries are now caught in a convergence of trends that pose a serious challenge to the continued development of education systems in the region. Strong competing

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forces in health, population, and environment sectors are making compelling demands on the resources needed for continued system improvement.

Whether the enormous success of the past 30 years continues or erodes in the face of these new pressures depends largely on the quality and wisdom of those who administer, manage, and guide the system at all levels—from senior ministry officials to rural school principals. Yet, despite the education successes across the region, many countries of the region consider the management of their education system to be weak, and virtually all education system shortfalls are attributed at least in part to weak management capacity (Chapman, 1998). The need to improve school administration has been one of the most widely advocated and least examined elements in the effort to strengthen education in Asia.

This article argues that the education successes that Asian countries have experienced have been due largely to the convergence of three demographic and economic trends. Together, these have resulted in increased school participation rates, a leveling of enrollment demand, and formation of a financial base that has allowed substantial national investment in education. As a result, countries have now gained a much-needed window of opportunity to focus on quality improvement. Governments are seizing the opportunity; improving school quality is a stated priority of practically every country in the region. Yet, this commitment to quality comes at the very time that virtually all countries in the region are also committing to greater decentralization of their education systems, a process in which many more decisions are being shifted to those at lower levels of the education system. The central premises of this article are (a) that the interaction of these new trends—toward quality improvement on one hand and decentralization on the other—now poses significant new challenges for the administration of education systems across Asia and (b) that the group hardest hit and least prepared for these pressures is the school headmaster.

Within the increasingly decentralized education systems across the region, school headmasters will play a greater role in instructional supervision, community relations, and school management than they have in the past. They will take new responsibility for decisions that were previously planned, funded, and for the most part implemented centrally. Yet, only in a very few cases have headmasters been trained for those responsibilities. The education decentralization movement sweeping Asia is placing professional demands on headmasters they are ill prepared to assume. If school quality is to increase, school-level administrators across developing Asia need to operate from a clearer, more articulate understanding of the instructional process and a sharper understanding of how they must operate to convert the

resources available to them at the community level into effective instructional programs in their schools.

If the education systems of developing countries of Asia are to consolidate and extend their gains of the past 30 years and accommodate both the pressure to improve quality and the pressure to decentralize, urgent new attention will need to be given to the preparation and support of the school headmaster.

WHEN TRENDS CONVERGE¹

The successful expansion of education across Asia over the past three decades is largely a story of trends converging. The intersection of demographic and economic trends created a unique window in which new funds for education became available at the very time that enrollment growth slowed across much of the region. Many countries used their opportunities well—to expand access and increase quality. To understand the challenges of the next decade, it is important to understand the dynamics of the previous.

Changing Demographics

The population of Asia is estimated at more than 3 billion people, about 53% of the world's population (Asian Development Bank [ADB], 1997). More important than the overall numbers, however, has been a dramatic change in the age distribution. Between 1975 and 1995, the percentage of the Asian population younger than 15 years of age declined sharply, dropping from 40% to 32%. During that same period, the proportion of the working-age population (ages 15 to 64 years) increased from 56% to 63%. This resulted in a drop in the dependency ratio—the proportion of the population assumed to be outside of the labor force (those ages 1 to 15 years and older than 65 years and presumed to be dependent on others for their maintenance) to the total population (ADB, 1997; Lewin, 1998). Dependence ratios across Asia are reported in Table 1.

This rapid shift in demographics meant more citizens were of working age, paying taxes, saving, and contributing to the economic development of their countries (ADB, 1997). As the birth rate declined, fewer children were entering school and presumably drawing down on those taxes and savings. This demographic shift had two consequences. First, there was more money available to finance both the public and private costs of education. Second, there were fewer children to educate (ADB, 1997; Lewin, 1998). This "breather" allowed countries the opportunity to extend access to those still not in school and eventually to direct more funds to quality improvement.

TABLE 1 Selected Demographic Conditions

	Midyear	Population Annual Growth	I	Dependency ratio ^d	Expe at .	ife ectancy Birth ears)	Total Fertility	Infant Mortality Rate per 1,000
	Population (in millions)		Urban Population ^e	ratio 0 to 14	Mala	Famala	Rate per Woman	Live Births
Country	(in millions) 1995	1995	(%) 1995	(%) 1995		1993	1995	1995
Afghanistan	19.66	2.0 ^b	20.0	73	43 ^f	45 ^f	6.9 ^f	
Bangladesh	118.23	1.8	18.3	75	56	56	3.5	79
Bhutan	1.77	2.4	6.4	79			5.9 ^J	
Cambodia	10.02	3.4 ^b	20.7	78	50 ^f	54 ^f	4.7	108
People's Republic								
of China	1220.22	1.2	30.3	39	68	71	1.9	34
Cook Island	s 20.2	1.9	60.4					
Fiji	0.78	1.6	40.7	65	70 ^f	74 ^f	2.8^{f}	22^{f}
Hong Kong	6.12	1.6	95.0	28	76	82	1.2	5
India	929.00	1.9	26.8	64	61	61	3.2	68
Indonesia	197.46	1.7	35.4	67	61	65	2.7	51
Kazakhstan	16.82	-0.2	59.7	51	65	74	2.3	62
Kiribati	0.078	2.3	35.7		56 ^f	58 ^f	3.8^{f}	65 ^f
Korea	44.91	0.9	81.3	33	68	75	1.8	10
Kyrgyz	4.46	0.7	38.9	64	65	73	3.3	30
Lao	4.88	2.6	21.7	86	50	53	6.0	90
Malaysia	20.14	2.5	53.7	65	69	73	3.4	12
Maldives	0.254	3.5	26.8	94	63 ^f	61 ^f	6.7 ^f	55 ^f
Marshall								
Islands	0.55	3.8	69.1		61 ^g	64 ^g	7.2 ^f	55 ^k
Micronesia	0.12	1.1	28.0				5.1 ^f	37 ^f
Mongolia	2.46	1.6	60.9	68	63	65	3.4	55
Myanmar	45.10	1.9	26.2	59	57	60	4.1 ⁱ	82¹
Nauru		1.9 ^c	13.7					
Nepal	21.45	2.6	100.0	81	55	54	5.3	91
Pakistan	136.25	3.0	34.7	79	61	63	5.2	90
Papua								
New Guine	ea 4.30	2.0	16.0	69	56	57	4.8	64
Philippines	67.84	2.5	54.2	66	64 ^h	68 ^h	3.7	39
Samoa ^m	0.17	0.4	21.0		67 ^f	71 ^f	4.3 ^f	23 ^f
Singapore	3.33	2.0	100.0	31	73	78	1.7	4
Solomon Isl	ands 0.378	3.7	17.1	84	61 ^f	63 ^f	5.2 ^f	42 ^f
Sri Lanka	17.93	1.2	22.4	46	70	74.	2.3	16
Taipei, Chin		1.0	57.4		72 ⁱ	78 ⁱ	1.8 ⁱ	5 ⁱ
Thailand	58.24	1.2	20.0	42	66	72	1.8	35

(continued)

TABLE 1 Continued

Country	Midyear Population (in millions) ^t 1995	' '		Dependency ratio ^d 0 to 14 (%) 1995	Expedit At I (year) Male	ife ctancy Birth ars) Female 1993	Total Fertility Rate per Woman 1995	Infant Mortality Rate per 1,000 Live Births 1995
Tonga	0.98	0.3	41.1		67 ^f	71 ^f	3.4 ^f	19 ^f
Tuvalu	0.010	1.4	46.2					38 ¹
Uzbekistan	22.76	2.2^{c}	41.3	71	66	72	3.7	30
Vanuatu	0.169	2.7	19.3	81	59 ^f	61 ^f	5.1 ^f	47 ^f
Vietnam	73.79	2.2	20.8	64	63	68	3.1	41

SOURCE: United Nations Educational, Scientific and Cultural Organization (1998b); Asian Development Bank (1996); World Bank (1997).

- a. Except for Cook Islands, Fiji, Kiribati, Maldives, Marshall Islands, Micronesia, Nauru, Solomon Islands, Tonga, Tuvalu, Vanuatu, and Western Samoa, where units are in thousands.
- b. Figures may be influenced by refugees to an unknown extent.
- c. Annual population growth rates refer to the growth of the population for the last 5 years avail-
- d. Estimated data using medium variant projections except for Cook Islands, Kiribati, and Mar-
- e. Based on national definitions incorporated in the latest available census.
- f. Refers to the period 1989 to 1994.
- g. Refers to 1994 to 1995.
- h. Refers to 1995.
- i. Refers to 1993.
- j. Refers to 1992.
- k. Refers to 1989.
- 1. Refers to 1990.
- m. Previously Western Samoa.

One consequence was that much of East Asia has achieved nearly universal primary education since 1975. At the same time, expenditure per student rose. For example, the decline in the size of the school-age cohort between the mid-1960s and mid-1970s resulted in a slowing of secondary enrollment growth to about 3% to 4% annually; but during that same period, there was a 10% to 13% increase in per pupil expenditure (ADB, 1997).

Fast Track Economic Growth

Whereas the change in the dependency ratio has been an important factor fueling the economic growth enjoyed by much of the region over the past two

TABLE 2 Changes in Gross Domestic Product (in percentages)

Country	1996	1997	1998
Thailand	+5.5	-0.4	-7.0
South Korea	+7.3	+5.5	-5.0
Malaysia	+8.6	+7.8	-2.0
Indonesia	+8.0	+4.6	-12.5

SOURCE: Samuelson (1998).

decades, that economic growth in turn has been the engine driving the wider transformations that have swept Asia. From 1965 to 1990, gross domestic product (GDP) in Asia as a whole grew by an annual average of 3.8% per person (ADB, 1997). Average income per person rose from 13% of the U.S. level in 1965 to 26% of the U.S. level in 1990. East Asia did even better. Per person GDP in the East Asia subregion rose from 17% of the U.S. level in 1965 to 57% of the U.S. level in 1990. Although not all countries have enjoyed this growth and there are sharp disparities among countries, the region overall thrived. The improved economy led to a sharply improved health and nutrition, a reduction in poverty, and widespread extension of educational opportunity. The greater prosperity allowed both governments and individuals to pay for more and better education (ADB, 1997). A booming economy also increased the rewards of being educated as graduates were able to find meaningful employment.

It is not clear that this level of prosperity will continue; the recent financial problems sweeping the region suggest not. As illustrated in Table 2, the leading economies in Asia experienced a sharp downturn in GDP during 1997 (Samuelson, 1998). This may foreshadow a new trend; at the least, it will introduce a new level of caution. The money that financed education growth in the past may not be there in the future.

Investment in Education

The success of education in Asia is due to more than the good economy; it reflects a longstanding public commitment to basic education in many countries of the region. One of the defining differences between the high performing and underperforming Asia economies is their investment in basic education over the past three decades. Early investment in human resource development in general and education in particular is widely credited as a key component in fueling the economic take-off that in turn allowed countries to

TABLE 3 Public Expenditures on Education in Selected Asian **Development Bank Developing Member Countries, 1995**

	Public Expenditures on Education as a Percentage of Gross	Public Expenditures on Education as a Percentage of Total		age Distribu t Expenditu	
Country	National Product	Government Budget	Primary	Secondary	Tertiary
Bangladesh	2.3	8.7	44.2	43.3	7.9
Bhutan	4.0	10.0	41.5	18.4	22.3
Cambodia	1.0	10.0		_	_
China, People's					
Republic	2.3	12.2	34.5	34.7	19.1
Fiji	5.4	18.6	50.5	37.0	9.0
Hong Kong, China	2.8	17.0	26.9	39.3	30.0
India	3.5	12.1	38.0	27.0	14.7
Indonesia	2.2	_	_	_	_
Kazakhstan	4.5	17.6	_	_	_
Kiribati	6.3	17.6	_	_	_
Korea, Republic of	3.7	17.4	43.5	39.4	6.9
Kyrgyz Republic	6.8	23.1	_	_	_
Lao, People's					
Democratic Repub	olic 2.4	_	42.2	43.5	3.9
Malaysia	5.3	15.5	38.6	37.4	16.1
Nepal	2.9	13.2	44.5	17.7	28.1
Philippines	2.2	_	63.9	10.1	22.5
Samoa	4.2	_	52.6	25.2	_
Solomon Islands	4.2	_	56.5	29.8	13.7
Sri Lanka	3.1	8.1	_	_	13.7
Taipei, China	6.2	17.9	_	_	_
Thailand	4.2	20.1	54.5	21.2	16.3
Tonga	4.7	17.3	38.8	24.2	7.3
Vanuatu	4.9	18.8	58.0	29.1	3.2
Vietnam	2.7	7.4	40.0	20.0	16.0

SOURCE: United Nations Educational, Scientific and Cultural Organization (1995, 1998b); various national sources. NOTE: — = not available.

finance the continued expansion of access (ADB, 1997; Lewin, 1996, 1998). The decision to invest in basic education was not a foregone conclusion and was not uniform across the region. However, those countries that made the investment are now the economic and education leaders in the region. Table 3 reports the growth in government expenditure on education across Asia both as a percentage of GDP and as a percentage of the annual government budget.

Whereas these trends help explain the progress of the past, new pressures are now developing that are creating a very different context for the next decade.

DOMINATING ISSUES OF THE NEXT DECADE

The unfolding of these trends has created the current context of success amid disparities. The situation is now changing, largely in response to four important changes now under way across much of Asia. These changes will dramatically reshape the role and responsibilities of school-level administrators across much of developing Asia.

Universal Primary Education and the Focus on Quality Improvement

The countries of East Asia have nearly achieved universal primary education. As Table 4 indicates, all but a small percentage of the children are now in school. By the 1990s, the primary gross enrollment rates (GERs) were close to 100% for both boys and girls in most East Asian countries (Lee, 1998; Lewin, 1996; United Nations Educational, Scientific and Cultural Organization [UNESCO], 1997, 1998a). GERs in South Asia and the transitional economies were low in the 1980s but by 1995 had increased to more than 70% with some close to 100% (Lee, 1998). Although an impressive achievement, the rapid influx of students over the past two decades put considerable pressure on school quality. As enrollment shot up, teachers and administrators often were hired faster than they could be adequately trained or supported once back in the schools. In many parts of the region, instructional quality dropped.

The near universal access and leveling of enrollment growth at the primary level occurring in many countries provides an opportunity to reallocate resources to quality improvement. Consequently, one major education policy initiative across the region over the next decade is likely to be a push toward higher quality instruction (Chapman & Adams, 1998; Development Academy of the Philippines, 1997; Fuller & Holsinger, 1993; Government of Indonesia, 1997; Government of Nepal, 1997; Government of Papua New Guinea, 1997; Government of Vietnam, 1997; Kyrgyz Republic, 1997; Pakistan Institute of Development Economics, 1997; People's Republic of China, 1997). One consequence of this shift toward quality is that educators at all levels will need a better understanding of which actions are likely to improve education.

 ${\bf TABLE}\ 4$ Primary Gross Enrollment Ratio (GER) by Gender in Asian Development Bank Developing Member Countries

			1980			1985			0661		Cin	Circa 1993		1985	3661
-	Country	F	М	M/F	F	М	M/F	F	M	M/F	F	М	M/F	Total	Total
. 1	Afghanistan	12	54	4.5	13	27	2.1	19	35	1.8	29	59	2.0	20	49
. –	Pakistan	27	51	1.9	30	99	1.9	36	9/	2.1	49	80	1.6	44	74
. ¬	Nepal	49	117	2.5	47	101	2.1	77	128	1.2	85	129	1.5	80	110
. –	Papua New Guinea	51	99	1.3	63	73	1.2	65	9/	1.2	57	80	1.4		
. –	Lao People's Democratic Republic	104	123	1.2	100	121	1.2	93.3	116	1.2	92	123	1.3	111	107
. –	India	29	86	1.5	80	110	1.4	84	111	1.3	91	113	1.2	96	100
. –	Bangladesh	46	9/	1.7	52	9/	1.5	73	84	1.2	105	128	1.2	63	
	Solomon Islands	65	85	1.3	65	83	1.3	78	06	1.2	87	102	1.2		
•	Vietnam	106	111	1.0	100	106	1.1							103	114
. –	People's Republic of China	103	121	1.2	114	132	1.2	121	132	1.1	116	120	1.0	123	118
. –	Hong Kong	106	107	1.0	105	106	1.0	103	102	1.0	66	86	1.0	106	96
. –	Korea, Republic of	111	109	1.0	86	96	1.0	105	105	1.0	102	100	1.0	26	101
. ¬	Malaysia	92	93	1.0	100	101	1.0	93	93	1.0	93	93	1.0	101	91
	Singapore	106	109	1.0	113	117	1.0							111	
. ¬	Indonesia	100	115	1.2	114	120	1.0	114	117	1.0	113	117	1.0	117	114
. –	Philippines	110	112	1.0	107	108	1.0	111	113	1.0	111	110	1.0	107	116
•	Sri Lanka	100	105	1.0	101	104	1.0	102	105	1.0	105	106	1.0	103	113
•	Thailand	26	100	1.0				66	100	1.0	26	86	1.0	96	87
. –	Myanmar	68	93	1.0	96	101	1.0	104	107	1.0				86	103
-	Cambodia	126	123	1.0							120	118	1.0		122
. ¬	Kazakhstan										98	98	1.0	88	96
. ¬	Kyrgyz Republic	115	118	1.0	123	123	1.0	112	112	1.0	112	110	1.0	122	107
. –		119	119	1.0	122	122	1.0	126	126	1.0					
. –	Maldives										133	136	1.0		134
	Vanuatu							103	109	1.1					
	Uzbekistan	80	83	1.0	85	88	1.0	81	83	1.0	77	77	1.0	87	77
	Micronesia										94	94	1.0		
 291	Mongolia	107	107	1.0	83	77	6.0	83	75	6.0				103	88
•															

SOURCE: Lewin (1996); United Nations Educational, Scientific and Cultural Organization (1997, 1998a).

Although virtually every country in Asia has designated improving educational quality as one of their highest national priorities over the next decade, when pressed to proclaim how that quality will be improved, the answers are varied and vague. In fact, educational quality is one of the most confusing concepts in the literature. It is variously used to refer to inputs (number of teachers, amount of teacher training, and number of textbooks), processes (amount of direct instructional time and lecture vs. other means of presentation), outputs (test scores), and outcomes (ability to perform well in subsequent employment) (Chapman & Adams, 1998; Windham & Chapman, 1990). For present purposes, *educational quality* refers to the extent to which an education system provides relevant, age-appropriate, and culturally appropriate instruction. It is typically measured in terms of student learning.

Focus on quality improvement: Implications for educational administrators. Even when resources are available, the problem administrators face in improving school quality is knowing which 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 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. Low achievement often, however, stems from a more complex constellation of problems. For example, if low student performance reflects a 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 multisource problem.

Increased Competition for Resources

National budget priorities are formulated with attention to immediacy of impact and severity of consequence. The most immediate and catastrophic threats are generally given priority. In this equation, education tends to lose. Even the strongest advocates of education acknowledge the threats posed by degradation of the environment (pollution and deforestation), the rise in HIV/AIDS and other health threats, persisting poverty, and continued urbanization (ADB, 1997; Beyrer, 1998; Bloom & Godwin, 1997; Bruestle, 1993; Chapman, 1998; Corbin, 1998; Feldman & Miller, 1998; Imai, 1998; Jalal, 1993; Linge & Porter, 1997; Panayotou, 1993; Park, 1995; Rogers, 1993;

Sanderson, 1996; United Nations, 1997). It is not that education is viewed as less important, but other issues have taken on more urgent dimensions.

The pressures on national development posed by poverty, epidemic, and pollution are commanding because they threaten highly probable short-term catastrophe if ignored, whereas education offers less certain promises of long-term gain. Education managers of the future will need to become increasingly articulate about the pay-off of continued investment in education, increasingly knowledgeable about strategies that are effective in producing those outcomes, and skilled at moving the system toward those ends with even fewer resources than in the past.

In most countries, the growth rate in the education expenditure budget exceeds the average for government, and often education (along with defense) is the most rapidly expanding sector of government activity (Windham & Chapman, 1990). This is unlikely to continue. As the opportunity costs posed by educational expenditures (relative to alternative social investments) increases, new pressures will mount to lower costs, develop new sources of funding, or off-load education activities to the private sector.

As a result, 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 several problems. Many front-line education administrators do not really understand efficiency or how it can be improved. The notion is fraught with confusion. Furthermore, administrators frequently do not have the authority to make the changes that would be needed to seriously improve efficiency.

As Windham and Chapman (1990) argued, efficiency is a function of both cost and quality. Efficiency can be increased either by lowering cost without a concomitant drop in quality or by raising quality without a corresponding increase in cost. 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. Although education administrators throughout Asia are under enormous pressure to increase efficiency, they usually interpret that charge as a mandate to cut costs rather than improve quality. Three reasons help explain this preference for reducing expenditures over improving effectiveness (e.g., school quality). First, expenditures tend to be more directly under the control of administrators, whereas changes to instructional quality require administrators to work indirectly through teachers. Second, cuts in cost are more quickly obvious than increases in quality. Finally, increasing efficiency by improving quality requires a far fuller understanding of the teaching and learning process than many education administrators have.

The drive for efficiency: Implications for education administrators. Education administrators are the ones who mediate educational 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 which inputs and processes of instructional delivery contribute to greater student learning and which inputs and instructional processes can be reduced without serious drops in student learning. More than that, they must be articulate about what they know 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 ensuring that the mix of inputs and instructional strategies being used actually results in the desired outputs. Education administrators need to know a great deal about the education process as well as about management (Fuller, 1987; Wang, Haertel, & Walberg, 1993).

Decentralization of Educational Decision Making

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. Despite being one of the most heavily researched topics in educational development literature and one of the most widely pursued strategies in the region, the merits of decentralization are heavily contested (Bray, 1996b, 1996c; Hannaway, 1995; Hannaway & Carnoy, 1993; Rondinelli & Puma, 1995; Rugh & Bossert, 1998). Advocates argue that decentralization shifts decision making to those closer to the community and school, which leads to decisions more responsive to local conditions and needs. They believe it is a way to encourage greater community participation and financial support of schools. Opponents suggest decentralizing authority and responsibility may only shift the same old problems to levels of the system less well prepared to cope with them and that decentralizing management invites corruption and inefficiency. They point out that because communities do not necessarily speak with a single voice, decentralization has sometimes led to increased tension at the local level. Both groups are probably right. Whether decentralization is a force for more relevance or an invitation to confusion will be determined largely by the leadership at the district, community, and school levels.

Although the educational impacts of decentralization may not yet be clear, one by-product of decentralization is the expectation that headmasters will

play a greater role in instructional supervision, community relations, and school management, activities for which many have never been trained. Headmasters in many parts of developing Asia have little or no formal preparation to understand the trade-offs (in terms of learning outcomes) associated with the resource allocation decisions that many are being asked to make. Also, they do not necessarily have the political skills needed to build the community participation and support that decentralization is supposed to foster. The move toward greater decentralization will place demands on school headmasters that many will be unable to meet (Bray, 1996a, 1996c; Chapman, Mählck, & Smulders, 1997; Epstein, 1995; Hannaway, 1995; London, 1997). One of the current ironies of educational development is that the push toward decentralization now under way (to varying degrees) in virtually all countries in the region shifts more responsibility to the group of educational administrators least ready to accept it.

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 things as teacher selection and deployment, selection of textbooks and other instructional materials, facilities construction and maintenance, and most important, financing (Bray, 1996a, 1996b, 1996c; Fiske, 1996; Lauglo, 1995; Rondinelli & Puma, 1995; Shaeffer, 1992; Wheeler, McDonough, Gallagher, Sookpokakit, & Duongsa, 1997).

It is not yet clear that decentralization can legitimately be regarded as an educational innovation. That is, the decentralization has been advocated for its contributions to democracy development, community development, and financial relief. However, it is not clear that it results in different experiences for students in classrooms or in how much students learn. The impact of greater community involvement and local financing depends on whether the new monies are in addition to current levels of government funding or are merely displacing that funding. Much of the value to education of greater decentralization will be determined by how communities and schools use their greater autonomy (Bray, 1996a, 1996c; Fiske, 1996; Rugh & Bossert, 1998). The wise use of resources to improve the quality of schooling will demand school managers who understand the elements of good instruction and who do not succumb to pressures to spend money on show rather than substance.

Decentralization: Implications for education administrators. 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 (Bray, 1996b; Fiske, 1996; Rondinelli & Puma, 1995). In the move toward decentralization, head-masters face three issues: First, in only a few countries do headmasters currently 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. It is ironic that 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 educational value decentralization may hold is largely lost if headmasters 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 educational reform. Communities tend to be conservative (Chapman, 1998; Chapman et al., 1997; London, 1997). Even well-intentioned changes to instructional materials, teaching methods, or tests can arouse considerable opposition (Chapman & Snyder, 1992; London, 1997). Parents are not prone to risk their children's future on new ideas about what students should study, how teachers should teach, or how learning should be measured. Parents and teachers may perceive such shifts as threatening the balance of advantage. Those who do well under the existing system may resist changes that put their advantage in doubt. As interested as parents are in seeing the quality of education improve, they are often more interested in protecting whatever comparative advantage their own children might have gained from their schooling. They want to make sure their own children do not lose their positioning for whatever benefits may accrue from their education (London, 1997). A corollary of this observation is that parents may not always be natural allies of teachers and headmasters in efforts to raise educational quality, at least if there is perceived short-term risk to their children.

One of the issues of the next decade will be involving communities in meaningful ways without stifling new instructional materials and practices. Central governments face their own challenge in this regard. It is not yet clear how central government can encourage quality in a system in which much (or all) of the money comes from the community.

Decentralization also can bring other problems that education managers at levels above the school need to anticipate. For example, decentralization fosters inequities. One reason that countries centralize some educational 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.

This is not to say that productive dialogue cannot develop. In most communities, there are shared education concerns—such things as persistent dropouts, high pupil absenteeism, school-work relationships, and the utilization of school fees. These concerns under certain conditions may provide a common purpose and facilitate community dialogue on school matters. This does not happen automatically; there needs to be support such as previous community experience in participatory decision making, willingness of governments to share control while continuing to provide resources, and commitment on the part of local organizations to a process of continued learning. Most important, community participation depends on the openness of community members to the possibility that new local practices emerge from examination and study of local experience (Shaeffer, 1992).

Increased Community Contribution to Support Their Local Schools

As national budgets get tighter, governments essentially have only a limited number of strategies available to them for finding new funds to support education. They can (a) lower costs (presumably without lowering quality), (b) raise taxes, (c) raise fees paid by the student and their families, (d) encourage (or require) higher community subsidization of their local schools, or (e) some combination of these. Because salary accounts for more than 90% of the education budget in many countries, lowering costs is problematic for both political and educational (quality) reasons—among other things, underpaid and unemployed teachers can become a potent political force. Raising taxes is always unpopular. Many families are already paying substantial private costs of sending their children to school (even when it is officially free) (Bray, 1996c). With alternatives constrained, strategies for increasing community support have taken on new salience. Consequently, one purpose of decentralization is to encourage more financial support from the community for the schools.

Community contributions: Implications for education administrators. Increased community contributions come at a price. Many communities expect their investment to be reflected in a better educational experience for their children. Some expect more meaningful participation in decisions that affect their school such as teacher selection. Indeed, much of the advocacy for greater community involvement is grounded not in claims that communities should pay more but in the belief that community participation can increase responsiveness of schools to local needs, which in turn will enhance quality. In short, increased local support will require headmasters to use community money wisely, be able to demonstrate pay-off, and operate in a transparent way.

EDUCATION ADMINISTRATION IN ASIA

How countries respond to these changes depends in part on how their education system is organized and how responsibilities are allocated across levels.

Education management in virtually all developing countries of Asia follows a pyramid model in which national policy, programs, and logistics are formulated by a central ministry of education organized into a set of divisions, bureaus, and units. This central ministry then works through a network of provincial, regional, and district education offices that largely duplicate the structure of the central Ministry of Education (MOE) and are responsible for ensuring that central policies are communicated and implemented in the schools. Individual schools are managed by headmasters whose authority and responsibility differ by country but usually involve some combination of school management, school-ministry communications, school-community relations, and instructional supervision. The administrative and management issues at the various levels of the pyramid differ, and given the new pressures for decentralization and community participation, are changing dramatically.

Central Level Management—Growth and Elaboration

So dramatic has been the growth in the size of education systems over the past 20 years that across much of Asia, education is the largest public sector employer (after the military) and often commands one of the largest shares of government resources (see Table 3). With size came greater elaboration and compartmentalization (although not necessarily greater clarity) of functions that instead of solving the problem only drove up costs and further reduced effectiveness. That elaboration resulted in a proliferation of administration. For example, in Cambodia, 75,000 employees, half the public employees, are employed in the education sector. Within that, administration often consumes a high percentage of the positions. More than one fifth of the education service consists of administrators (ADB, 1995a). In Laos, the number of staff

in nonteaching positions in 1994-1995 represents more than 20% of the number of teachers (Mingat, 1996).

Clarity was often the victim of growth. In the Cambodian example, the Ministry of Education, Youth and Sports was, until recently, organized into 16 departments averaging 58 staff members per department. An ADB study estimated there were nearly 1,300 staff across the 13 provincial headquarters and 1,750 to 2,000 staff in district bureaus (ADB, 1995a). There was no clear delineation of functions between the provincial and district headquarters; both largely performed the same kind of tasks.

This Cambodian example reflects a larger problem: The most common and persistent criticism of education management in Asia is that linkages across and among units of government are weak. There often is little communication either vertically (between levels of the ministry) or horizontally (across units at the same level). Ministry organization is characterized by a multiplicity of departments, some with very few staff, in which responsibilities assigned to the departments do not match department titles. There are frequent mismatches between organizational charts and unit activities, jurisdictional ambiguities, redundant operations, slow or absent coordination, and conflicts between units over control of programs and resources (ADB, 1995a, 1995b; Chapman, 1998; Wheeler, Calavan, & Taylor, 1997). This is not news. It is widely recognized by the governments involved. However, as inefficient as the structures might be, there are constituencies that benefit from them and resist streamlining, fearing their special advantage might disappear. Nonetheless, serious attempts are now under way in some countries to reduce the size of central ministry bureaucracies, sometimes prompted by pressures toward decentralization, sometimes by the push toward greater efficiency. For example, in October 1995, Kazakhstan reduced the size of public sector employment by 40% across all ministries and regional offices, down to 160 staff in the central Ministry of Education (ADB, 1995b).

A further problem is that responsibility for education is often distributed across several ministries. This multiministry oversight of education further complicates effective coordination. Examples from Kazakhstan, Laos, Cambodia, and Indonesia illustrate the point. Figure 1 shows the multiple groups that each have partial (or overlapping) responsibility for policy development and operational control of the education system in Kazakhstan. Given the overlapping responsibilities of the Cabinet of Ministers, the central Department of Education, and the Oblast (regional) Departments of Education, the opportunities for confusion and conflict are enormous.

In Lao People's Democratic Republic, the administration of different subsectors, levels of education, and institutions rests with different ministries. The administrative functions are divided between different levels of

Function	Education Ministry	Overlaps With:
Education policy	Drafts policies and regulations	Cabinet of Ministers
Curriculum policy	Develops conceptions, elaborates standards, and develops humanities curriculum	Cabinet of Ministers and Institute of Educational Problems
Higher education policy	Development of regulations and policy issues regarding private institutions	Cabinet of Ministers
Teacher education policy	Projects teacher staffing needs	Oblast (e.g., regional) Department of Education
School staffing levels	Ensures that staffing meets government norms	Oblast Department of Education
Educational finance	Monitors expenditures and payments to institutions	Ministry of Finance: Oblast Department of Education
Quality assurance	Operates the Department of Inspection (mainly for higher education institutions and republican institutions)	Oblasts and raions (e.g., district) with responsibility for schools
Other functions	Statistics and health	Oblasts and SCSA*

Figure 1: Kazakhstan: Overlap of Major Policy Functions Between Ministry of Education and Other Government Agencies

SOURCE: Asian Development Bank (1995b), United Nations Educational, Scientific and Cultural Organization (1995).

government (e.g., national, provincial, district, and village) with the absence of essential linkages and coordinating mechanisms. Figure 2 illustrates this just for one subsector—vocational/ technical education—in Laos. Yet, conflict and confusion are not just between ministries but also between units of the same ministry, as illustrated in Cambodia. During 1994 to 1996 in Cambodia, the Planning and Aid Coordination Unit (PACU) of the ministry had formal responsibility but weak capacity for coordination of international assistance to support educational development. To compensate, the minister created and relied on a new Program Management and Monitoring Unit (PMMU). The overlapping responsibilities resulted in competition between units that slowed decision making (Wheeler, Calavan, et al., 1997).

The distribution of responsibility across different levels and among different groups at the same level results in ambiguities leading to nonperformance in some areas and duplication of function in others. This has caused delays and inefficiency in such management processes as teacher assignment, text-book distribution, and curriculum reviews (ADB, 1993).

Level of Education	Who Is Responsible?
Preschool and kindergarten	Run by factories, state enterprises, cooperatives, and so on under administrative control of District Education and Sports Division
Primary education	District Education and Sports Division and local community
Lower secondary education	District Education and Sports Division (financing), Provincial Education and Sports Service (planning, financing, and administration), local community, and Ministry of Education and Sports
Upper secondary education	Provincial Education and Sports Service (planning, financing, and administration), individual schools, and Department of Education and Sports
Vocational/technical education	Ministry of Education and Sports; Ministry of Communications, Transport, Post and Construction; Ministry of Culture; Ministry of Industry; Ministry of Public Health; Ministry of Justice; Ministry of Agriculture and Forestry; Ministry of Economy, Planning and Finance; and Provincial Education and Sports Service
Teacher education	Ministry of Education and Sports and Provincial Education and Sports Service

Figure 2: Distributed Responsibility: Who Is Responsible? The Case of Vocational/ Technical Education in Lao People's Democratic Republic SOURCE: Asian Development Bank (1993).

Intermediate Levels of MOE—Redundancy and Little Power

The importance of intermediate levels of administration varies across countries, with influence generally increasing as countries get larger. For example, provincial education offices in China and India tend to be powerful relative to their counterparts in Cambodia or the Pacific Island nations. Organizationally, provincial, regional, and district education bureaucracies tend to duplicate the structure of the central ministry—each has offices for functions such as curriculum, testing, and facilities. This redundancy often results in duplication of effort and unclear lines of authority and responsibility. Much of the analysis of educational effectiveness and managerial efficiency has focused on these blurred lines of authority and responsibility.

The main responsibilities of the intermediate levels of ministry management are to (a) convey policy and program information from the central ministry to the schools, (b) convey data (school enrollment) and other information (book orders) from the schools to the central ministry, (c) ensure that schools are abiding by government policies, and (d) occasionally provide instructional leadership and supervision (although this often defaults only to ensuring that schools are abiding by government policies).

The main bottleneck to effective intermediate-level administration is that provincial, regional, and district offices often lack the authority to do their job effectively or the resources necessary to do their job at all (Philippine Congressional Committee on Education, 1992). Because of the insufficient delegation of authority, many midlevel administrators do not have authority to make decisions or to act on information available to them. For example, in many countries, district and regional education officials cannot fire nonperforming teachers or school administrators without lengthy consultation with central authorities. They cannot redirect resource flows to particularly needy schools without considerable time delays. Because of inadequate budget, even minimal oversight of the schools may not occur. For example, the Philippines, Cambodia, and Nepal all report that provincial, regional, and district education officers do not have adequate transportation to allow them to get to the schools. Decentralization is not an automatic solution unless decision making reflects a clearly defined division of authority and responsibility between different levels of the system.

School-Level Management—A Growth Industry

School headmasters are on the cutting edge between the administration of education and the actual delivery of instruction to children. Yet, few have adequate preparation for their job or authority to change the way their school operates. School headmasters generally have responsibility in four areas. First, school management, which includes ordering supplies, ensuring teachers are hired and assigned, information gathering, and basic record keeping, is viewed in many countries as the headmasters' chief set of responsibilities. Second, school-ministry communications, which consists largely of completing reports required by the central ministry, is a major task for headmasters in some countries. For instance, until only a few years ago, headmasters in Nepal had to complete a 52-page school data collection from the School Administration Section of the Ministry and a 4-page survey, collecting much of the same information, for the Manpower and Statistics Section of the Ministry (Chapman & Dunghana, 1991). In another Asian country, headmasters until recently were required to complete a 46-page survey about their school three times a year. Headmasters also share responsibility with district education officers for ensuring that ministry policies and programs are conveyed to teachers and parents. Third, school-community relations involves working with community councils, community development associations, parentteacher associations (PTAs), parent groups, and other local organizations that have an interest in the schools. The goal is often to encourage community support of the school (e.g., teacher subsidies, facilities construction, and maintenance) or of the schooling process (encouraging parents to make sure their children do their homework, send their daughters to school, etc.).

Finally, instructional supervision is presumably the activity most directly linked to the quality of teaching. The extent to which school-level administrators regard instructional supervision as part of their responsibility varies across countries, with instructional supervision often falling to district inspectors or teacher supervisors. However, one by-product of decentralization often is an increased expectation that headmasters will play this role. With few exceptions, instructional supervision is the function least well served by the typical allocation of responsibilities across the administrative structure of the education ministry. Teacher supervision in most developing countries is the responsibility of officials operating from the provincial or (more often) the district level. This removes it from the administrator most aware of a teacher's pedagogical skill (e.g., the headmaster) and assigns it to individuals removed from the school context who visit the school only intermittently or not at all and who often view their role more as one of enforcing rules than of demonstrating to teachers how they could improve their teaching. For example, in the 1980s in the Philippines, district supervisors were responsible for up to 100 to 600 teachers. Some supervisors had no transportation to get to the schools, and some schools were not along transportation routes, making them largely inaccessible even when supervisors had vehicles (Philippine Congressional Committee on Education, 1992). In Nepal, district inspectors may have to walk for 3 days to reach remote schools and it is not uncommon for a school to go without a supervisory visit for 3 to 4 years at a time. The experience of the Philippines in the 1980s and Nepal is typical of many countries in the region.

The supervision of teachers is complicated by the difficult conditions under which many teachers have to live and work. The Philippine Congressional Committee on Education (1992) found that Philippine teachers in the 1980s generally lived below the poverty line, had low levels of aspirations, and were dissatisfied with their working conditions. The congressional committee study placed the average family monthly income of teachers at P3,205, which was well below the poverty line of P5,821 for Metro Manila and P3,864 in other regions. Moreover, salaries were not always paid on time. Under these conditions, it was difficult for headmasters and higher level administrators to exercise much effective leadership or supervision of teachers. And, administrators do not necessarily see it as within their own power to remedy the situation.

The pressures now impinging on educational administration across Asia hold three implications for school level management:

- National education goals in many parts of Asia are already shifting from emphasis on continued expansion to emphasizing quality improvement. This will change the day-to-day work of education managers, particularly those at the school level. The emphasis in quality improvement over the next decade will be to work with the existing teaching force to institute new methods and pedagogical practices in the classroom. Right now, headmasters are poorly equipped to do this.
- Greater decentralization will place demands on school headmasters that many
 will be unable to meet. Headmasters in developing Asia typically have little or
 no formal preparation to understand the trade-offs (in terms of learning outcomes) associated with the resource allocation decisions that many are being
 asked to make; neither do they necessarily have the political skills needed to
 build the community participation and support that decentralization is supposed to foster.
- Countries' efforts to reduce the size of their bureaucracies may reduce the number of opportunities for managers to move up the administrative pyramid.
 The leveling off of demand in some countries will reduce the number of opportunities for teachers to move into school administration. The convergence of these two trends may contribute to administrator stagnation, particularly at the lower ranks, where opportunities to move up the system are relatively few.

Most training for education managers has been skill focused (e.g., how to budget, analyze data, and design an evaluation) (Adams, 1998; ADB, 1999; Gillies, 1973). Yet, much of the need is for strategic thinking, analysis of cross-impacts, and ability to work with constituent groups. However, the more profound problem in the preparation of managers is that even if they have strategic planning skills, they often lack a firm understanding of the educational process. They do not know what inputs and processes can reasonably be expected to contribute to increased student learning. Lacking this, managers are left to react to daily events and political pressures. One implication is that managerial training needs to provide education administrators with some framework for understanding the educational process and information on which interventions have the best chance of yielded promising outputs.

CONCLUSION

The success of education across Asia over the past three decades has been due largely to a declining enrollment rate, a booming economy, and national development strategies that favored education. New pressures created by urgent needs in health, environment, and population combined with an economic slump are fueling a rapid move toward more decentralized education systems. Decentralization in turn is placing new pressures on the school headmaster that few are prepared to meet. Across much of Asia, two of the most urgent challenges of the next decade will be to first strengthen and then support school-level administration.

NOTE

1. The enormous national diversity across Asia presents a challenge to any regional analysis. The diversity is instructive, however, because it exposes and contrasts issues that might otherwise be overlooked. At the same time, the countries of developing Asia also have a great deal in common, and the fact that they have so much in common despite the diversity makes this fact all the more remarkable (Bray, 1998). The author recognizes that generalizations spanning such diversity risks oversimplification and the loss of important nuance. Nonetheless, the central themes addressed in this article—specifically, the commitment to quality improvement, educational decentralization, and the weak preparation of school headmasters—are indeed the subject of discussion among educational leaders in virtually every country of the region, although the particular facets of the issues or the level of engagement may differ. Several recent studies offer frameworks for categorizing countries across the Asian-Pacific region based on such factors as size, political and social history, and level of economic development for purposes of thematic analysis (Adams, 1998; Bray, 1998; Lewin, 1998). Readers interested in analyses of more similar country subgroupings are encouraged to review these sources.

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