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EDUCATION REFORMS IN EAST ASIA: POLICY, PROCESS, AND IMPACT

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In most developing countries, responsibility for providing primary and secondary education has resided with the central government. However, a growing number of countries throughout the world, including those in East Asia, are transferring this responsibility away from the center, typically as part of a broader reform to decentralize government functions. This transfer has taken various forms, including devolving fiscal responsibility and management to lower levels of government, making public schools autonomous, requiring the participation of communities in operating schools, expanding community financing, allowing families to choose their schools, and stimulating private provision of education. The impetus for decentralization has often been political or financial rather than educational, yet supporters of decentralization would argue that it can address difficult problems confronting education systems, especially those relating to performance and accountability. Education systems are extremely demanding of the managerial, technical, and financial capacity of governments, so the potential returns to making such systems more efficient and effective are great.

The promise of decentralization lies in giving more voice and power to local leaders and school personnel, who presumably know more about local educational problems than national officials, and who have an incentive to lobby for more resources and to innovate. Indeed, as the broader decentralization literature suggests, the benefits of decentralization lie in reinforcing accountability among those responsible for delivering services—between the central government and local governments, between governments and school personnel, and between school personnel and the communities they serve (Ahmad et al. 1998).[1] In countries as large and diverse as China and Indonesia, generating local solutions to educational problems and mobilizing local energies and resources can yield dividends for all.

Despite its promises, however, decentralization is not a policy panacea. As this chapter shows, choosing an appropriate design for transforming an education system is difficult. What's more, the reform process is never smooth. It is likely to be punctuated by bursts of progress and frequent setbacks, which may lead to rising frustration and growing mistrust among stakeholders who see themselves as losers under the reform process.

This chapter reviews the experiences of East Asian countries in decentralizing their education systems, with the goal of understanding the challenges of designing reforms, distilling lessons

on implementation, and examining the impact on educational development. Decentralization laws typically stipulate dramatic reallocations of authority and responsibility among levels of government and also transfers of resources. However, the experience in East Asia—and, indeed, in nearly all countries that have decentralized—suggests a lack of congruence between design and implementation, or between de jure and de facto decentralization.

Several factors have given rise to this incongruence: incomplete design and implementation lags, which may be due to weak technical and administrative capacity, and lack of broad political support for reform. For example, central agencies are not shy about transferring responsibilities for financing and delivering education services to local governments but are not as eager to share corresponding authority and resources, and so find ways of reasserting control. Local governments that are supposed to yield some decision-making authority to schools may also hold back from doing so. Indeed, two common challenges are to align functions, powers, and resources among levels of governments, and to define an appropriate role for the central authority within a decentralized system. Achieving a better alignment of functions, powers, and resources is primarily a matter of improving design in some countries, and of improving implementation in others.

The next section examines the rationale for decentralization in East Asian countries. The principal motives rarely relate to expanding or improving public services, so the allocation of functions and resources often does not provide a coordinated framework for managing services more effectively. The third section reviews the nature and design of education reforms in these countries, as well as their implementation. This section focuses on the overall legislative framework: how decentralization has changed governance and management; which responsibilities and functions countries have devolved; whether resources are adequate to act on these; whether the structure of the system is aligned with the changes; and what functions the central agency has retained. East Asian countries reveal common design features but also important differences, emerging partly from differences in motivation for reform, initial conditions, and the political milieu.

The fourth section reviews evidence on the impact of decentralization and the factors that have influenced its effectiveness. Because educational development is rarely the rationale for decentralization, there is no guarantee that the reform will, in fact, improve education outcomes. With the exception of China, East Asia's experience with decentralizing education is fairly recent and research on its impact nascent, so the review focuses on shifts in education expenditures and on inequality, and then relies on lessons from around the world to evaluate the impact of decentralization on learning. The final section summarizes key findings and lessons about decentralization given experiences in the East Asian countries.

The Impetus for Decentralizing Education

Educational achievement in parts of East Asia is much admired. Japan, Korea, Singapore, Taiwan, and Hong Kong have achieved high enrollment rates and high-quality education, with their students consistently topping international tests (see table 9.1) (Martin et al. 2004a and 2004b). Other East Asian countries have not done as well, but they, too, have achieved high enrollment rates (see figure 9.1). These countries face other educational challenges: The emerging economies of China, Indonesia, Malaysia, the Philippines, and Thailand must better manage their education systems to reduce disparities between wealthier and poorer regions, and to improve the overall quality of education. The poorer countries—Laos, Cambodia, and Papua New Guinea—must expand the number of children who enter school, cut the number who drop out at the primary level, ensure that the system produces enough talent to support economic growth and development, and address difficult problems in financing and managing their education systems.

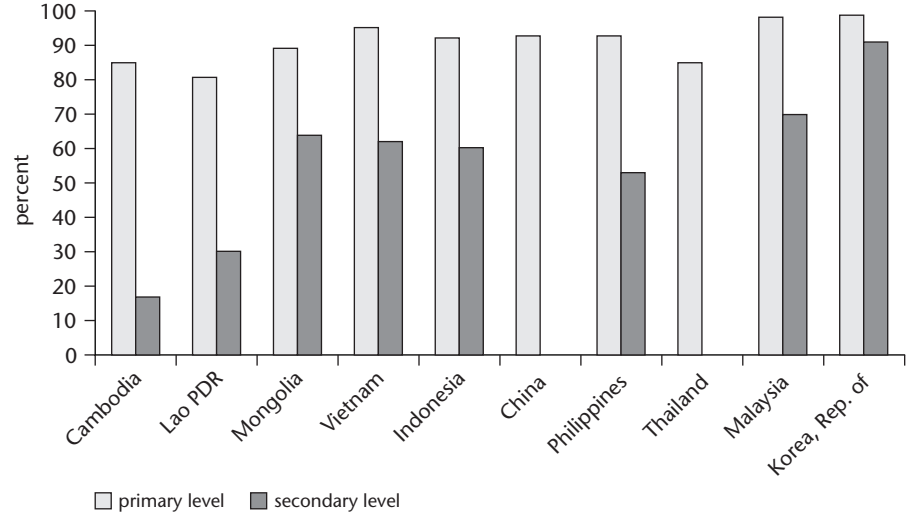
These challenges, however, have not been the primary rationale and main driving force behind efforts to decentralize the education systems in these countries. Rather, political factors and fiscal concerns have been the impetus.[2] Key design aspects of reform—including central-local transfers, local tax authority, and civil service rules—may therefore ignore legal, financial, and administrative issues that are critical for achieving national education goals, and may establish structures and incentives that imperil those goals.

TABLE 9.1 Student Performance on Mathematics and Science Tests
(*ranking among 38 countries*)

Country	Mathematics score and rank		Science score and rank	
	1999	2003	1999	2003
Singapore	604 (1)	605 (1)	568 (2)	578 (1)
Korea	587 (2)	589 (2)	549 (5)	558 (3)
Taiwan	585 (3)	—	569 (1)	—
Hong Kong	582 (4)	586 (3)	530 (15)	556 (4)
Japan	579 (5)	570 (5)	550 (4)	552 (6)
Malaysia	519 (16)	508 (13)	492 (22)	510 (21)
Thailand	467 (27)	—	482 (24)	—
Indonesia	403 (34)	411(35)	435 (32)	420 (27)
Philippines	348 (36)	378 (42)	345 (36)	377 (43)

Sources: Trends in International Mathematics and Science Study 1999 and Martin et al. 2004a and 2004b.
Note: — = not available. Scores reported are for eighth grade. Ranking is among 38 countries (1999) and 46 countries (2003).

FIGURE 9.1 Net Enrollment Rates in East Asia, 2000



Note: Countries are listed according to their gross domestic product per capita for 2002—from Cambodia to Republic of Korea. Data on Thailand's and China's net enrollment rates at the secondary level are not available.
Sources: UNESCO 2002/2003; World Bank 2003b.

In China, decentralization of education can be traced to the decollectivization and economic liberalization reforms of the 1970s, which laid the groundwork for transferring responsibility for social services to local governments. Fiscal constraints on the central government were also seen as a primary motive for that transfer (Hawkins 2000; Bray 1999; Cheng 1997). In Indonesia, political factors—a national call for democracy, the end of the Soeharto regime, the failures of the highly centralistic government, intensified by the financial crisis of 1997—drove the decision to decentralize all but a few sectors in 1999 (World Bank 2003a). In the Philippines, the 1987 Constitution mandated decentralization, and the 1991 Local Government Code provided legal guidelines for transferring responsibility for providing services to subnational governments. Except for the transfer of construction and maintenance of school buildings to local governments, however, the Philippines has not formally decentralized governance of elementary education. Political considerations underlie this exception. One often-cited reason is that public schoolteachers have traditionally counted votes

during elections, so decentralization would make them vulnerable to local politics, possibly compromising election results (Loehr and Manasan 1999).[3]

In Thailand, decentralization is said to result from the groundswell of support for greater democracy, shared powers and resources between the central government and local levels, and greater accountability, culminating in the 1997 Constitution (Mutebi 2003; Weist 2001). The motivation for decentralization in Cambodia was also predominantly political: building democratic governance in a country ruled by centralized power for most of its modern history. Because the regime that emerged from a long civil war was marked by rigid organization, inefficiency, leakage of funds, budget allocation difficulties, and little community participation, civil society and the development community pushed to deconcentrate government functions to improve service delivery, especially for the poor (Royal Kingdom of Cambodia 2001).

The Design and Practice of Education Decentralization

The design of decentralized education across East Asian countries reflects common features. One is that devolved education systems rest on multilayered governance and management structures, with the result that forging a coherent national policy requires a much larger effort. Central and intermediate (provincial, state, municipality, and district) levels of government generally continue to govern post-basic education, but the lowest level of government, and even schools themselves, govern basic education.

China's policy stipulates multiple layers of educational supervision involving the National Educational Supervision Agency as well as corresponding agencies in local governments (Hawkins 2000; Wang 2004). The provincial level takes responsibility for developing specific local policies and regulations in line with national education objectives. The local government—the township level in rural areas (the lowest level of the bureaucracy without education offices), and the district level in urban settings (with education offices)—has responsibility for ensuring that all children receive nine years of compulsory education. Earlier implementation revealed inadequate capacity of township governments to manage schools, so local responsibility for financing and managing basic education in rural areas was transferred from township to the county level in 2001.[4] In 2002, the People's Congress passed the Private Education Promotion Law, which defined the legal status as well as the rights and responsibilities of the private sector, further opening the door for diversified provision and multiple sources of funding for education (Wang 2004).

In Indonesia, Laws 22 and 25 of 1999 transferred governance and management of primary and junior secondary education to district governments, and the upper secondary level to provincial governments, while the central government retains control of the tertiary level. The Education Law 20 of 2003 takes decentralization a step further, moving control of basic levels of education from districts to schools (World Bank 2004a). In Cambodia, recent laws have transferred functions and powers—including the provision of public services—to communes, and the country plans to boost accountability further by increasing the "operational autonomy" of schools and postsecondary institutions (Royal Kingdom of Cambodia 2001).[5]

A second common feature of decentralized education across East Asia is that, at the deepest level, the vehicles for governance and management are typically community councils and school committees involving local officials, civic leaders, and parents. In Thailand, each school is supposed to have a board composed of representatives of parents, teachers, community organizations, alumni, and students. Parents' organizations with jurisdiction over schools are to establish a quality assurance system, and communities are urged to "participate in educational provision by contributing their experience, knowledge, expertise and local wisdom for educational benefits" (Kingdom of Thailand 1999). In Indonesia, each school is supposed to have a School Committee—declared an independent body by the 2003 Education Law—to provide advice, direction, and support for managing schools (Government of Indonesia 2003). In China, school principals are charged with greater responsibility than in the past but also enjoy more autonomy. They are expected to generate additional resources for the school and ensure teaching quality, because they can choose teachers without much intervention from the district or county, as well as determine incentives for teachers (Wang 2004).

Such deep decentralization is common outside the region, too, a means not only of mobilizing local resources but also of fostering greater accountability and better performance. In Brazil, reform in several states has entailed establishing school councils, allowing the direct transfer of resources to schools, and giving communities the power to elect the local principal. El Salvador's Community-Managed Schools Program—better known as EDUCO *(Educación con Participación de la Comunidad)*—transferred management of each preprimary and primary school to an elected Community Education Association composed mostly of parents and other community members (Jimenez and Sawada 1999). These councils are legally responsible for running the schools, raising funds, and hiring and firing teachers, with the goal of improving accountability, attendance, and achievement. Nicaragua's school autonomy reform gave school councils—composed of principals, parents, teachers, and students—the authority to hire and fire teachers, veto power over principals' decisions, and discretion over the sanctions of the Ministry of Education and the obligations of teachers and students (King and Ozler 1998). In Australia, under site-based management reform, school councils develop a school charter, which is a contract between the school and the government, while parents play a supervisory role through the council (Pascoe and Pascoe 1998). Overall, international experience suggests that deep decentralization with empowered, accountable schools presents the best opportunity for improving schools.

One important difference between experience in Latin America and East Asia, however, is that school councils in Latin America elect their members from the community, whereas this is not yet the practice in East Asian countries. Elected council members can truly represent the interests of the community and provide built-in accountability. In East Asia, the duties and legal powers of school committees—in general and relative to school principals, who tend to sit on the committees—are often unclear.

The Locus of Decision Making

Countries do not devolve responsibility and power to lower levels of government and schools wholesale. While a central government may transfer governance and overall management of basic education to lower levels, it may retain control of pedagogical matters, personnel management, and financing and resource allocation, or it may decentralize those functions to school councils. How each country assigns these specific decision areas is, in many respects, a more accurate measure of its degree of decentralization.

In 1998, the World Education Indicators survey, conducted under the auspices of the Organisation of Economic Co-operation and Development (OECD), collected information on the locus of decision making in lower secondary education in a small sample of developing countries, including a few East Asian countries (OECD 1998). The survey examined 38 decisions pertaining to instructional content, personnel management, and resources and financing. To update the resulting data for this chapter, we undertook a similar, though more modest, information-gathering effort in East Asian countries. (See the chapter annex for details on the method we used and a list of functions comparing the two sets of data.)

Both databases reveal de facto rather than de jure decentralization in East Asia.[6] However, these assessments of decision-making authority are subjective for at least two reasons: First, practice can vary widely within each country, so country-level information is impressionistic rather than a "weighted average" of practice across areas. Second, periodic assessments are likely to reflect variation in implementation of legislation, a change in legislation, or both. These factors affect these two data sets. We present the results briefly, nonetheless, as a rough indication of the change in the degree of decentralization of each country relative to other countries.

In 1998, the proportion of decisions related to secondary education made by the central government varied widely in East Asia—from one-fifth in China to three-fifths in Indonesia, indicating that China's education system was then much more highly decentralized than Indonesia's (see table 9.2). At that time, China's provincial and local governments were making one-third of such decisions and schools about one-half, while Indonesia's provinces made less than one-tenth of such decisions and schools about one-third. By 2003, the allocation of decision making in Indonesia and China had shifted considerably. China seems to have retracted powers from schools but widened

TABLE 9.2 Percentage of Decisions Related to Lower Secondary Education at Each Level of Government, 1998 and 2003

Country	Central government		State/provincial/ local government		School	
	1998	2003	1998	2003	1998	2003
Cambodia	—	75	—	11	—	14
China	21	3	33	77	46	20
Indonesia	63	36	7	28	30	35
Philippines	37	62	24	20	39	18
Thailand	55	75	0	6	45	20

Sources: OECD 1998; World Bank survey for this study, 2003.
Note: — = not available. Percentages may not add up to 100 because of rounding.

provincial and local power (among counties and townships)—not uncommon in the country's decentralization history. In Indonesia, the 1999 decentralization reform assigned powers and responsibilities to district governments, quadrupling the proportion of education-related decisions by these governments.

The numbers from 1998 and 2003 for the Philippines and Thailand are puzzling: they imply that these countries have recentralized rather than decentralized during this period. The 1998 data suggest that the central government was making only about one-third of decisions in secondary education in the Philippines, and about one-half of the decisions in Thailand. These countries seem to have pushed back decentralization in 2003, with three-fifths and three-fourths of decision making lying with the central government and the role of schools greatly reduced. Historical background, however, suggests that decentralization to the degree suggested by the 1998 numbers did not exist, and that the 2003 assessment more accurately reflects reality. In Thailand, following the 1997 Constitution and the Decentralization Act of 1999, a Decentralization Master Plan approved in 2000 stipulated details for transferring responsibilities. However, implementation has been slow. In the Philippines, the legal framework for decentralization has not transferred overall management of secondary education to local government, although strong local governments nevertheless use their substantial autonomy under the Local Government Code to supplement their administrative authority.

In sum, despite the transfer of governance of lower secondary education to lower levels of government in these countries, decision making on specific functions actually occurs at different levels of government and in schools.The next section asks whether these countries reveal a pattern in allocating specific decision areas, and whether such allocation is likely to improve the way the education systems operate and thus promote better outcomes.

Who Makes Which Decisions?

With different levels of government involved in multiple areas of decision making, the goal is to ensure delineation and alignment of responsibilities, coordination, and information sharing. Although these challenges may have existed before decentralization, pressure to address them has intensified. Decentralization is not likely to improve the education system if local governments have the authority to hire and fire teachers but not to influence their promotion, compensation, and development, or if schools have the authority to choose teaching methods but not textbooks.

Patterns emerge in the locus and mode of 22 of 38 decisions related to secondary education in the East Asian countries (see table 9.3). Setting curriculum content, instruction time, and teachers' salaries, and allocating resources to schools, remain the domain of the national or state and provincial governments. In contrast, all five countries leave the choice of teaching methods and support activities for students (such as remedial classes) entirely to schools; four of five countries also assign decision making on teachers' careers to local entities. Cambodia is the most centralistic with respect to the 22 decisions:

TABLE 9.3 Locus and Mode of Key Decisions in Lower Secondary Education, 1998 and 2003

	Cambodia		China		Indonesia		Philippines		Thailand	
	1998	2003	1998	2003	1998	2003	1998	2003	1998	2003
Instructional matters										
Instruction time	—	■	■	■	■	■	□	■	■	■
Designing programs of study	—	■	■	■	■	■	□	■	■	■
Defining course content	—	■	■	■	○	■	□	■	■	■
Choosing textbooks	—	■	○	△	■	◊	◊	■	◊	◊
Teaching methods	—	♦	♦	△	■	◊	◊	●	♦	○
Mode of grouping students	—	◊	♦	♦	♦	◊	♦	♦	♦	♦
Support activities for students	—	■	♦	♦	♦	♦	♦	♦	♦	♦
Creation/closure of schools	—	●	△	△	○	△	□	■	■	■
Creation/abolition of grades	—	■	■	■	♦	♦	○	■	■	■
Setting qualifying exams	—	■	■	△	■	■	□	■	◊	♦
Credentialing	—	■	△	♦	■	◊	□	♦	◊	—
Methods for assessing students' regular work	—	■	◊	△	♦	△	♦	■	♦	◊
Personnel management										
Hiring teachers	—	■	♦	△	■	△	○	●	■	■
Hiring principals	—	■	△	△	■	△	○	●	■	■
Fixing teacher salaries	—	■	◊	△	■	■	□	■	■	■
Fixing principal salaries	—	■	◊	△	■	■	■	■	■	■
Career of teachers	—	■	♦	◊	♦	△	◊	●	♦	○
Career of principals	—	■	△	△	♦	△	○	●	■	■
Resources										
Allocation to school for teaching staff	—	■	△		■	■	○	■	■	■
Allocation to school for nonsalary current expenditure	—	■	♦	△	■	△	○	■	■	■
Allocation to school for capital expenditure	—	■	▲	△	■	△	■	△	■	■
Use in school for capital expenditure	—	■	▲	△	■	◊	◊	■	■	■

Sources: OECD 1998; World Bank survey for this study, 2003.
Note: — = missing data. Symbols indicate locus and mode of decision according to this legend: Decision made in full autonomy: ■, Central government; ●, Intermediate government; ▲, Local government; ♦, School. Decision made in consultation or within framework: □, Central government; ○, Intermediate government; △, Local government; ◊, School.

Instructional matters. All these countries are reluctant to delegate standard setting and decisions on core curricula to local governments and schools, reflecting the widely held belief that the education system helps promote a national identity as well as shared values and culture. The management and quality assurance functions of local education councils and school committees remain fairly

limited, bounded by a national framework. China's central government continues to keep a close watch on curriculum, selection of textbooks, school-leaving qualifications, and teacher education, and also retains control over core subject areas such as moral-political education (Bray 1999; Shen 1994; Hawkins 2000). A national curriculum framework—developed primarily by the central government with some consultation with local governments and adopted in 1992—specifies compulsory courses. Local autonomy in education content appears to be limited to art, music, and sports. Continuing to take control over the national core curriculum, in 1999 the central government developed new curriculum standards for 18 subject areas for the nine-year compulsory education level. These standards emphasized the need for the curriculum to respond to rapid changes in technology and China's economy (Wang 2004). The new core curriculum also allows for local and school curricula, however.

According to Indonesia's Education Law 20, the central government still determines the curriculum framework and structure for basic and secondary education (Article 38). The central government is also establishing minimum service standards for education. However, district governments, given constrained financial and technical resources, may have trouble meeting these standards. Likewise, in Thailand, the Commission of Basic Education—a pillar of the central education agency—is responsible for proposing standards and the core curricula for basic education in line with the National Scheme of Education, Religion, Art, and Culture. Parents' groups will provide internal oversight of each school, while a central agency will develop criteria and methods for assessing student performance and school quality. In the Philippines, the central government also retains responsibility for policy, curriculum, personnel, and operations.

Decisions on creating or closing a school are made at the national level in the Philippines and Thailand but at the local level in Cambodia, China, and Indonesia. These countries usually decentralize decisions on textbooks and teaching and assessment methods to provincial and local governments. All countries except Cambodia allow schools to make autonomous decisions regarding grouping students and providing extracurricular activities.

Countries outside East Asia show a similar reluctance to surrender control over the substance and quality of education to subnational governments and schools. For example, in Chile, the central ministry maintains curriculum-setting, regulatory, and quality assurance functions (Delannoy 2000). In Australia, the Curriculum Standard Framework defines eight key learning areas, incorporating both content and process standards (Pascoe and Pascoe 1998). Likewise, the British school reform established a national curriculum with learning objectives for core subjects each year and at each key stage (Rodríguez and Hovde 2002). In Spain, which is less centralized, the decentralization law established that the Ministry of Education defines 65 percent of the instructional material taught in all schools, while autonomous communities may define 35–45 percent of domains that reflect regional interests (Hanson 2000). But in other OECD countries, schools choose teaching methods, textbooks, and techniques for assessing students day-to-day, although usually within a framework established by a higher level of government (OECD 1998). This is similar to the approach among some states in Brazil, such as Paraná, Pernambuco, and Rio de Janeiro, where most schools are responsible for elaborating pedagogical proposals and integrating them into the core curriculum process (Machado 2002).[7]

Teacher management. Different levels of government make decisions regarding teachers, often leading to confusion and inefficiencies. These decisions range from teacher training to recruitment, deployment, performance evaluation, human resources databases, payroll, and redeployment. Some countries decentralize some functions, such as hiring and firing of teachers, while keeping others effectively centralized, such as setting compensation levels.

Indonesia illustrates a mixed—and confusing—policy regarding teacher management. The 2003 Education Law stipulates that the central and district governments share responsibility for "getting educators and education personnel to ensure the implementation of good quality education programs" (Article 41), and that these governments will "supervise and develop educational personnel in education units" (Article 44). However, many aspects of teacher management remain centralized, including managing the personnel

database, registering personnel actions, and transmitting this information to the payroll system. While districts manage personnel and payroll, the recording of such actions—necessary to trigger the payroll—is still centralized, and, according to civil service law, the central government retains much authority over teacher wages, position allowances, family and rice allowances, and even honoraria. In focus-group discussions, teachers reported that while they support decentralization, they prefer central management of their employment (World Bank 2004a). According to teachers, given that processes such as promotion still require the center's approval, decentralization has slowed action on personnel matters because it has added a bureaucratic layer. Teachers also claim that management processes are neither more transparent nor better monitored, even though they occur at the district level. Without authority or significant influence over teacher-related matters, local governments and schools lack the single most important tool to influence the quality of education.

In countries outside East Asia, the approach to managing teachers is also mixed and reveals a willingness to experiment. In Chile and Mexico, control over contracts is centralized, and a national salary scale standardizes teachers' pay. Other countries have encouraged greater local participation. In El Salvador, community education associations are legally responsible for hiring and firing teachers. In the United Kingdom, while the national level sets a minimum pay scale and qualifications for educators, public schools are responsible for hiring and paying their own teachers. In Brazil, communities across an increasing number of municipalities rely on direct elections to select school directors (Namo de Mello 2005).

Financing and resource allocation. This decision area is the most decentralized, as countries have sought to mobilize local funds for schools—but not without second thoughts. Initial enthusiasm for granting revenue-raising authority to local governments has been dampened by inequalities, followed by attempts to rein in the tendency of local governments to impose many new taxes. Nonetheless, declines in subsidies from the central government and emerging fiscal gaps have forced communities and schools to seek supplementary funding, often by raising user charges.

Fiscal decentralization was a key feature of China's reform, with the central government reducing its subsidies to local schools, and local governments intensifying their efforts to find alternative funding for basic education through taxes, community contributions, and income from enterprises (Hawkins 2000; Tsang 2002). As the central government cut school subsidies, the share of nongovernmental sources rose from 19 percent in 1993 to 24 percent in 2000 (Hawkins 2000). Reform documents suggested six sources of funding: urban and rural surcharges levied by local governments, contributions from industry and social organizations, donations by individuals and community organizations, tuition fees, income from school-run enterprises, and central authorities. In 1994, however, the central government reversed itself and removed certain tax authority from local governments, and has continued to fund teachers' salaries and certain capital expenditures, citing growing disparities across regions (Tsang 2002; West and Wong 1995). The practice of charging fees is prohibited by the central government but encouraged by local governments, which use some of these additional resources to fund a compensatory mechanism. The local government defines the fee scale and collects a certain percentage from fee revenues. For example, district governments receive 25–50 percent of fee revenues collected by schools. The revenues remitted to local governments are then used to help other schools repair their school buildings and improve their facilities (Wang 2004).

Financing for education in Indonesia is also meant to be a "shared responsibility" of the central government, district governments, and communities (Article 46), but legislation has sent mixed messages about how autonomous local governments actually are in raising funds (Government of Indonesia 2003; World Bank 2004a). On the one hand, laws have expanded the revenue-raising ability of district governments and allowed them to determine their own financial management, accounting, and procurement systems within broad guidelines. On the other hand, three design features of the reform limit local autonomy. First, a supposedly temporary hold-harmless component assigns part of the block grant to districts to cover the salaries of existing teachers. Second, the reform earmarks at least 20 percent of the national budget and a similar percentage of the regional budget (net of salaries) for education (Article 49 of the Education

Law). Third, the funding mechanism for education is still too diverse and fragmented. Given these features, some regional education officials have expressed frustration at not knowing the total level of resources actually available to them (World Bank 2004a). Without information or transparency, they find it difficult to plan ahead, to develop coherent and effective educational programs, and to monitor and assess the flow of funds through the system.

In the Philippines, education financing is more centralized because public education is not formally decentralized, but local governments spend their own resources for education nonetheless.[8] The sources of local government financing are the Internal Revenue Allotment (IRA), which the central government sends to each municipality and city, and the Special Education Fund (SEF), which is a 1 percent tax on assessed values of real properties owned by a municipality or city. One-half of the SEF is spent at the municipality or city level and the other half is remitted to provinces for education projects. The provincial Local School Board determines the allocation of this fund among municipalities.[9] Because the Local Government Code devolved construction and maintenance of elementary and secondary school buildings to municipalities and cities, the SEF also sometimes finances such construction and repair, as well as equipment, educational research, books and periodicals, and sports development. Many local governments have also shown initiative in using the fund to establish new secondary schools and hire more teachers, or to top off the salaries of the centrally hired public teachers (Azfar et al. 2001; Manasan 2002).[10] User charges have also boosted local funding: the share of school fees in education spending by households rose to 17 percent in 1997 (Manasan 2002).[11] Fearing that fees might reverse gains in enrollments, in 2001 the central Department of Education prohibited elementary schools from collecting user charges.

If the central government adopts a strong compensatory policy in distributing funds across regions, then local financing and modest user charges can boost performance by allowing parents and the community to exert greater control over school operations. In the Philippines, schools that rely more heavily on local sources—including contributions from the local school board, municipal government, and parent-teacher associations—are more efficient. A 1 percent increase in the share of financing from local sources can lead to a 0.14 percent decline in total costs (Jimenez and Sawada 1996). In Indonesia, local government spending and parental contributions boost school efficiency: cost per student falls as the local share of funding rises, though at a diminishing rate (James et al. 1996). In sum, if used with an eye toward equity concerns, local funding can improve efficiency without worsening inequality.

The role of the central education agency. Under decentralization, the central education authority needs to redefine its role and reform its structures and processes so it can fulfill its new core functions. Lower levels of governments simply have no incentive to carry out some policies and programs because they cannot fully capture the returns, they are unable to perform them well because of a lack of economies of scale, or they do not have enough resources. These policies and programs include setting goals and standards for service provision, experimenting when needed, rewarding innovation from other parts of the system, disseminating information widely and regularly, establishing and enforcing a transparent regulatory framework, and ensuring more equitable education spending.

East Asian countries recognize these roles. The 1985 decision by the Central Committee of China's Communist Party on reforming the education system retains a guiding and monitoring role for the central government on major policies, principles, and the general plan. In 1993, the State Council issued the Program for China's Educational Reform and Development to address weaknesses in the education system and to emphasize the link between the country's economic development and education. This policy guideline provided for local governments to assume more responsibility for managing and financing basic education, and encouraged the gradual establishment of community-sponsored schools, while retaining the central government's role as the arbiter of rules and regulations (Hawkins 2000). This mandate of local responsibility and differentiated levels of management was reinforced by the State Education Commission in 1995 through the Education Law of the People's Republic of China (Wang 2004).

Thailand's National Education Act of 1999 assigned administration and management functions related to academic matters, budget, and personnel to "educational service areas, educational insti-

tutions, and local administration organizations" (Section 9) (Kingdom of Thailand 1999). However, this legislation maintains a large role for the central authority in designating standards and defining procedures while supporting local governance through boards and committees.

International experience illustrates the role of the central government in reducing education inequalities within a decentralized setting. In both Spain and Chile, the central government used revenue-sharing and transfer mechanisms to implement this goal. Besides a block grant budget transfer, Spain created the Inter-Territorial Compensation Fund (FCI). As a result, in 1996 Andalucia received 38 percent of state redistributed income and 39 percent of the FCI, while Madrid received less than 1 percent of state redistributed income (Hanson 2000). In Chile, the P-900 program designed pedagogic support initiatives for rural students and the least-advantaged 10 percent of the primary school population. Chile used several measures to improve equity in the 1990s: a capitation grant to rural schools; scholarships for indigenous, low-income, and distinguished students; school feeding programs; and an expansion of preschool education (Delannoy 2000). In 1998, the Mexican government adopted a formula-driven system for allocating transfers to states. Under the new formula, states receive at least the same amount as the previous year, as well as budgetary increments based on the number of needed schools and teachers (Lopez-Acevedo et al. 2003). In Brazil in the mid-1990s, the *Lei de Diretrizes e Bases da Educação Nacional* assigned the federal government the role of narrowing inequalities in access and finance, and launched the Fund for the Maintenance and Development of Basic Education and Teacher Appreciation (FUNDEF) to equalize financing for basic education. This fund guarantees a minimum per pupil expenditure in primary schools throughout the country and partially equalizes per pupil funding within states.

The Impact of Decentralization: Educational Dividends

East Asia's experience with decentralization has been relatively brief, so it is too early to assess the real impact of decentralization reforms on many measures of educational development. This section presents two measures of such impact: the level of spending on education, and geographical disparities in enrollment and literacy rates. The section focuses on three of the five countries—China, the Philippines, and Indonesia, which have had slightly longer experience with decentralization. The evidence is suggestive rather than conclusive, because it reflects not only the effects of decentralization but also those of other reforms and developments. Even if we could capture the direct impact of decentralization, the results would reflect its design, procedural and implementation capacity, and political maturity more than its inherent flaws and benefits. This section also presents the impact of decentralization on student performance, but focuses on lessons from international experience because of lack of data on East Asia.

Greater but More Unequal Education Spending

Has total spending on education grown as a result of decentralization? Are funding levels appropriate? Answers to these questions need to consider whether a country has created an appropriate balance between assigned expenditure responsibilities at various levels and allocated revenues ("vertical equalization"). In other words, local governments should control resources commensurate with their assigned responsibilities, and transfers from the national government should supplement what they lack. Has the spending share of local governments expanded relative to the share of the central government? Has the type of government spending for education changed? Have central governments tended to spend more on, say, capital investments than recurrent items such as salaries and operational expenditures?

China. This country's share of education expenditures in total fiscal spending more than doubled—from 6.7 to 18 percent—from 1978 to 2001. The central government devoted 16.3 percent of its budget to education in 2001 (People's Republic of China 2002). From 1986 to 1992, the budget allocation and out-of-budget funds grew annually by 3.5 percent and 19.7 percent in real terms, respectively, while per-student budgeted spending rose by 9.6 percent at the primary level and 5.1 percent at the secondary level. Yet because China's economy grew rapidly, the share of education spending in gross domestic product (GDP) fell from 2.9 percent

TABLE 9.4 China: Education as a Share of Total Fiscal Expenditures

	1997	1998	1999
Hezheng County	17.3	14.3	13.3
Jinshishan County	19.0	18.4	18.3
Linxia Prefecture	16.0	17.2	16.1
Gansu Province	14.9	15.5	16.0
CHINA	16.7	16.0	

Source: World Bank 2000.

in 1991 to 2.5 percent in 1997, and to 2.2 percent in 1999 (Tsang 2002). Even as a share of total government spending, education expenditures fell somewhat from 16.7 percent in 1997 to 16.0 in 1999, such as other fiscal expenditures rose faster (see table 9.4). Trends varied across counties, however. In some, as Hezheng and Jinshishan, education's share of total spending declined. In Gansu province, which began the period with a lower share for education, that share rose.

Interprovincial disparities in per-student spending have also widened. The highest-spending provinces spend many times more for primary and lower secondary education than the lowest-spending provinces, and these gaps have grown, especially for primary education (see table 9.5). Observers conclude that the lack of a clear equalization scheme is a fundamental weakness of the system's financing (Hawkins 2000; Tsang 2002; West and Wong 1997). While the central and provincial governments provide a financial subsidy to poor areas, the subsidy is small and an ad hoc instrument rather than a regular part of financing for compulsory education. The result is that teachers are not paid on time, many schools are in poor physical condition, and the goals of the Universal Compulsory Education program have been delayed. Despite the program's efforts to raise the minimum provision of education in poor regions, they provide less education in terms of quantity and quality and pass more costs along to families. And, contrary to the law, some county governments are borrowing from the private sector to finance their schools (Tsang 2002). In addition, although tuition fees in compulsory education are forbidden by law, fees in public schools are often collected in the form of a "joint construction fee" or as voluntary donations (Wang 2004).

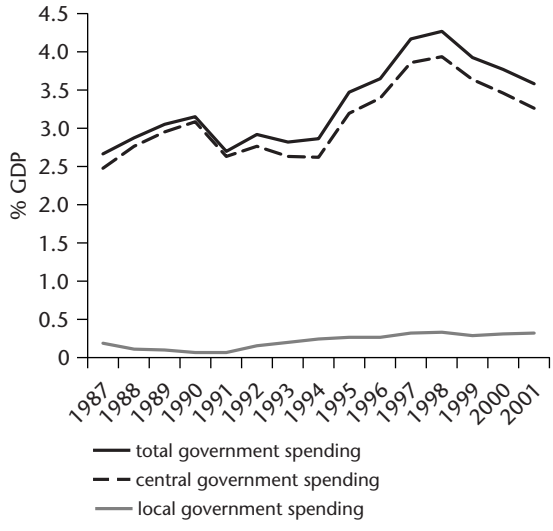
Philippines. In this country, total public spending on education as a percent of GDP rose at an average annual rate of 6 percent from 1987 to 2001 (see figure 9.2). During this 15-year period, spending declined only during times of fiscal adjustment (1990–94) and financial crisis (1998–99), mainly because of dips in central government spending. GDP grew by 4.1 percent in real terms, so this larger share of education meant a substantial rise in real spending for education. As a share of total spending by local governments, education spending rose from 3.8 percent in 1990–91 to 7.8 percent in 1998–2000, with the Special Education Fund (SEF) fueling a growing part of this local spending, rising

TABLE 9.5 China: Per Student Educational Expenditure, 1989, 1997, and 2000

	Primary level			Lower secondary level		
	1989	1997	2000	1989	1997	2000
Highest-spending provinces	393	2,351	2,756	788	3,425	2,788
Lowest-spending provinces	75	255	261	174	491	420
Ratio of highest-to-lowest-spending provinces	5.2	9.2	10.6	4.5	7.0	6.6
Mean	166	593	492	353	1,096	680

Source: Tsang 2002.
Note: Data for 1989 and 1997 pertain to total education expenditures by provinces; 2000 data pertain only to recurrent expenditures. In 1997, for which both total and recurrent expenditure data are available, the ratios of recurrent spending by the highest- and lowest-spending provinces are similar (9.4 and 7.1, respectively).

FIGURE 9.2 Central and Local Government Education Spending in the Philippines



Source: Manasan 2002.

TABLE 9.6 Philippines: Median Values of SEF Resources per Pupil

Income classification	Median	40th percentile
City class 1	590	450
City class 2	382	270
City class 3	341	190
City class 4[a]		140
City class 5[a]		120
Class 1	132	101
Class 2	65.7	51
Class 3	50.2	40
Class 4	46.7	37
Class 5	32.5	26
Class 6	17.6	11

Source: Manasan and Atkins 2004.
Note: The classes pertain to income classifications: 1 to 5 for cities and 1 to 6 for other municipalities.
a. These numbers represent few observations.

from 57 percent in 1992 to 79 percent in 1999. The result has been a shift in the shares of central and local governments in education spending. In 1991, the local government share was only 2.5 percent, rising to 7.4 percent in 2001. Meanwhile, the shares of the central government in both capital expenditures and operating expenditures for education have declined.[12]

Data on average SEF spending per pupil indicate wide variation across income classes of municipalities and cities (see table 9.6). The poorest municipalities spend only 13 percent of the SEF per pupil resources of the richest municipalities, and only 3 percent of the SEF resources of the richest cities. These numbers plainly show that transferring responsibility for funding basic education to local governments leads to wide regional disparities in school inputs.

Indonesia. It is still too early to tell whether decentralization will raise overall public spending on education in Indonesia, but early signs have been positive. Before decentralization, Indonesia was spending the smallest share of GDP on education among East Asian countries: only 1.4 percent. This share rose to more than 4 percent in 2002—a significant expansion in resources for the sector. In 2001, district governments accounted for about two-thirds of total education spending, whereas the share of provincial governments was only 4 percent.

On average, district governments in Indonesia do have more resources at their disposal than in the past, and the allocation formula stipulates that poorer districts should receive larger transfers. However, the central government expects districts to mobilize more of their own resources to supplement the transfers. Herein lies the risk that inequalities among districts will grow, as in China and the Philippines.[13] Decentralization laws have given taxing authority to district governments if the central government authorizes the taxes and districts abide by principles in Law 34 of 2000.[14] The reality, however, is large inequalities in local revenue bases. Many district governments have limited capacity to raise taxes from land, buildings, and natural resources, which constitute only about 5 percent of their revenues. Provincial governments have a larger own-resource base but must share these revenues with district governments. For example, the per capita GDP (excluding oil and gas) of the richest province, Jakarta, is almost nine times larger than that of the poorest province, East Nusa Tenggara (Akita and Alisjahbana 2002). Partly as a result, per student allocations for recurrent and capital expenditures vary widely, with districts at the lower end of the range surely not meeting any kind of education standard (see table 9.7).

Summary. The trends in education spending in China, the Philippines, and Indonesia show that total

TABLE 9.7 Indonesia: Per Capita Education Spending, 2001–2
(in rupiah)

	2001 (actual)	2002 (planned)
Total	134,000 (1,586/463,753)	175,058 (1,193/540,479)
Recurrent	126,118 (998/450,789)	159,460 (1,013/539,287)
Capital	16,185 (177/205,044)	21,692 (402/415,463)

Source: Sistem Informasi Keuangan Daerah (SIKD), Ministry of Finance.
Note: Numbers in parentheses indicate minimum and maximum values.

resources for education have grown under decentralization; yet whether these increases are larger than they would have been without reform is difficult to say. It is also clear that the share of education spending by local governments has grown, partly because the central government has devolved resources and responsibilities for spending those resources to local governments, and partly because local governments are expected to generate their own resources to meet those expenditures. However, local governments are far from equal in their ability to mobilize their own resources, and thus the gap in education expenditures per student between wealthier and poorer areas can only widen. Central governments clearly need to establish a mechanism for equalizing education resources across municipalities and cities.

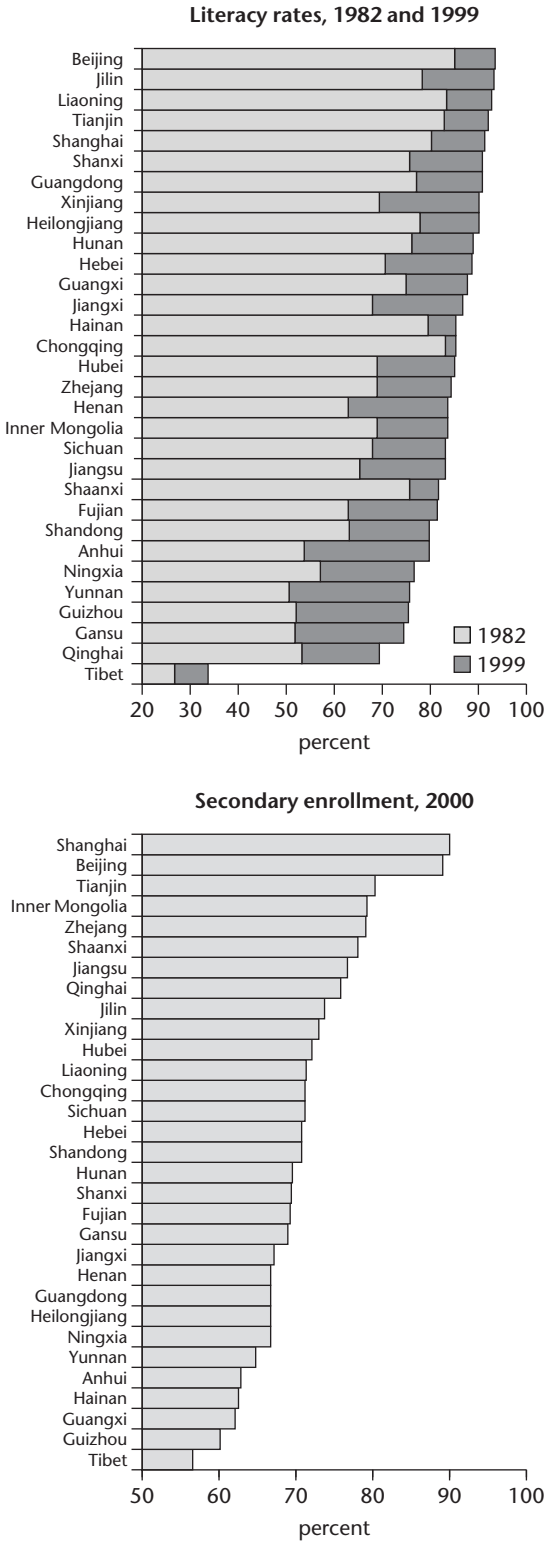
The block grant system—which gives local decision makers latitude to act on local goals with generally unrestricted funds—does not guarantee that officials will spend enough resources on education. On the one hand, local decision makers may choose to finance budget items that promise a quicker and more stimulating effect on the local economy. On the other hand, they may respond to the desire of local voters for more and better schools, or to the fact that schools provide local employment and can be a source of prestige for the community and its leaders. Greater local funding is expected to create public pressure to spend resources more wisely and thus make the sector more efficient, given an appropriate system of accountability.

Reducing Educational Disparities within Countries

As mentioned, developing countries in East Asia have generally made important progress in basic education. Enrollment rates at the primary level are high, and rates are rising even for post-basic education. These numbers hide large inequalities within each country, however. These inequalities predate decentralization reforms, but those reforms could exacerbate them. Large inequalities in the distribution of resources among geographical regions can produce large disparities in education outcomes. Transferring fiscal responsibilities to local areas and relying on local resources and expertise is likely to widen educational gaps between areas with a strong revenue base and those that are less prosperous while weakening the central government's ability to close these gaps.

China. So how large are within-country differences in education outcomes, and have they increased or decreased since decentralization? China's overall enrollment rates in basic education are high, but provinces differ widely in literacy rates and in enrollment rates at the secondary level. Literacy rates (for those aged 10 and above) rose significantly from 1982 to 1999—in a few provinces by as much as 25 percentage points—and inequality fell (see figure 9.3). The coefficient of variation for literacy rates declined from 0.19 in 1982 to 0.13 in 1999. With the sole exception of Tibet, where literacy was only 35 percent in 1999, literacy rates across China exceeded 70 percent. Despite this progress toward equalization, undoubtedly the result of the national policy of universal basic education, provinces such as Qinghai, Gansu, Guizhou, and Yunnan lag by nearly 20 percentage points behind the most literate provinces of Liaoning, Jilin, and Tianjin. Tibet's literacy rate also improved, but its gain was one of the smallest.

FIGURE 9.3 Literacy and Enrollment Rates in China, by Province



Source: People's Republic of China 2001.

Note: Provinces are arranged in descending order according to values in the more recent year.

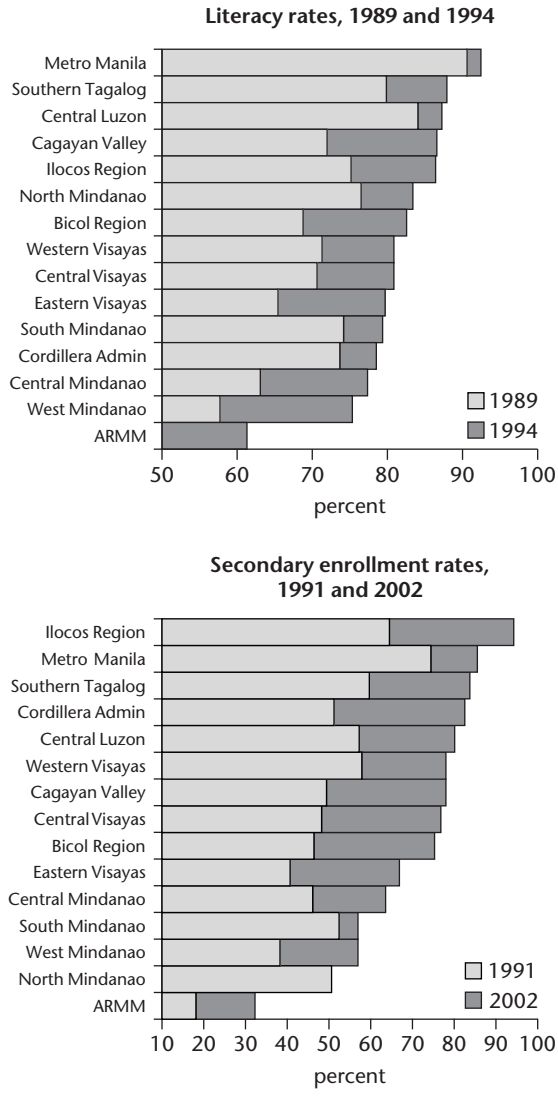
Education of minority ethnic groups in poorer, interior rural regions has been a concern. Enrollment rates are 15 and 10 percentage points lower for minority girls and boys than for Han girls and boys, respectively (Hannum 2002). Secondary enrollment rates are also unequal among provinces. In 2000, Shanghai and Beijing had enrollment rates close to 90 percent, while Tibet, Guizhou, Guangxi, and Hainan had enrollment rates one-third lower. But while the coefficient of variation of enrollment rates is smaller (at 0.10) than that for literacy rates, the tendency is for provinces that had higher literacy rates in 1982 to have higher secondary enrollment rates in 2000, suggesting that lagging provinces will continue to fall behind.

Philippines. Similarly, in the Philippines, literacy rates and enrollment rates vary widely across provinces. Literacy rates (for the population age 10 years and above) increased substantially over the five-year period from 1989 to 1994—by as much as nearly 20 percentage points in Western Mindanao, and by almost 15 percentage points in three other regions (see figure 9.4). With these gains, the literacy gap narrowed among the regions, but by 1994 literacy rates still ranged from 61 percent in the Autonomous Region of Muslim Mindanao (ARMM) to 92 percent in the national capital region (metropolitan Manila).[15] These trends do not indicate that decentralization has helped reduce education gaps.

Enrollment rates at the secondary level have also shown significant gains since decentralization, with increases fairly equal across regions.[16] The notable exceptions are the regions in Mindanao: Northern Mindanao is the only region in which secondary enrollment rates declined, and the increases in the other Mindanao regions are smaller than in any other region. In 2002, enrollment rates varied from just 32 percent in ARMM to 94 percent in the Ilocos Region.

The experience of ARMM is noteworthy because it is the region with the fullest autonomy, including in managing its education system.[17] Legislation passed in 2001 contains detailed provisions that the region's schools will adopt the basic core courses, minimum curriculum, and textbooks required by the national government, but will have the prerogative and responsibility to add other courses and instructional materials that reflect Islamic values. With respect to the two indicators considered above,

FIGURE 9.4 Literacy and Enrollment Rates in the Philippines, by Region



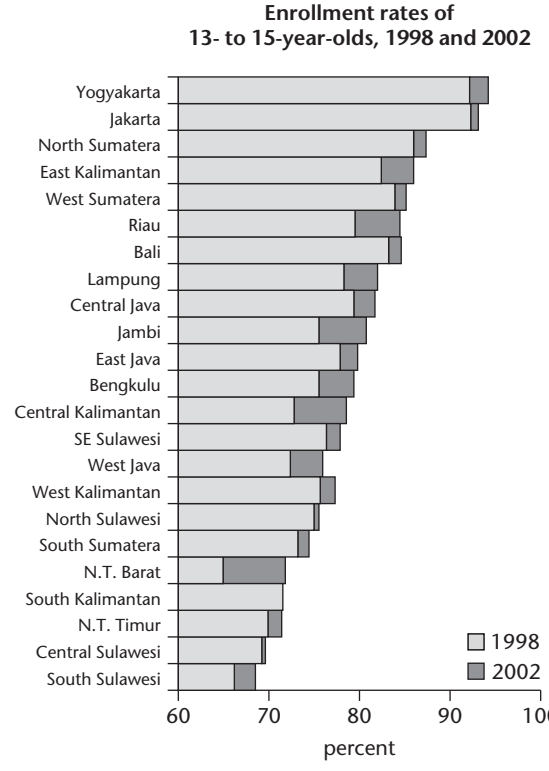
Source: Department of Education Statistical Yearbook, several years; National Statistical Coordination Board.

Note: Provinces are arranged in descending order according to values in the more recent year.

however, ARMM ranked dead last, with changes not large enough to allow it to catch up with other regions. Although the enrollment gap in primary education between ARMM and the rest of the country has narrowed since the 1990s, it remains substantial: nearly 20 percentage points separate school-age children in the poorest quintile in ARMM and those in other regions (World Bank 2003b). ARMM children begin school later and are only about half as likely to continue through the elementary grades, and the transition to high school is particularly difficult. As a result, fewer than 2 of 10 children who enter grade one complete high school. In sum, while at least two other factors might explain the region's poor education indicators—high poverty and protracted armed conflict—it is reasonable to conclude that greater autonomy has not produced better outcomes.

Indonesia. Indonesia's enrollment rates, especially at the primary level, compare favorably with those of East Asian countries with higher per capita income. With decentralization relatively nascent in Indonesia, these overall gains cannot be attributed to the reform. But differences among regions reveal the equity challenge for decentralization. In 2002, the enrollment rate of youths aged 13 to 15 (roughly the junior secondary level) ranged from 68 percent in South Sulawesi to 94 percent in Yogjakarta (see figure 9.5).[18] Increases since 1998 have been modest.

FIGURE 9.5 Enrollment Rates in Indonesia, by Province



Sources: Susenas 1998 and 2002.

Note: Figure reflects provincial divisions in 1998; the provinces of Aceh, Irian Jaya, Maluku, and North Maluku have been excluded because their sample sizes in 2002 were much smaller and limited than in 1998. Provinces are arranged in descending order according to values in the more recent year.

Disparities within provinces are even larger than variation between provinces. Only about one-fourth to one-third of inequality in enrollment rates in primary and secondary education is due to differences among provinces—the rest reflects differences among districts within a province. This means that equalization among districts within each province is a greater challenge than equalization among provinces.

Overall, these changes in the levels and interprovincial distribution of education expenditures, and in basic indicators, in China, the Philippines, and Indonesia point to both positive and negative effects of reform. However, the analysis is still at an aggregate level. Ultimately, the test of decentralization's effectiveness is whether schools are better and students are learning better. Decentralization laws encourage greater local and community participation in providing and financing education, but this feature exposes inequalities between prosperous and poor areas, and the inability of poor areas to mobilize adequate resources. Central transfer mechanisms need to equalize resources across areas. Indeed, the push for greater local mobilization of resources in decentralizing countries risks widening disparities between regions with a strong revenue base and those that are less prosperous. But implementing an equalization scheme is a considerable political challenge. On the one hand is the issue of how much inequality in educational outcomes the political system can tolerate; on the other hand is the question of to what extent the system can redistribute from richer areas to poorer areas, and from urban areas to rural areas.

Improving the Quality of Education

Good education is not only about quantitative targets, such as boosting the supply of classrooms, textbooks, and teachers, but also about incentives that lead to better instruction and learning. The level and use of public spending for education is only part of the educational story in East Asia.[19] East Asian countries do not yet have a record of the impact of decentralization on student outcomes, especially on learning. There are several reasons for this: Decentralization is a wide-ranging reform, encompassing and influencing school functions in different ways, so isolating its impact from other changes in the education system and the economy at large is difficult. Student-level data on national exam results are usually not available even to researchers. Summary test results do not allow study of whether differences in test scores result from changes in students' economic conditions or from aspects of the decentralization reform. Lastly, most East Asian countries have relatively brief experience with decentralization. However, evaluations of the experiences of countries outside East Asia provide lessons on the potential impact of decentralization on student performance.

In the United States, two examples are illustrative. The 1995 Chicago School Reform Amendatory Act modified a 1988 autonomy reform by establishing stronger central support functions and requiring external accountability mechanisms.[20] Although attributing causality to either the 1988 or the 1995 reform is difficult because of their complementary nature, student scores in elementary reading and math have improved consistently since 1995. The percentage of students scoring at or above the mean in elementary reading tests rose from 26.5 percent in 1995 to 36.1 percent in 1999.[21] In 1995, Memphis introduced a similar set of reforms that differed in one important feature: city schools received a menu of eight different restructuring models from which to choose. Before 1995, the schools that later became autonomous had lower student achievement; two years later, their scores were substantially higher than those in a control group (Ross et al. 1998).

In Chile, two phases of reform appear to have produced significantly different results. One evaluation concluded that the first phase had either a negative effect on student performance or no effect. A confounding factor was that education expenditures declined during the same period. A later evaluation concluded that the reform did not improve the quality of public schools, and that test scores for the majority of students declined. Another evaluation found that test scores were higher in private schools, but concluded that this was largely because those schools chose better students. Yet another study found that teacher autonomy exerts greater positive effects on student performance when decision-making authority is also decentralized (Winkler and Gershberg 2000; Prawda 1992; McEwan and Carnoy 1999; Hsieh and Urquiola 2001; Vegas 2002). Evaluations of the second phase show more positive results, with an 18 percent rise

in language and math test scores on standardized tests. But again, isolating the effects of decentralization from other influences, such as the substantial rise in education expenditures throughout the decade, is difficult.

An evaluation of Nicaragua's 1991 school autonomy reform shows that schools took some time to exercise the new functions and powers given to school councils. Controlling for de jure and de facto autonomy, the results indicate that school autonomy—especially in decisions related to staffing and monitoring of teacher activities—improves student performance (King and Ozler 1998). Moreover, math and language scores were significantly higher in schools where teachers felt more empowered and influential in decision making.

Brazil's reform remains to be evaluated at the student level, but researchers have already used state-level measures of educational performance to assess progress. While school councils and the direct transfer of resources are not significantly related to better student performance, the election of school directors is positively associated with higher test scores.[22] Rather than testing the reform as a whole, the researchers decided to break it down into three components and analyze the impact of each innovation on educational performance.[23] Among reform-minded Brazilian states, the most prominent is Minas Gerais, whose reform included school autonomy and dramatically changed schools' internal structure of accountability (Guedes et al. 1997).[24] As in Nicaragua, however, qualitative studies have shown that while de jure autonomy rarely exerts any influence in most schools, de facto autonomy appears to boost teacher motivation, and thus the potential for improving student learning and participation in the classroom (Cordeiro Guerra 2003).

An evaluation of El Salvador's EDUCO reform found that parents in EDUCO schools participate more actively in school affairs, feel they have more influence over decision making in the school, and have a more direct relationship with teachers than parents in traditional public schools. This greater local participation has had a positive effect on education outcomes. Controlling for school and student characteristics, a study found that students in EDUCO schools do not perform worse on achievement tests despite the fact that they come from poorer families, and that student absences owing to teacher absences are significantly lower in EDUCO schools (Jimenez and Sawada 1999).

In sum, international experience yields mixed evidence on the impact of decentralization on student performance. U.S. experience provides positive evidence, but the experience in Latin America yields ambiguous results. Reform-oriented schools in the cities of Chicago and Memphis have substantially higher test scores than schools in the control group. In Latin America, whereas decentralization appears to have improved student performance in Nicaragua and Brazil, and to have reduced teacher and student absenteeism in El Salvador, evaluations of Chile's long-running reform are inconclusive concerning the impact of greater local participation and school choice on student performance.

Lessons about Decentralizing Education

Experiences in the five East Asian countries are beginning to provide lessons for implementing decentralization—the factors that have affected their experiences, the sources of resistance or support they have encountered, and the risks and challenges that have emerged. Actual practice often deviates from formal rules on decentralization, and it is important to understand why. As mentioned, China has had the longest experience with decentralization and thus offers valuable lessons. While Indonesia and Thailand previously tried to decentralize some functions, their formal decentralization reforms are recent. Cambodia's reform is more accurately characterized as deconcentration, while reform in the Philippines is largely a side effect of a broader decentralization that has formally bypassed education. Indonesia has chosen the rapid Big Bang approach, while Cambodia and Thailand are proceeding at a much more measured pace.

Lessons from these experiences include:

Strive to clarify the assignment of functions, simplify new processes and structures, and provide mechanisms to coordinate and foster a shared understanding of reform at different levels of government, as well as to adjudicate disagreements.

Decentralizing education systems requires harmonizing a complex set of functions at each level and type of education, and is a difficult reform to design and implement. Central governments tend to devolve management of education to different levels

of government, but devolution does not happen wholesale. The central government may retain individual decision areas that may or may not cut across levels of education, or may devolve them even more deeply. This complexity leads to confusion, redundant bureaucracies, and weak implementation. Mixed signals from legislation and policies make it difficult for subnational governments and schools to fulfill their functions efficiently and effectively.

Despite two decades of implementing decentralization in China, for example, the division of responsibilities between county and townships is still unclear. The 1994 Guidelines for the Reform and Development of Education state that both county and township governments are responsible for delivering compulsory education, although the former manages education revenues and the latter safeguards the right to compulsory education for school-age children and adolescents. The legislation is unclear on how these responsibilities differ, and also seems to conflict with the Budget Law, which clearly states that each level of government should budget separately for its own jurisdiction (Hawkins 2000).

In Thailand, implementation difficulties stem from vague compromises on the overall decentralization plan and time frame. Local governments are poorly informed about their roles and responsibilities as well as the decentralization plan and time frame. Legislation is itself unclear about the decentralization process. For example, the 1999 National Education Act transfers authority from the central government's provincial and district offices to 175 school districts or local education areas (LEAs), each with its own committee and office. This aspect of the reform, if implemented, would require staffing cuts and redeployment totaling half of all education administrators in various provinces (Mutebi 2003).[25] In response, implementers of the National Decentralization Act argue that they have the authority to transfer power to local governments only after they fulfill a set of readiness criteria. The latter piece of legislation would seem to retrieve some of the autonomy delegated by the National Education Act. Parties have reached a compromise to merge both acts, which entails administrative deconcentration of central power to LEAs in the short to medium term, and gradual decentralization of responsibilities from LEAs to local governments in the long term (World Bank 2003d).[26] Ironically, even this compromise suffers from vagueness on a time frame.

In Cambodia, the initial framework for deconcentrating and decentralizing education is clear about delegating authority to provincial and district authorities, but is much less clear about the roles of the school cluster system and commune councils. The Cluster School Policy, created in 1996, encourages decentralized management of resources, but is ambiguous about what functions school clusters need to perform. Similarly, commune councils, though endowed with new financing mechanisms, lack clearly defined roles and responsibilities. This lack of clarity weakens the institutional structures that are closest to the community, ultimately weakening accountability as well.

The central government plays important but different roles in a decentralized context, and needs to transform both its structure and skills.

Though stripped of some traditional functions under decentralization, the central authority needs to step into its new roles quickly to facilitate successful reform. These roles include setting standards and performance measures for use throughout the education system; ensuring that decentralized units can meet the standards through systems development, training, and funding; and brokering links between local governments to capture economies of scale. The central government also needs to perform overall system planning and forecasting and prioritize investment, including of teacher supply and demand; design and implement an equalization scheme, fostering support from wealthier regions; and stimulate experiments and spread lessons learned.

The central government clearly has a critical role to play in designing and implementing equalization schemes. Decentralization laws encourage greater local and community participation in providing and financing education, but this feature exposes inequalities between prosperous and poor areas and the inability of poor areas to mobilize adequate resources for education, and risks widening those disparities. Appropriate transfer mechanisms can equalize resources across regions. However, equalization efforts are not only about infusing more money into local systems but also—and more importantly—about changing incentives. Implementing an equalization scheme can be a

considerable political challenge, as efforts to redistribute from richer areas to poorer areas, and from urban areas to rural areas, may meet resistance.

Furthermore, the relative importance of the roles of the central government is likely to change as decentralization matures, requiring the central government to boost its involvement in certain functions at certain times. For example, it makes more sense for the central government to help build capacity in countries like Cambodia than in those like China, which have a larger national supply of experts. Ultimately, redefining the central government's roles means distinguishing between functions requiring critical involvement throughout the process, those requiring periodic involvement at different stages, and those requiring one-time initiatives with frequent follow-ups.

Decentralization puts the complex architecture needed to operate an education system—personnel, finances, procurement, student assessment, and information management systems—under pressure. This system needs to be reorganized to reflect the new intergovernmental relationships and decentralized functions, and capacity needs to be strengthened.

In decentralized education systems, replacing inappropriate structures and building the capacity to work within new arrangements are key challenges. A principal bottleneck is a lack of adequate technical and managerial experience among responsible parties. A lack of viable and coordinated management systems linking central agencies to local governments and schools exacerbates problems resulting from weak local capacity.

Countries may be tempted to slow the pace of decentralization because of fears that district and provincial governments do not have enough capacity to fulfill their newly assigned responsibilities effectively. Indeed, the traditional approach has been to build local capacity before transferring responsibility and authority because of concerns about irresponsible spending, local corruption, regional inequities, and service collapse. However, although capacity building is important, local governments may have more capacity than most central policy makers assume. As decentralization proceeds, local talents and capacities are likely to emerge and to improve with practice, as is becoming clear in Cambodia, Indonesia, and the Philippines. Furthermore, in China, the capacity of local governments to manage compulsory education seems to have improved substantially, in areas such as training personnel, collecting and using information, expanding the use of technology, and incorporating research findings and consulting experts in the decision-making process (World Bank 2004c; Kerr 1999; Tsang 2002).

For decentralization to exert a positive impact on student performance, information and evaluation systems—as accountability mechanisms—must not only be in place but must also function iteratively through participation.

Information problems become much more acute in a decentralized context. Dramatic shifts in responsibilities and powers often lead to the breakdown of information and evaluation systems, which typically depend on the central government to extract information from lower levels of government and schools. In Spain, decentralizing administrative functions to regions greatly undermined the country's capacity to collect and disseminate national statistics. Newly autonomous regions began to produce their own statistics using incompatible methods, and although the Spanish government took a strong stance on cooperation, it still met resistance. The Education Law in 1985 tried to overcome the lack of coordination across regions through a Conference of Counselors which included the Minister of Education and autonomous community counselors.

Information on performance at all levels is key to accountability. Countries can use sample testing, national surveys, and the census to assess the impact of programs, allocate resources, and identify geographic areas requiring special attention (Asian Development Bank 1999). Local governments, communities, and schools also need information and diagnostic tools to evaluate performance in specific subject areas, define learning challenges in different communities, and compare different pedagogical approaches and teacher training mechanisms. School-level data can also communicate results to parents and the larger community. At the deepest level, information is instrumental for greater accountability and control. Citizens rely mostly on frequent reports, magazines, and participatory workshops to gain information on student performance. However, linking teacher promotion to predetermined inputs and outputs

BOX 9.1 School Report Cards in Paraná: A New Incentive System

In the state of Paraná in Brazil, a new system of incentives at the school level entails producing school report cards. These report cards—known as *Boletim da Escola*—include three main sets of information. These are results from the Statewide Student Learning Testing (covering Portuguese, math, and science), school census data (on student promotion, retention, dropout rates, enrollment, teacher-pupil ratios, and teacher profiles), and surveys of school life (from students, parents, and school managers). The report cards therefore focus on individual school performance while allowing for cross-school comparisons in the state and region. This wealth of information enhances competition across schools, thus strengthening incentives and overall accountability at the state level. If applied consistently across time, this system will also help schools assess the impact of their policies on student performance. One lesson from these experiences is that such systems are not sustainable if they lack local ownership, and if schools do not have the technical capacity to maintain and use them.

Source: Vasconcelos-Saliba 2004.

could create perverse incentives for transmitting information. Some analysts, including the Education Commission in the Philippines, argue that the government should use incentives to make teachers and school heads directly accountable for student outcomes (see box 9.1 for an account of the information system of the Brazilian state of Paraná).

One area that deserves monitoring and evaluation is the flow of funds through the system. In Cambodia, the Department of Finance designed an improved system for monitoring financial performance in 2001. Supported by training and technical assistance, new budget management forms for schools, districts, provinces, and central departments, along with provincial and program reports, will feed into a computerized system. A fund tracking system will monitor inputs and outputs and relate them to strategic outcomes, and will include incentives for transmitting information. School inspection reports will now focus more on school performance indicators, such as development planning, financial management, community partnerships, teaching and learning processes, the learning and school environment, and promotion rates.

Accurate and timely information on enrollments, teachers, and school inputs is essential, especially for assessing the needs of remote areas and underserved populations. Widely conflicting statistics on these variables are still too common to support robust planning and policy making. Most problematic of all are student testing systems: the challenge is to make national tests comparable over time to allow policy evaluation, and to ensure that they reflect existing or desired curriculum content.[27]

To advance education outcomes, school stakeholders must have greater voice and exercise some control over school operations.

Decentralization is not just about increasing local management and technical skills, but also about strengthening the voice of the community in the delivery of public services. In many centralistic systems, local communities are not used to governing themselves, electing politicians who represent their interests, and using their right to vote to make their will known. Breaking out of this mold immediately is difficult. Despite commune councils in China, lack of popular representation persists at the local level. In Cambodia, the central government still appoints provincial governors and district heads. And in Indonesia, although the majority of schools now have school committees, they hardly meet and do not yet fulfill their designated functions (World Bank 2004a).

Beyond strengthening voice, experiences in countries outside East Asia suggest that giving parents, teachers, and other stakeholders decision-making authority in key areas such as curriculum, training, and pedagogical approaches leads to better student performance. This occurs through greater commitment from teachers, more focus on learning, stronger school leadership, and a sense of responsibility for results (King and Ozler 1998; Winkler and Gershberg 2000).

Top-down decentralization has largely precluded the involvement of teachers and teachers' unions in designing education reform.[28] Such limited agency reflects not only the impetus for decentralization but also political and unions' inability to mobilize. Unions have been less politically active (China) and have had fewer opportunities to play a significant role (Cambodia and Philippines) than in Latin American countries, where teachers' unions have wielded more political power and played critical roles in shaping education reform.[29] The Latin American experience shows that these responses can be diverse, including resistance (Mexico), negotiation (Bolivia and Chile in the 1990s), cooperation (Brazil), and inaction (Chile in the 1980s). Decentralization inevitably draws many stakeholders—namely, local authorities and associations—into the decision-making process in government and schools. Fearing a loss of negotiating power on critical issues such as salaries and the hiring and firing of personnel, unions have strongly opposed efforts to decentralize (Gaynor 1998). These experiences foreshadow the extent to which unions' political influence might affect both the pace and depth of decentralization in East Asia.

A review of 83 studies of school-based management in North America and among members of the OECD revealed greater teacher commitment, more collaboration and information sharing, and a change in classroom instruction. In India, student dropout rates declined and teacher attendance improved—from 33 percent to 78–86 percent—after village education committees began participating in schools and teacher monitoring (Leithwood and Menzies 1998; Pandey 2000). In the Philippines, about 2,000 schools adopted school-based management on a trial basis in connection with a World Bank–supported education project. Preliminary results show that greater involvement among teachers in planning and managing schools has greatly improved their motivation and enthusiasm, while principals' efforts to fully involve teachers in identifying problems and needs, and to improve communication, have helped yield solutions.

Countries vary in the extent to which they have decentralized functions directly affecting teachers, such as recruitment, deployment, promotion, and salary scales. Nonetheless, underlying these arrangements are incentives that influence the behavior of teachers and ultimately affect the quality of teaching and student learning. Research on teacher incentives has shown that teachers are not only sensitive to incentives but also responsive. Designing targeted incentives that translate into improved classroom performance and student learning is extremely difficult because teacher effort is both difficult and costly to measure (Murnane et al. 1991; Hanushek 1986; Waterreus 2003). Several countries in Latin America, in parallel with decentralization, have implemented policy reforms affecting teacher incentives, such as Mexico's *Carrera Magisterial*, Chile's *Sistema Nacional de Evaluación del Desempeño*, and Brazil's FUNDEF.

Annex: Research and Data Collection Methods

The 2003 World Bank study on which this chapter is based followed a method similar to that used in the 1998 World Education Indicators survey by OECD-INES (Indicators of Education Systems). Yet the Bank study also differs in significant ways. What follows is a description and comparison of our methodology and research approach, including the conceptual framework of the questionnaire, data collection procedure, and calculation of indicators. This annex also outlines the methods we used to make the two studies comparable.

Conceptual Framework of the Questionnaire

Decentralization focuses on the distribution of power between levels of government. The OECD-INES survey examined two dimensions of decentralization: the locus of decision making—that is, the level of government with authority—and the mode of decision making, or the degrees to which levels of government are autonomous or share authority. The World Bank study examined the former: the locus of decision making.

While the OECD-INES survey distinguished six levels of government (central, state, provincial/regional, subregional/intermunicipal, local, and school), the World Bank study focused on three main levels of government:

National/central: The central government consists of all bodies at the national level that make decisions or participate in different aspects of decision making, including both administrative (government bureaucracy) and legislative bodies.

State/provincial/local: The state is the first territorial unit below the nation in federal countries, or in countries with similar types of governmental structures. The province or region is the first territorial unit below the national level in countries that do not have a federal or similar type of government structure, and the second territorial unit below the national level in countries with a federal or similar types of governmental structures. The municipality or community is the smallest territorial unit with governmental authority; the local authority may be the education department within a general-purpose local government, or a special-purpose government whose sole area of authority is education.

School: This level applies to individual schools and includes school administrators and teachers or a school board or committee established exclusively for that individual school. The decision-making body or bodies for this school may be an external school board, which includes residents from the larger community; an internal school board, which could include headmasters, teachers, other school staff, parents, and students; and both an external and an internal school board. The study considered parents and teachers as an element of the school level.

In practice, however, the decision-making process is not that simple. In determining at what level decisions are made, numerous unclear situations arise. In some cases, a higher level of government may have formal or legal responsibility for decision making, but in practice that level delegates its authority to a lower level of government. In describing the actual decision-making process, we identified the lower level of government as the decision maker. Similarly, a higher level of government may provide a lower level of government with choices in a particular area, such as the selection of textbooks, even though the higher level establishes the framework for the decision. In that case, too, we designated the lower level of government as the actual decision maker. Finally, one level of government may have responsibility for an individual decision, but inaction results in a decision by a lower level. If a decision is left to the discretion of a lower level through lack of determination at higher levels, then we chose the level that actually makes the decision.

Although the OECD-INES survey included fewer indicators (35) than the World Bank study (53), both studies organized those indicators into four broad categories. The main items within those categories included:

Organization of instruction: Decisions regarding which school students will attend, school careers, instruction time, choice of textbooks, grouping of pupils, assistance to pupils, teaching methods, and methods for assessing pupils' regular work.

Personnel management: Decisions regarding the hiring and firing of the principal and teaching and nonteaching staff, their duties and conditions of service, their salary scales, and their careers.

Planning and structures: Decisions on creating and abolishing schools and grade levels, selecting and designing programs of study and subjects taught at a particular school, defining course content, setting qualifying exams for certificates or diplomas, and credentializing students.

Resource allocation and use: Decisions on allocating resources to a school for teaching staff, nonteaching staff, capital expenditures, and operating expenditures, and on using resources for staff, capital expenditures, and operating expenditures.

Data Collection Procedure

The OECD-INES approach to collecting data was similar to that of the World Bank, although the two studies differed fundamentally in the composition of expert panels formed to assess decision making at different levels. In the OECD-INES approach, researchers created a panel for each level of education, composed of one member from each of the three decision-making levels. These groups completed the questionnaire and arrived at a consensus on all questions. The researchers also composed a second panel for each level of education, again composed of one member from each of the three decision-making levels, and repeated the process. The INES Network C representative or national coordinator for the World Education Indicators survey then compared the results of the two surveys. Where the responses differed, the INES Network C representative used source documents and consulted the national coordinator to reconcile disagreements.

We conducted the World Bank study in two phases, relying on intermittent consultation between two different panels of experts. The first panel was composed of World Bank education

experts with knowledge and work experience within each of the countries. This group completed the questionnaire and arrived at a consensus on all questions. A second expert panel included World Bank education experts located in the field in the respective countries. This group reviewed the results from the first round of surveys. Where the responses differed, this panel reconciled differences with the first panel.

Calculating the Indicators

The OECD-INES study gave equal importance to the indicators within each of the four domains. Each domain contributes 25 percent to the results. Because each domain includes a different number of items, each item is weighted by the inverse of the number of items in its domain. The World Bank study followed the same approach.

TABLE 9A.1 Cross-Study Comparison of Functions

World Bank Study (2003)	OECD-INES (1998)
Pedagogical	**Organization of instruction**
Admissions criteria to enter school	Decision on what school a child should attend
Mode of grouping pupils/class size	Mode of grouping pupils
No. of periods of instruction/classroom hours	Number of periods of instruction
Selection of textbooks/teaching material	Choice of textbooks
Design of programs	
Design of program subjects	
Choice of subject matters	
Definition of curriculum	
Teaching methods	Teaching methods
Provision for extra help	Assistance to pupils
Extracurricular activities	
Evaluation methods	Methods of assessing pupils' regular work
Student promotion	Decisions affecting pupils, streaming
Setting of equivalencies	
Setting of goals/targets for the school	
Administrative	**Planning and structure**
Opening/closure of school	Creation and closure of a school
School calendar	
Creation/abolition of grade(s)	Creation and abolition of grades
Distribution of textbooks/teaching material	
Setting of qualifying examinations	Setting of qualifying examinations
Collection of student data (enrollment/exams)	
Community outreach	
Awarding of credentials	Awarding of credentials
Accreditation of new schools	Design of programs for a specific school type
	Definition of course content
Personnel management	**Personnel management**
Hiring and firing of staff	*Hiring and firing of staff*
Head of school	Principals
Teaching staff	Teachers
General staff	Nonteaching posts
Terms of service and duties	*Duties and conditions of service of staff*
Head of school	Principals
Teaching staff	Teachers
	Nonteaching posts
Fixing of salary levels/benefits/incentives	*Fixing of salary scales for staff*
Head of school	Principals
Teaching staff	Teachers
	Nonteaching posts

World Bank Study (2003)	OECD-INES (1998)
Evaluation methods/supervision	
Head of school	
Teaching staff	
Promotion	*Influence over staff careers*
Head of school	Principals
Teaching staff	Teachers
	Nonteaching posts
Training	
Head of school	
Teaching staff	
Certifying staff	
Head of school	
Teaching staff	
Allocation and use of resources	**Allocation and use of resources**
Allocation of resources to the school	*Allocation of resources to the school*
Salaries and benefits	Teaching staff; nonteaching staff
Administrative/operating costs	Operating expenditures
Capital expenditure (infrastructure/maintenance)	Capital expenditures
Scholarship/awards	
School projects/activities	
Budget/finances	
User charges/monthly fees/voluntary fees	
Fundraising activities	
Allocation from state/subsidies	
Procurement and disbursement	*Use of resources in the school*
Salaries and benefits	Staff
Administrative/operating costs	Operating expenditures
Capital expenditures (infrastructure)	Capital expenditures
Scholarship/awards	
School projects/activities	
Relationship with unions	

Sources: OECD 1998; World Bank study 2003.

If a single item produced multiple answers, although the instructions for the questionnaire did not specifically allow this, each answer received half of the original weight of that item.

The following table compares the indicators used in the two studies:

Endnotes

1. Accountability means more than "answerability" or "enforceability." It implies a precise set of relationships between principals and agents encompassing five main features: delegation, finance, performance, information about performance, and enforceability (World Bank 2004c).
2. This, however, is not different from what had occurred in other countries that had decentralized earlier, such as Spain and Chile (political reasons) and the United Kingdom and Australia (concerns about state finances). After Franco died in 1975, a new Spanish Constitution promoting a transition to democracy devolved central functions to regional governments (Hanson 2000). Through an opposite political transition in Chile—from a democratic to a military government—newly empowered neoliberal economists and social planners also pushed for more decentralization. In contrast, Australia's fiscal situation provided the principal motives for public service reform. The Victorian Commission of Audit assessed public expenditures in key sectors as too high and pushed for incremental change (Pascoe and Pascoe 1998).
3. One impediment to further devolution of education functions is increased politicization of elections at the local level. In the Philippines, teachers serve on the Board of Election Inspectors and thus play an important role in counting ballots (Manasan 2002).

4. This was undertaken with the 2001 Decision on the Reform and Development of Basic Education by the State Council (Wang 2004).
5. Cambodia's policy goals for education reform are contained in the Education Strategic Plan (ESP) for 2001–5 and implemented through the Education Sector Support Program and the Priority Action Program rather than through a single piece of legislation. The ESP reiterates the central government's vision: "The Ministry's vision of an inclusive education system also includes broad-based participation al all levels of Government and civil society in taking responsibility for planning and implementation of education services . . . An associated goal would be to incrementally delegate greater decision-making and spending authority to districts, possibly communes, and schools. In this way, all national stakeholders would also have to assume responsibility for frank and open evaluation of how the system is performing and in taking steps to put things right" (Royal Kingdom of Cambodia 2001, p. 1).
6. The OECD-INES method clearly distinguishes between de jure and de facto decision-making power: "The descriptions of 'at what level' and 'how' educational decisions are made reflect the actual decision-making process. In some cases, a higher level of government may have formal or legal responsibility for decision-making, but in practice, that level of government delegates its decision-making authority to a lower level of government. In describing the actual decision-making process, the lower level of government is identified as the decision-maker. Similarly, a higher level of government may provide a lower level of government with choices in a particular area of decision-making (e.g., the selection of textbooks for particular course). In that case too, the lower level of government is the actual decision-maker, but within a framework established by a higher level of government. Finally, there are cases in which one level of government may have the responsibility for an individual decision, but inaction by the higher level results in a decision being made by a lower level within the educational system" (OECD 1998, p. 407).
7. Although references are frequently made to state-level decentralization in Brazil, the process has progressed at such a rapid pace with FUNDEF's implementation that, as municipalities and mayorships are given responsibility for the first four years of basic education, discussing decentralization at the state level does not fully reflect the national context.
8. Local government expenditures on education rose nearly 14-fold, from ₽ 0.8 billion in 1991 to ₽ 11.6 billion, in 2001 (Manasan 2002).
9. The Local School Board is cochaired by the local chief executive and the division superintendent. Other members include the chair of the education committee of the local legislature, the local treasurer, a representative of the federation of local youth councils, the president of the local federation of teacher-parent associations, a representative of the local teachers' organization, and a representative of the nonacademic personnel of the local public schools (Manasan 2002).
10. Because of a shortage of teachers at the local level, many local governments hire and pay supplementary teachers despite the fact that this function is one of the primary responsibilities of the central Department of Education.
11. This high percentage may be due to the unclear distinction between fees and voluntary contributions.
12. The share of central government spending in capital expenditures fell from 10.5 percent in 1990–91 to 4.6 percent in 1996–2000, and the central share of maintenance and operating expenditures fell from 18.7 percent in 1990–91 to 10.4 percent in 1996–2000 (Manasan 2002).
13. With the transfer of authority and management to regional governments in Indonesia, "It is hoped that the local governments are capable of obtaining more funds in their regions and in managing them more efficiently and effectively. It is expected that the local governments are able to use or exploit the sources of funds in the regions, such as the private sector and other education stakeholders, in funding education" (Government of Indonesia 2001).
14. Until recently, the national government retained 10 percent of total tax revenues for its own use and provided 9 percent to local tax offices to assist with collections, 16 percent to provincial governments, and 65 percent to local governments (Lewis 2002).
15. The coefficient of variation in literacy rates declined from 0.11 in 1989 to 0.08 in 1994.
16. There was no change in the coefficient of variation of enrollment rates across the regions.
17. The creation of ARMM was a direct result of the 1996 peace treaty between the national government and the Moro National Liberation Front. Republic Act No. 9054—the law creating ARMM—contains detailed provisions that pertain to the governance, regulation, and funding of human development sectors in the region. However, the 1991 Local Government Code had already mandated devolution of many functions and responsibilities related to human development—notably health and social welfare services—to provinces, cities, municipalities, and *barangays* (World Bank 2003b).
18. These comparisons exclude a few provinces where the samples tended to be in urban areas. According to the SUSENAS Work Manual (Government of Indonesia 2002), "Because of the unfavorable security situation, in the following provinces/regencies SUSENAS 2002 is only conducted in Banda Aceh (Aceh), Ambon (Maluku), Ternate (North Maluku), Sorong (West Irian Jaya), Timica (Central Irian Jaya), and Jayapura (East Irian Jaya)." Because the samples were not representative, enrollment rates in these provinces appear to be surprisingly higher than in other provinces.
19. Education systems suffer from ineffective and substandard schools, persistent shortages of good textbooks, and unprepared and absent teachers. The nondelivery of publicly supplied textbooks and chairs at the beginning of each school year in several of these countries deprives millions of children of the chance to do better in school. In the Philippines, this problem was estimated at 30–60 percent of total contracts with the education central agency (Chua 1999).

    The proportion of teachers who are absent from the classroom is too high, according to a recent survey of teachers in several countries. For example, in Indonesia, 17 percent of teachers in primary schools were not on the school premises during school hours. And too many teachers do not know their subject matter better than their students, as indicated by the performance of teachers on tests conducted for a recent study of the quality of primary schools in Vietnam (World Bank 2004b). These problems are also found in a much wider set of countries for which policy and program evaluations do not point conclusively to gains

from higher per pupil spending or from investments in specific school inputs (Glewwe 2002).

20. The newly established Academic Accountability Council, along with the Office of Accountability, was jointly responsible for overseeing a system of review and analysis of school performance, while local school councils lost some of their independence.
21. See the Chicago Public Schools website: www.cps.k12.il.us/.
22. Paes de Barros and Silva Pinto de Mendonça (1998) conducted a broad evaluation of decentralization across most Brazilian states. Their research base includes all geographical units in the country except the Federal District, northern states, and the state of Alagoas. The study examined data between 1981 and 1993 and included 220 observations.
23. The measures of educational performance used included the repetition rate (school census); the proportion of children outside school and two measures of grade-level lag (National Household Survey Sample, or *Pesquisa Nacional por Amostra de Domicílios*); and student achievement (National Basic Education Evaluation System, or *Sistema de Avaliação do Ensino Básico*).
24. The 10-year-old Basic Education Quality Improvement Project (*Próqualidade*) aimed to strengthen school autonomy by providing managers in central and regional offices with tools designed for information-based decision making; and help school directors assume their new roles as both leaders and managers in a more decentralized state education system. The project also aimed to increase teachers' access to training opportunities; deliver packages of instructional materials to public schools; and upgrade facility management to ensure equitable access of pupils to classroom time as well as rational use of school space.
25. The LEAs were created according to population distribution and density, number of institutions, geographic characteristics, sociocultural considerations, and the extent to which planned areas overlapped with existing district boundaries.
26. This act was supported by the National Decentralization Committee and part of the Decentralization Action Plan passed by Parliament in early 2002.
27. In China, the monitoring and evaluation system is quite comprehensive. Throughout compulsory education, students must take exams and tests following each semester and school year to graduate. In primary schools, students must pass tests in Chinese and mathematics, while tests in the remaining subjects are usually used as checkup. In secondary schools, exam subjects reflect the general subjects taught to a given graduating class, while exams in the remaining subjects are again used for checkup (China Education and Research Network 2003). Junior secondary school graduates seeking promotion to senior secondary schools must pass locally organized entrance exams prior to full admission.

    In Indonesia, final exams are set at both the national and school levels. While the national portion is based on multiple choice, the school portion is based on laboratory work, written portfolios, or demonstration of a given set of skills. Students are tested on core knowledge in three main subject areas: mathematics, Indonesian, and English. At the central level, test results play a strong role in resource allocation. At the school level, they provide comparable information on the relative strengths and weaknesses of individual schools. At the client level, parents and the community can use exam results to hold providers accountable. However, the new exam system does not include primary school, and does not provide information about the performance of children below the ninth grade. Confronted with this, provinces and districts can create their own complementary testing system using guidance available from the National Evaluation Center.
28. Some have argued, however, that even when reforms involve quality issues, unions still oppose them, given that such reforms require more effort and political sacrifices (Corrales 1999). Similar debates stem from the joint function of unions as both professional organizations aiming to promote efficacy and public knowledge and agents of collective bargaining (World Bank 2004c).
29. In Mexico, given strong leadership by the teachers' union, the government quickly realized that it could neither confront nor ignore it, and so openly included it in the process of negotiation on greater decentralization. Unions in Chile are also politically powerful and "have systematically stood in the way of true curriculum reform and teacher accountability, and the political class has been unwilling to confront them" (Edwards 2003). Less contentious than in Mexico and Chile, reform in Bolivia has shown progress in negotiating with teachers. Nonetheless, teachers' unions are also extremely powerful and reform has stalled at several points. In contrast, unions in Brazil did not stall reform; union representatives were active stakeholders in reform negotiations, and decentralization progressed to the school level. And, finally, in El Salvador, teachers' unions took a strong stance against the EDUCO model, but government dissuaded them with evidence of innovation in teaching practices (Marques and Bannon 2003; Stavenhagen 1999).

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