

Overview of Indian CET Policy Formulation

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OVERVIEW OF INDIAN EDUCATIONAL POLICY FORMULATION

Introduction: The Paradox

Indian education was largely the realm of the states through the first three decades of independence. Individual regional bodies, such as those at Calcutta in 1823¹ and Delhi in 1911², helped to manage the educational process on a largely local basis. The Government of India Act formally declared education to be a provincial matter in 1919³.

The 1917 Calcutta University Commission made the first inroads in the area of educational policy. It was charged with finding solutions to the problems in the University of Calcutta organisation, but soon decided that no permanent solutions were possible without a reorganisation of the secondary education level⁴. In this context, it reported that the Indian government can act as an advisor, an impartial arbiter, and a higher-level coordinator in educational matters⁵. Concerns regarding such a drastic increase in centralisation—especially in light of the aforementioned Government of India Act two years later—soon moderated its proposed role into a more passive advisory function⁶.

The Hartog Committee, which reviewed the Constitutional reforms in the Indian polity in 1928, further recommended that when the provinces were unable to provide funds for universalising primary education, the Centre should be able to bail them out⁷. Even so, proponents of centralisation made little headway until the sweeping consolidation of administrative power following independence.

As dozens of provinces and kingdoms consolidated into formal states, educational institutions rose to aid the states' development. After Madhya Pradesh was created in 1950—and reorganised in 1956—one of the new state's first acts was a measure to consolidate the varying school codes across the vast region⁸. Several national organisations, such as the National Council for Educational Research and Training (NCERT) were set up to create educational guides for state governments; the states followed suit with parallel organisations.

The Kothari Commission of 1964-66 recommended a number of centralising measures, such as a unified national secondary education board, but central intervention was limited in its aftermath. In 1976, the Forty-Second Amendment to the constitution placed education on the concurrent list, giving the central government a greater say in the process of educational development.

Since the adjustment of educational roles, funding and management has largely remained a realm of the state governments. However, directives and mandates—often unfunded—have been heavily influenced from the Centre. The central government sends 40% of school curricular and managerial mandates and only 5% of the funding⁹. The Constitution gives no guidelines to either it or the states in terms of areas or limits of involvement. While this was

¹ Majumdar, Srilekha, et al. 2001. *Educational Administration in West Bengal*. New Delhi: Vikas.

² Tyagi, RS, IP Aggarwal, and NK Dhawan. 2000. *Educational Administration in Delhi*. New Delhi: Vikas.

³ Government of India. 1960. *CABE Silver Jubilee Souvenir*. New Delhi: Ministry of Education.

⁴ Asiatic Society of Bangladesh. 2004. Calcutta University Commission, The. *Banglapedia*. Accessed 7 November 2004 at http://banglapedia.search.com.bd/HT/C_0026.htm.

⁵ Calcutta University Commission.

⁶ *CABE Silver*.

⁷ Matthew, A. 1990. *Ministry of Education: An Organizational History*, 17. New Delhi: NIEPA.

⁸ Mahajan, Baldev. 1994. *Educational Administration in Madhya Pradesh*. New Delhi: Vikas.

⁹ NIEPA. 2001. *Governance of School Education in India*, edited by Marmar Mukhopadhyay and RS Tyagi, 9. New Delhi: NIEPA.

intended to imply a need for cooperation between the two, it has actually led to a confusion of each party's ultimate mission and responsibilities.

Educational researchers AK Nayak and VK Rao illustrate the jumble perfectly as they recommend that education should embrace the whole (i.e., centralise) while catering to individuals¹⁰. The 1993 Yash Pal Committee report *Learning without Burden* attempted to clarify the situation by designating merely the frameworks and recommendations as central level responsibilities. All else were to be left to state and—with the rise of the Panchayat Raj—local administrations¹¹. A 2001 report prepared for the Ministry of Human Resources Development (MoHRD) by the Expenditure Reform Commission recommended that the NCERT close its regional offices; stronger state research resources and improved communications facilities render them unnecessary¹². The Department responded in the 2002 Tenth Five Year Plan by announcing the opening of a fifth regional institute in Shillong¹³.

Meanwhile, some states are increasingly eager to create parallel organisations to the centre, such as West Bengal's founding of the State Open Schools system¹⁴ just eight years after the National Open Schools system. This attitude has not at all been uniform. Efforts in curriculum development, one of the foci of this paper, varies from a dearth of work in the northeastern states to distinct education policies in Maharashtra, Tamil Nadu, and West Bengal.

The imbalance also varies between the primary and secondary levels. Primary education has become a concrete example of sharing responsibility, through the District Primary Education Program (DPEP) and Education for All programs. The absence of such a comprehensive cooperative plan as DPEP in favour of individual subject schemes¹⁵ makes collaboration at the secondary level far more nebulous.

These overlapping duties and questions of responsibility pose challenges for research in Indian education. The first step on the journey towards deeper educational research is to build and examine a map of the system. This paper hopes to achieve just that, by examining players at the national and state levels of education and their interactions.

The Players

National Level Bodies

Numerous committees, working groups, and agencies have aided the Government of India in developing, implementing, and managing educational plans of action at all levels of administration. Today, a few main groups dominate national educational policy, including the national apex bodies:

- Ministry for Human Resource Development (MoHRD)
- National Council for Educational Research and Training (NCERT)
- National Institute for Educational Policy and Administration (NIEPA)
- Central Advisory Board of Education (CABE)
- National Council for Teacher Education (NCTE)

¹⁰ Nayak, AK, and VK Rao. 2002. *Secondary Education*. New Delhi: APH Publishing.

¹¹ National Advisory Committee. 1993. *Learning without burden*, chairman Yash Pal. New Delhi: The Committee.

¹² Government of India. 2001. "Rationalization of the Functions, Activities, and Structure of the Ministry of Human Resource Development", 26. Expenditures Reform Commission.

¹³ Government of India. 2002. *Tenth Five Year Plan*, ch. 2.3. Planning Commission.

¹⁴ Majumdar, *West Bengal*.

¹⁵ Eg, those for science education equipment improvement and vocational curriculum

- Council of Boards of Secondary Education (CoBSE)

Ministry for Human Resource Development (MoHRD)

As a central government ministry, the MoHRD is one of the more politicised institutions in the Indian educational system. Its Department of Education has numerous in-house policy committees¹⁶. In any case, its influence moves far beyond political circles. The ministry sways appointments for leadership in several national apex bodies¹⁷, and has representatives on the controversial Central Advisory Board of Education (CABE).

National Council for Educational Research and Training (NCERT)

Founded in 1961, NCERT is charged with researching pedagogical matters and developing educational materials for use in all-India and state level boards. Its main division is its National Institute of Education, which includes departments for every facet of curriculum and implementation. Also under its umbrella are the Central Institute of Educational Technology (CIET), the Pundit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE) in Bhopal, and the five regional institutes scattered across the country. The latter five institutions were created to push teaching and teacher training methods into all parts of the country.¹⁸

The Council is officially an autonomous body whose leadership is appointed by the Government. Its faculty is largely hired on as professional employees. It falls under the jurisdiction of the ministry's secretary of secondary and higher education¹⁹.

Controversy over textbook and curriculum contents have kept NCERT in the heat of the public spotlight over the past few years. Thus, the organisation has the air of a fort under siege. This may have opened the door to a new wave of politicised intervention in the wake of the 2002 Supreme Court decision on 2000 national curricular framework.

National Institute for Educational Policy and Administration (NIEPA)

NIEPA was registered as a society in the 1960s to act as an Indian subsidiary of UNESCO during the latter's work in educational development. When the job was finished, NIEPA was merged into the Centre's collection of apex bodies.²⁰

The institute appears to have more breathing room than its sister organisations. This is in part due to the nature of its work; NIEPA largely refrains from very public subjects of curriculum and examination development. Instead, it works more in the area of administration and management. It is supervised through high-level appointments by the Planning Division of the MoHRD's Department of Secondary and Higher Education, but has an independent faculty.

National Council for Teacher Education (NCTE)²¹

The NCTE's primary relevance in this survey is its heavy involvement in the pedagogical reforms suggested by the Yash Pal Committee. Its work in assisting local-level training bodies also makes it a possible source of ground-level knowledge.

¹⁶ MoHRD. Department of Education – Organization – Who's Who. Accessed 8 October 2004 at <http://www.education.nic.in/htmlweb/orga.htm>.

¹⁷ a fact only revealed upon examining the charters of the national apex bodies

¹⁸ NCERT. Organization. Accessed 7 October 2004 at <http://www.ncert.nic.in/sites/organisation/organisation.htm>.

¹⁹ MoHRD.

²⁰ NIEPA. Introduction. Accessed 7 October 2004 at <http://www.niepaonline.org/>.

²¹ Courtesy Sandhya Sanghai, Dept. of Elementary Education, NCERT.

Central Advisory Board of Education (CABE)

Until June 2004, the CABE was body without any statutory basis. CABE was founded in 1921 on the recommendation of the Calcutta University Commission Report four years earlier. It was disbanded in 1923 on the grounds of financial prudence. CABE was revived in 1935, and served in various capacities intermittently for sixty years. It eventually became a key body for approving the curricular frameworks from NCERT.

Its last constitution, in 1994, was allowed to lapse during the NDA government in 1999. The following year, the NCERT created its controversial 2000 National Curricular Framework, which was challenged in a case heard in the Supreme Court. In that September 2002 ruling, *Roy v. Union of India*, the court ruled that the NCERT could be excused for not having consulted the CABE upon completion of the national curricular framework, as the CABE did not actually *exist*²². In the future, the Board will act as the last word on upcoming frameworks, as well as on any other matters for which it is consulted. In two years, it has rocketed from non-existence to gain the final word on education.

By executive order of the MoHRD controlling authority, the CABE was reconstituted in 2004. Under current rules, the membership is drawn from a variety of sources, including many political organizations. The HRD Minister serves as chairman. Twenty-five officials from government leadership positions serve on the board, of which fifteen serve in an ex-officio capacity. Four Lok Sabha and two Rajya Sabha members are to be selected by their respective bodies to join the CABE, while thirty-one other members are to join to represent "different interests"²³.

*Council of Boards of Secondary Educations (CoBSE)*²⁴

CoBSE is a body designated to act as an intermediary between the Centre and state governments, as well as between the various states themselves. It has been registered as a society, but remains an autonomous body with few visible ties to any particular department.

At present, it has been reported that the Council is largely a one-man operation. The process of nominations to the council, as well as its administrative status, is presently undocumented.

Boards of Secondary Education

In the early days of modern Indian education, universities lacked a way to determine the calibre of students passing out of secondary schools. In order to fill the gap, they created their own entrance examinations, and, in effect, became the country's first examination boards.

Various government and societal bodies began to step up with third-party examination systems. Two of the earliest were the boards in Madras (1908) and Delhi (1926)—both of which exist even today. Today, there are thirty-one boards in total, three of which are all-India boards. The vast majority of the state boards were founded after independence (as were the state which founded them). Their functions vary based on a number of factors, such as age, structure, and region served²⁵.

²² *Roy v. Union of India*, 12 September 2002. Writ Petition no. 98. Justice D.M. Dharmadhikari.

²³ Resolution [on the reconstitution of the CABE], 6 July 2004: Ministry of Human Resource Development, Dept. of Secondary and Higher Secondary Education. New Delhi: Gazette of India.

²⁴ Government of India. 1997. *Remodeling of School Boards*, §4.13. Ministry of Human Resource Development

²⁵ *Remodeling*, various.

Central Board of Secondary Education (CBSE)

The CBSE began as an autonomous society in 1935, giving examinations to students in Delhi and central India. After independence, it was eased into the central education system and soon became one of the two premier national boards. It serves as the official board for central government schools like Kendriya Vidyalayas (KV) and Jawahar Navodaya Vidyalayas (JNV). Government schools in states without boards, such as Delhi, often follow the CBSE, as do numerous private schools.

Though officially autonomous, the CBSE falls under the implicit authority of the Controlling Authority of the MoHRD's Department of Education, which appoints the board's officers²⁶. The organization has a general board, further subdivided into committees for finance, examinations, affiliation, and pre-medical/pre-dental examinations. Officers include a full-time chairman, a secretary serving as chief administrative officer, a controller of exams, and an academic director²⁷.

The CBSE has close ties with the national level apex bodies; for instance, it tends to very closely follow the NCERT frameworks²⁸. Furthermore, the CBSE has acquired the role of "trendsetter" in Indian schools, especially with respect to science and vocational curricula. Navneet Publications Finance President Sunil Gala notes that, of late, most state syllabi have been revised in tandem with the CBSE—he estimates that 80-85% of they syllabi will be uniform in a few years' time²⁹. With over 6500 affiliated schools around the world³⁰, the CBSE is heavily influential in the realm of curricula and examinations.

Council for the Indian School Certificate Examinations (CISCE)

In 1952, a meeting was convened to consider the replacement of the Cambridge examination certificates with an Indian examination certificate of the same calibre. The Anglo-Indian community made a significant push for the move, and the CISCE was formed in 1958. The Council filed as an official society in 1967, and later became the only non-governmental secondary education board recognized by the Ministry of Education by way of the Delhi School Education Act of 1973³¹. Their focus continues to be on students receiving a well-rounded education in both the sciences and the humanities³², and continues to be strongly supported by the Anglo-Indian community³³.

The Council is composed of a variety of individuals involved in the education process, including representatives from Anglo-Indian schools, other CISCE-board examining institutions, and state education institutions. Several committees—most notably the curricular review committees—report their various findings to the general council for approval.³⁴

The main Council office is located in Delhi; this office also handles the Indian Certificate of School Examination (ICSE) class X examination. The Indian School Certificate (ISC – class XII) offices, as well as the Research, Development, and Consultancy Division (RDCD), are located in neighbouring Noida. Decisions involving the system are largely handled in unison, making the separation merely a geographic oddity. A branch office in Calcutta runs some

²⁶ *Remodeling*, §8.09

²⁷ CBSE. Management of CBSE. Accessed 7 October 2004 at <http://cbse.nic.in/manage~1/org.htm>.

²⁸ *Remodeling*, §8.14

²⁹ "Latest Speak." 6 January 2004. India Infoline.com. Retrieved 17 August 2004.

³⁰ CBSE.

³¹ Delhi School Education Act, 1973. Delhi: Controller of Publications.

³² *Remodeling*, §8.21

³³ *Remodeling*, §8.26

³⁴ Courtesy Meera Aggarwal, Asst. Secretary, CISCE.

teacher training programs³⁵, but there are no regional branches for core functions analogous to the regional institutes under the NCERT.

In recent years, groups from both within the CISCE umbrella and outside agencies—most recently the Amrik Singh Commission³⁶—have called on the Council to coordinate curricular review more closely with overall national trends. The Council itself notes that its curriculum for class X and class XII boards are in line with the National Policy on Education of 1986³⁷, but the Council has largely maintained its independence. While it has adapted to some trends in language, geography, and history, it has taken a leadership role in adding courses in environmental sciences (before the Supreme Court ruling mandating such classes), gender sensitivity, and overall curricular flexibility.³⁸

The RDCD, as expected, develops and reviews curriculum for the Council. Subsidiary subject curriculum committees meet annually to analyze school feedback, examination results, and current trends to revise class X and XII syllabi as necessary. The major overhauls occur in five-year cycles. The Council does not explicitly require or recommend textbooks until the class IX level; even then, the recommendations only cover language classes.

The Council has in place a solid feedback system which funnels complaints and recommendations from parents, teachers, and students through the school principals to the necessary agencies at CISCE (e.g., curricular recommendations to the curricular committees). Such feedback is brought to the council's attention almost annually.

National Institute of Open Schools (NIOS)

The various boards of education grew from the desire to examine student skill sets before the students entered university, and the "junior college" or "pre-university" system that still exist in some states like Andhra Pradesh³⁹ is a testament to those times. Today, however, greater numbers of students are moving to secondary education for its own right rather than as a step towards graduation. Thus, the call for a change in the system has been sounded for many years.

Today, the concept manifests itself in the push for "vocationalisation" of secondary education curricula. However, the education system had to take a step before that—to set up a system for the formation of skill sets outside the traditional classroom lecture based model for students. With that goal, the NIOS system was developed as a subsidiary of the CBSE specializing in vocational education in the wake of the Ishwarbhai Patel report in 1977. It was formally spun off in 1989, and boasts over 3.4 lac enrolled students across the country as of the 2003-04 school year⁴⁰.

The emphasis in NIOS is on self-paced learning to ensure that other students in the system are not alienated from the system. Innovations from the NIOS include pedagogical developments and an "on demand" learning program in the process of development at the moment. The system is further customized in that a student who has passed a class X NIOS

³⁵ This office's location may be related to the fact that West Bengal has the most CISCE-affiliated schools in the nation.

³⁶ *Remodeling*, §8.20

³⁷ Council of Indian Schools Certificate Examination. 2004. Affiliation Guidelines. New Delhi: CISCE.

³⁸ Courtesy Aggarwal.

³⁹ *Governance*.

⁴⁰ National Open Schools. 2004. NOS at a Glance. Accessed 21 September 2004 at <http://www.nios.ac.in/glance.pdf>

board exam may enroll in a higher secondary course in almost any higher secondary education board in the country. It is also now pursuing a +2 only curriculum⁴¹.

Unlike secondary education boards, the NIOS only sets basic standards regarding examinations; institutions preparing students for NIOS boards are virtually free to teach as they choose. The organization's autonomy aids its flexibility. NIOS is a separate registered society and has an executive committee to manage operations with little interference⁴².

State Boards of Education

Of the estimated 75,000 schools in India providing secondary education, over 90% follow state secondary boards⁴³. We will look closer at the state boards when we examine the state apex bodies as a whole, but suffice it to say they are as widely variant as the rest of the state education systems. Not all states have formal boards—e.g., Delhi depends on the CBSE and Chhatisgarh relies on the MP state boards—but every state has an examination department to coordinate the process.

Thus far, the state boards have been fairly mechanical. They have preferred to specialize in the basic processes of examination distribution and grading, and are relatively efficient at the task. However, experts have been calling on these boards to become more diversified, or at least increase their contact with sister organizations, as the CBSE has. Particular tasks for completion or oversight include curriculum and textbook development and distribution⁴⁴.

International Baccalaureate Organization (IBO)

The IBO is worthy of a special note because its influence is growing beyond its traditional role in international schools. The IBO was founded in Geneva, Switzerland, in 1968, and has been widely known as the standard educational board for children whose parents were stationed abroad for commercial or diplomatic purposes.⁴⁵ As of the 2003-2004 school year, it served some 25,000 diploma candidates in over 100 countries.⁴⁶

The organization has changed significantly, as almost half of IB students are in state or national system schools (rather than international schools).⁴⁷ To Indians, its structure is reminiscent of the CISCE; it features greater academic flexibility for students and stronger feedback loops for schools. Of late, it has even been described as a possible competitor to the CISCE boards.⁴⁸

The secretariat is based in Geneva, but the finance, curriculum, and testing bodies are based in Cardiff, Wales. The core functions are based in these two areas, with regional councils reporting to and taking part in the Council of Foundation. The IBO includes representatives from the curricular development teams, concerned governments, universities, and various NGOs.⁴⁹ The governments' cooperation is key; schools following

⁴¹ Pant, MC. 2004. Chairman's Message. Accessed 7 November 2004 at <http://www.nios.ac.in/Chairman.htm>

⁴² National Open Schools. 1990. *A Decade of Learning: Decennial Report 1980-1990*, 18.

⁴³ *Education World*. Sep 2004. Children at Risk: India's Unsafe School System.

⁴⁴ *Remodeling*, annexure I.

⁴⁵ International Baccalaureate History of the IBO. 2004. History of the IBO. Accessed 21 December 2004 at http://www.ibo.org/ibo/index.cfm?page=/ibo/about/ibo_history&language=EN.

⁴⁶ International Baccalaureate Organization. 2003. *IBO Annual Review 2003*, 16.

⁴⁷ International Baccalaureate Organization. 2002. *Schools' Guide to the Diploma Programme*, 4.

⁴⁸ Broad Choice of Class X Boards. *Deccan Herald*. 1 July 2004.

⁴⁹ International Baccalaureate Organization. 2004. New Governance Structure. Accessed 21 December 2004 at <http://www.ibo.org/ibo/index.cfm?contentid=BB428B9A-0458-24F6-F23E97D83F83D289&method=display&language=EN>.

the IB must still meet state and national curricular requirements, barring exceptions made by their respective governments.⁵⁰

Schools largely develop their own curriculum, but the IBO assists in developing the curriculum and helping to implement it in other areas; its information technology curriculum is an example of a local program adapted disseminated by the larger body.⁵¹ The IB organization also has a research team which keeps teachers informed of the latest educational trends. Much of this collaborative work occurs through the IBO's Online Curriculum Centre.⁵²

The IBO sets and analyses its own question papers. These papers are then cross-checked before being submitted for final comments on general trends, which—as in the CISCE—are submitted to teachers.⁵³ In addition to final board exams, at least 20% of a student's final marks are to come from "internal assessment" at the school level. This may include any projects or tasks within the classroom, which helps to get a broader idea of a student's abilities. The IBO then analyses the internal assessment scores to reduce variation among schools; the IBO calls this process "external moderation."⁵⁴

State Level Apex Bodies

State apex bodies largely mirror the national level, as was the implied purpose of the apex body system. On the surface, the state level functions should also closely follow the national level; many similarities have indeed developed during the decades of institutional standardization. Regulations on teacher hiring, school aid, and establishment of examination departments are common across almost all states⁵⁵. With a few notable exceptions, most states have some state council for educational research and training (SCERT) or state institute for education (SIE)⁵⁶ charged with curricular and training-related research⁵⁷.

However, the differences are more striking and adversely affect our ability to examine educational processes at the state level. The differences are specifically found in the roles of the various bodies. Boards of education may be a dominant force in education or a small but specialized body to look after examinations—or even split between secondary and higher secondary. West Bengal, Orissa, and the southern states are examples of the latter.

The variations have certain patterns which we will examine, including establishment date, ideology, and regional culture. One out to keep in mind, however, that there remains a sizable variation *within* these pattern groups.

*Delhi*⁵⁸

The capital city was reduced to a mere provincial town by the time the British Governor-General announced that the British Indian capital was to be moved there from Calcutta in 1911. Prior to that point, Delhi's educational system had been under the administration of the inspectors from Punjab's Ambala district. An education department was set up the next

⁵⁰ *Schools' Guide*, 2.

⁵¹ *Ibid.*

⁵² *Annual Review*, 7.

⁵³ *Schools' Guide*, 2.

⁵⁴ *Schools' Guide*, 3.

⁵⁵ *Governance*.

⁵⁶ This merely indicates a difference in nomenclature over the years.

⁵⁷ Courtesy RS. Tyagi, Sub National Systems Unit, NIEPA.

⁵⁸ Tyagi. *Delhi*.

year, and a board of secondary education began in 1926, which would later become today's CBSE.

Indeed, the NCT has no secondary education board of its own. It does, however, have an elaborate educational organization with some years of experience. A Directorate of Education was set up in 1947 to oversee localized education bodies in four districts, the Municipal Corporation of Delhi, and the New Delhi Municipal Corporation. Each of these, in turn, oversees primary and secondary education in their area. A secretary of education took over the educational functions in 1950, elevating the matter to ministerial status.

Today, the Delhi educational administration looks much like that of any other Indian state. The state SCERT was founded in 1960, and was charged with curricular development, continuing education, curricular support and teaching materials, and developing links to national and other state apex bodies. It was given autonomous status in 1988, following a national trend towards legal autonomy for educational institutions. Accompanying the SCERT in curricular development is the NCT Government Curriculum Committee. It was set up in 1996 to push for a continuous, far-reaching curricular update process.

The Delhi Textbook Bureau (DTB) handles textbook manuscript organization and arranges for low cost or free textbooks for underprivileged students. It also reprints many NCERT textbooks. At the far end of the educational chain is the examination department, which coordinates the exams—though the presence of the CBSE means that it falls well short of a complete secondary education board.

The state is similar to many other smaller or newer states, in which the state cannot take advantage of an economy of scale and thus cuts back on the size of its educational administration. States like Himachal Pradesh (in the case of textbooks) and Delhi (in the case of examinations and texts) have less severe cases than the brand new states of Chhatisgarh, Jharkand, and Uttaranchal Pradesh, which are still in the process of forming their own apex bodies and are using NCERT materials in the meanwhile.⁵⁹

*Kerala*⁶⁰

At first glance, the state of Kerala seems like a questionable choice for a case study given our parameters. It is not the only state with southern characteristics, nor is it a terribly distinct example of state-developed curriculum. However, in our prima facie examination of the state's institutions, there seem to be quite a few interesting quirks in the system.

The State Institute of Education (SIE) handles the majority of the Kerala's education functions. The SIE improves textbooks and curriculum, organizes teacher education, and conducts educational research. The SIE's Textbook and Syllabus Unit handles the research specifically for the classroom materials. The SIE as a whole answers to the state Department of Education.

The Commission for Educational Development and Research writes textbooks for the state. The events that follow in the text development process are unique. RS Tyagi's *Educational Administration in Kerala* describes the government as a middleman in the textbook supply chain. The manuscripts are handed to private publishers to print, and then are sent to government warehouses for regional distribution. From here, other private players sell the

⁵⁹ Courtesy RS Tyagi.

⁶⁰ Kapoor, MM, et al. 1994. *Educational Administration in Kerala*. New Delhi: Vikas.

books in individual villages. This is particularly peculiar in a state known for its Communist government.

*Maharashtra*⁶¹

The state of Maharashtra developed a more decentralized and distinct approach to educational policy than most Indian states. We can attribute this to, among other factors, the early adoption of devolution through the Zilla Parishad & Panchayat Samitis Act of 1961. However, the Maharashtra apex bodies remained the most powerful institutions in the state. They are controlled by the Directorate of Education. The DoE also has regional zones, each with various regional branches of the state apex bodies.

The state's seven regional zones comprise four to seven districts each, and are headed by regional deputy directors. These units are the supervisory and monitoring authorities for most all educational programs implemented in the field. Within the individual districts, officers for primary and secondary education work under the Zilla Parishad CEO. The primary education officer is given strong control over the district's primary schools by way of the state's strong decentralization laws; the secondary education officer works with teachers' salaries, grants, inspection and affiliation. The structure from ministry to block-level is one of the strongest in India.

The state's most influential apex body is quite possibly the Maharashtra State Board of Textbook Production and Curriculum Research. Founded in 1967, it is responsible for everything from development to publishing of curricula and textbooks. The Pune-based body is charged with developing the curriculum, printing low cost texts for state board students, editing old editions, and distributing the texts to the schools.

Assisting the curriculum review process is the State Institute for Educational Research and Training (formerly the SCERT). It is primarily concerned with reviewing and improving existing curriculum, but also handles teacher training for the state. The implied timeline for curriculum review in the state is five years, as no new texts are to be published within five years of the previous edition, barring any "expiry date" to the contrary.

The Maharashtra State Board of Examination (MSBE) develops seventeen tests in all, for everyone from civil servants to teachers, and has some expertise in examination development. Here, we are primarily concerned with their role in developing exams for secondary and higher secondary education. The Maharashtra Board of Secondary and Higher Secondary Education conducts these exams, as well as providing some statistical research on board results.

*Meghalaya*⁶²

Of the northeastern state, Meghalaya has one of the strongest educational scenarios. It has an relatively high literacy rate and a low gender disparity at the primary and secondary levels. It is also one of the newer administrations among Indian states; most northeastern states have quite underdeveloped educational administrations. Given these factors, Meghalaya serves as a fairly good example for its region and type of state.

The Meghalaya state education administration was once heavily centralized under the umbrella of the Director of Public Instruction (DPI). In 1997, the DPI was reorganized and a few apex bodies received autonomous or high-level statutory status. The SCERT was made

⁶¹ Majumdar, Srilekha, et al. 2002. *Educational Administration in Maharashtra*. New Delhi: Vikas.

⁶² Majumdar, Srilekha. 2000. *Educational Administration in Meghalaya*. New Delhi: Vikas.

an autonomous Directorate of Educational Research and Training (DERT) under the reorganization. Today, it is primarily responsible for reviewing and revising curriculum, preparing syllabi and instructional materials, and evaluating or reforming the examination process.

Meghalaya's Board of School Education prescribes courses of instruction and conducts exams after classes III, VI, X, and XII. Thus, the average student spends much of his school career studying for one board or another. The Director of Public Instruction chairs the Board.

Textbooks in the state were produced by private publishers until the late 1980s. Today, the preparation is done at DERT before being published outside the state. At the higher levels of education, the books are often direct copies or translations of NCERT recommended books.

The NCERT has a major presence through its newly-opened Regional Institute at Shillong. The institute's goal is to aid the development of state-level education throughout the Northeast.

*Rajasthan*⁶³

The state of Rajasthan is an example of an educational administration largely developed after independence, with all that that entails. The Department of Education and its sister organizations were signed into being through a series of laws in 1957. The state has since been an innovator in the realm of political autonomy and stability for its apex bodies.

The state's research and training facility is known as the State Institute of Educational Research and Training (SIERT). It develops and renews curricula and works to provide teacher training. SIERT appears to be quite similar to the setup of the NCERT, aside from the heavy influence of the state Department of Education in administrative matters.

The Rajasthan State Textbook Bureau (RSTB) handles the work in every stage of the textbook development process, including preparation, editing, publishing, stocking, selling, and distribution. As we will see later, educational experts have a long history of encouraging such a centralized manner of textbook distribution.

The Rajasthan Board of Secondary Education (BSE) not only writes and administers secondary school examinations, it also prepares the syllabi based on SIERT curricula and has the final say on textbooks.

The RBSE has been more active than most state boards in taking the dominant role in that state's educational policy formulation. Among the innovations cited in expert reports are its system for numerical feedback to schools, its frequent publication of policy matters for stakeholders outside the educational institutions, and its role in coordination of education from syllabi and textbooks through to examinations⁶⁴.

⁶³ Mahajan, Baldev, RS Tyagi, and Shanta Agarwal. 1996. *Educational Administration in Rajasthan*. New Delhi: Vikas.

⁶⁴ NIEPA. 2001. *Enhancing the Academic Role of Boards of School Education*, coordinated by Sudesh Mukhopadhyay. New Delhi: NIEPA.

*Tamil Nadu*⁶⁵

The state of Tamil Nadu has another one of the nation's oldest educational administrations. The British began looking into the issue of indigenous education shortly after the Governor-General's commission for West Bengal in 1823; the state's Board of Secondary Education was founded in 1910.

Like other southern states, Tamil Nadu's principal apex bodies are housed inside the Department of Education. Also like its neighbours, it has a relatively independent curriculum, most likely due to cultural factors.⁶⁶

The Directorate for Government Examinations is a virtual examination-writing factory. It develops forty-one examinations for the state, including the secondary and higher-secondary exams we are examining here. The Directorate for Teacher's Education, Research, and Training handles the duties of an SCERT. Both of these two agencies answer directly to the Education Ministry.

Other key apex bodies serve the state in an advisory capacity, like the five educational boards. The Board of Secondary Education and Board of Higher Secondary Education conduct examinations for their respective segments of the student populace. The two are distinct agencies, as is the case in the other southern states as well.

The State Board of Anglo-Indian Education "observes" the Anglo-Indian schools. Any supervisory functions, one suspects, are purely coincidental. The Board of Matricular Schools advises the matricular schools' functioning, while the Board of Teacher Education has the same role in teacher education.

As was the case in Kerala, the state has a number of the features common to southern Indian states. For instance, the secondary and higher secondary education boards are separate, and the curriculum is relatively dissimilar to the NCERT framework. It has been described as one of the more extreme cases among the states⁶⁷, and thus provides some fertile ground for further research.

*Uttar Pradesh*⁶⁸

The Uttar Pradesh Ministry of Education and Languages oversees all educational activity in the state. In addition to regional branches to ensure local cooperation, the ministry has its own academic support staff to help in the form of the SCERT and the State Institute of Science Education (SISE).

UP is one of the few states to have a distinct policy on education. The latest was enacted in 1998, and included reforms with respect to the curriculum load recommendations of the Yash Pal committee. The latest NCERT framework policies have also been merged into the curriculum.

UP's Board of High School and Intermediate Education, in addition to its traditional role in examinations, also serves as the nodal agency for textbook production and distribution. The board brings teachers and educational experts together at various workshops to develop a model textbook. This model is based on NCERT models and its own curriculum and is given to the publishers to modify to their liking. The publishers submit their versions to the Board,

⁶⁵ Tyagi, RS. 2001. *Educational Administration in Tamil Nadu*. New Delhi: Vikas.

⁶⁶ Courtesy Mukhopadhyay.

⁶⁷ Ibid.

⁶⁸ NCERT. 2003. *School Education in Uttar Pradesh*, edited by R.P. Singhal. New Delhi: NCERT.

which then recommends copies which meet its specifications⁶⁹. The books are freely distributed across the state—with the Ministry of Education adjusting distribution to ensure that the books reach underserved rural areas as well.

The state Board and is the largest examining body in the world, serving nearly the 57 lac students in secondary and higher secondary schools⁷⁰. Its dominance in educational activity is as immense, as it not only aids but also catalyzes the curriculum development process in addition to administering examinations. However, its one major drawback is its governing status. While it is officially autonomous, experts see it as just another government-controlled body⁷¹.

*West Bengal*⁷²

West Bengal's state educational system began in 1823, the Governor-General of British India appointed a general committee of public instruction. The move would be followed up by the Madras government's creation of a board; the two would mark the beginning of British involvement in the Indian educational system as concerned the indigenous population. The state would also be one of the first with a Department of Education in 1921.

Today, the state's educational administration has become enormous. The state Department of Education largely oversees all other educational institutions. It formulates policy, handles matters of vigilance, and manages the printing of nationalized texts.

The West Bengal SCERT is the umbrella organization for seven state apex bodies, including the aptly named Directorate of Curriculum and Materials Development and the Directorate of Educational Research, Evaluations, and Curriculum Reform.

The state is also one of a handful—most such boards reside in the East and South—which splits its secondary education boards into two distinct organizations⁷³. In fact, these boards, the West Bengal Board of Secondary Education and Board of Higher Secondary Education, are administered under completely separate acts⁷⁴. While this is far less extreme than neighbouring Orissa (whose divisions are headquartered in separate *cities*), this set up still obstructs a smooth flow of information to serve students moving through these years of their education⁷⁵. It may be noted that there is no formal arrangement for inter- or intra-departmental control⁷⁶.

West Bengal has one of the country's more advanced educational devolutions. The district-level authorities not only handle the suggested issues of teacher training, but also carry out inspections of schools for recognition and school code enforcement.

Ideology plays an important role a few key states, and West Bengal is an example of this. The state has deviated from the NCERT curriculum in several areas, allegedly because of the Communist Party's partisan influence⁷⁷. The government's professed ideological independence may also be a catalyst for the state's parallel founding of state open school and vocational education programs.

⁶⁹ *Remodeling*, §9.29.

⁷⁰ *Enhancing*.

⁷¹ *Enhancing*.

⁷² Majumdar, *West Bengal*.

⁷³ *Remodeling*.

⁷⁴ The West Bengal Council of Higher Secondary Education Act of 1975 and the West Bengal Board of Secondary Education Act of 1963, respectively.

⁷⁵ *Remodeling*.

⁷⁶ Majumdar *West Bengal*.

⁷⁷ Courtesy Marmar Mukhopadhyay, Joint Director, NIEPA.

Other Educational Players

India, as is the case in any vibrant democracy, is saddled with a bevy of special interests that try to influence the process of education. Public bodies obviously have concerns over their power in the grand system, but citizen's groups and private companies also enter into the equation. In Uttar Pradesh, the teacher's unions have an inordinate amount of power, as teachers have their own reserved seats in the Legislative Assembly. This has arguably led to both a better quality of life for many teachers and a suspiciously high level of obstructionism from the same groups regarding new policy which may conceivably add to teaching burdens⁷⁸—in theory, this could even include large curricular or pedagogical changes. This situation is likely repeated in many other states.

If anyone has gained from the turmoil over textbooks, it is the textbook manufacturers. They have a vested interest in seeing the text revised early and often, as new editions essentially mean a brand new product line for a captive audience⁷⁹.

Finally, to a slightly lesser extent, cultural movements in certain regions of the country do affect curriculum development. The push for the preservation of distinct cultures among lawmakers in Maharashtra and the South has increased the deviation from NCERT materials relative to the Hindi belt⁸⁰.

The Flow of Command

Thus far, we have identified the major players in the education process. To finish our examination, we must look at the way in which these groups interact in today's education system.

National Level Bodies

The overall direction for education is ultimately set by the nation's policy on education. Input from Parliamentary debates, expert forums, and workshops are compiled by a traditionally Parliamentary committee. The final product is released as the National Policy on Education (NPE). Two such documents have come out of Delhi, in 1968 and 1986, since independence.

In the most recent document, NPE '86, the central government set forth a variety of goals, including Education for All, devolution of education, and the continued march towards vocationalisation of secondary and higher secondary education⁸¹. A plan of action followed in 1990, as did a clarifying revision in 1992.

Approximately every five years, the NCERT compiles its recent subject-level research under the guidance of the NPE to formulate a National Curricular Framework (NCF). The NCF takes work from each of NCERT's specialized Curriculum Group to create what the Council sees as a loose guideline for schools affiliated with various boards to follow.

The last edition of the NCF was surrounded by controversy, especially with respect to history and social sciences curricula. A lawsuit was filed to recall the framework on secular and procedural grounds, which the Supreme Court finally ruled upon in September 2002. The document was upheld, as Justice Dharmadhikari wrote in his opinion:

⁷⁸ Kingdon, Geeta Gandhi, and Mohd. Muzammil. "A Political Economy of Education in India: The Case of U.P." August 2000.

⁷⁹ Latest Speak.

⁸⁰ Courtesy, Mukhopadhyay.

⁸¹ National Policy on Education, 1986. New Delhi: Ministry of Human Resource Development.

The Constitution and functions of NCERT are also given to us for perusal. From the language employed therein, we find that the functions of the two Bodies are not so clearly delineated as to put them in water tight compartments. In evolving a National Policy on Education and based thereon a curriculum, in accordance with long standing practice, it was desirable to consult CAGE although for non-consultation the National Policy and the Curriculum cannot be set aside by the court.⁸²

Thus, the 2000 NCF stood. However, the court ruled that future frameworks and other important Centre-level educational policies were to flow through the CAGE. Justice MB Shah quoted a 1990 resolution:

The Central Advisory Board of Education (CAGE) is the highest advisory body to advise the Central and State Governments in the field of Education⁸³.

This ruling—and the CAGE reestablishment document that followed two years later—made the board the final word on educational policy⁸⁴. In our focus, the CAGE gives the NCF a final examination before its release to the public.

The NCERT also assists states in providing resources not developed lower levels. As such, it further refines the NCF into a model syllabus to be followed by state and national boards of education. In the process of development, NCERT faculty conducts workshops and regional seminars to include opinions of teachers, subject-level experts, and other educators. This document is then sent to the state apex bodies as requested to assist them in their own curriculum development⁸⁵.

All-India Boards

The three nationwide recognized secondary education boards are all dependent on the national curricular framework. None explicitly use NCERT materials, nor do they explicitly use the NCERT model syllabus. However, the nationally emphasized trends filter into even these larger bodies.

CBSE

The CBSE has taken on a “model board” status⁸⁶, and has thus taken the lead in the implementation of national recommendations. Its materials often parallel NCERT recommendations, and the board has often taken national curricular committee recommendations further than any other governing body. For instance, the National Open Schools were a spin-off of the CBSE’s vocationalisation efforts⁸⁷.

The CBSE’s curriculum has evolved both from its own curriculum committee and from years of developing links to NCERT⁸⁸. Either NCERT or selected CBSE textbooks, the content of which bears heavy resemblance to NCERT materials, are required from class IX onwards.⁸⁹

⁸² Roy, Dharmadhikari.

⁸³ Parliament of India, Resolution, 19 October 1990, as quoted in *Roy v. Union of India*, 12 September 2002.

Writ Petition no. 98. Justice M.B. Shah.

⁸⁴ “Resolution”.

⁸⁵ Courtesy Yogesh Kumar, Reader, Curriculum Group, NCERT.

⁸⁶ *Remodeling*.

⁸⁷ *Remodeling*, §8.14.

⁸⁸ Matthew, 38.

⁸⁹ Courtesy Paromita Roy, Sardar Patel Vidhyalaya.

NIOS

The National Institute for Open Schooling adapts the curriculum of the NCF to suit the needs of its diverse range of students, so the resulting materials rarely mimic the model syllabus. In fact, the NIOS develops much of its teaching materials independently of NCERT influence; this has led to its being used outside the non-formal education sector as well⁹⁰. However, the underlying principles of the NIOS curricula remain the same.

CISCE

The Council was founded precisely for its *variation* from the other boards. It has traditionally entertained a more all-around educational experience, with heavier emphasis on the arts and humanities than the CBSE. That being said, the CISCE has explicitly agreed to support the principles of the NPE '86⁹¹, likely in the areas of the sciences and non-university courses—both of which have traditionally been weaker areas under the CISCE. The textbooks are more dissimilar to the NCERT recommendations.

State & Local Bodies

If the national boards are varied in their adaptations of national apex materials and recommendations, the state-level boards are even more so. The common factor of interest is the level of national curricular integration in the “average” state, which has proven quite difficult to quantify. After a decade of regional analyses from NIEPA, we can point to some general trends which, as mentioned earlier, support our selection of case study subject.

In the realm of curriculum, Tamil Nadu (like the other southern states, for cultural reasons) and West Bengal (for ideological) have diverged from the norm. They are still likely to incorporate the general trends in education as recommended from the top, but specific writings go further than simple translation in terms of originality. It should be noted that the divergence often subsides in the secondary stage, as English becomes the medium of instruction and the universal materials of science take precedence over state and regional matters in texts. Maharashtra has relatively stronger institutions to manage the promotion of the Marathi language⁹², giving its education a distinct flavour as well—though its board claims to include national level material in over 70% of the curriculum⁹³. This state and Uttar Pradesh are unique in having their own stated education policies; others have defined separate policymaking mechanisms. While such a framework does encourage a state-level examination of the national trends, it also results in heavy overlap with existing national priorities⁹⁴.

On the other end of the spectrum are the more accepting schools. They include states like Delhi, which has no examination board of its own and reprints existing textbooks (with little to no modification), Himachal Pradesh, which only recently began efforts to introduce its own textbooks⁹⁵, newer states like Chhatisgarh, and less-administratively-established states in the northeast.

There are a few common reasons for the lack of state-level activity. First, NCERT materials are released in two languages: Hindi and English. Hindi-speaking states are left with little

⁹⁰ *Remodeling*, §8.33

⁹¹ CISCE.

⁹² Courtesy Mukhopadhyay.

⁹³ Maharashtra State Board of Education. Board Profile. Accessed 24 August 2004 at <http://www.mah.nic.in/msec/boardmem.htm>.

⁹⁴ *Governance*, 20

⁹⁵ Courtesy Tyagi

work and thus little reason to spend inordinate amounts of time and manpower to reinvent the wheel, as it were.

Second, smaller states are disadvantaged in an educational policy sector prone to economies of scale. States like Delhi or Himachal Pradesh have fewer students among whom to spread the fixed costs of administration and support institutions when compared to a larger state such as Uttar Pradesh. The Amrik Singh Commission's Report illustrated this with the example of board exam fees, which are significantly higher in small Northeastern states like Nagaland than in larger states like Gujarat.

Lastly, the newly-formed states like Jharkhand, or before them some Northeastern states, have higher priority agencies at birth than education. With large commitments like administration and transport coming to the fore, the states have little money or manpower to spare. Hence, states may not only draw directly from national-level bodies; they may actually continue using the parent state's apex institutions, as is the case in Chhattisgarh.

At the local level, the state and national boards hand their syllabi to affiliated schools. The much-announced decentralization has largely manifested in teacher training, as in the District Institutes of Educational Training (DIET), or in the unification of non-formal education. The latter lies outside the scope of our study (in primary education), but the former does have pedagogical impact on the subject. While the materials may yet be centralized, there is a concerted effort to customize the methods of instruction for students in various localities. Actual content, however, remains a top-down affair.

Policy Statements and Other Timely Literature

The young Indian republic began examining its fragmented education system in the 1949 Radhakrishnan Committee report, which examined university education. The 1952 Educational Commission followed up its work, but dealt specifically with secondary education. The report examined policy formulation and other matters, including textbooks.

The 1964-66 Kothari Commission became the gold standard for the examination of academic policy nationwide. Its foci included vocationalisation, and more importantly, standardization. At the time, states varied in their educational timeline, mostly at the secondary and higher secondary stages. The Kothari Commission was in large part responsible for the standardization of the 10+2 system we see today. Even the enrolment pattern varied greatly: educationally backwards Jammu & Kashmir, Orissa, West Bengal, and the BiMaRU states accounted for a significant part of non-enrolled students⁹⁶.

The Kothari Commission's report laid the foundation for the first National Policy on Education in 1968. NPE '68 largely mirrored the recommendations of Kothari, including calls for vocationalization and standardization, as well as administrative reforms. It may very well have begun the shift towards official central involvement in education, as defined by the Forty Second Amendment⁹⁷, because it was the first across-the-board move into educational reform. Ironically, the policies outlined in NPE '68 were slowly—if at all—implemented by the states, as education was still constitutionally a state issue. At least NPE did get some results: it introduced the "five year" policy review cycle and a new mindset of constant re-evaluation, and it was among the major factors leading to nearly universal educational access for rural students just years after the NPE⁹⁸.

⁹⁶ Matthew, 26.

⁹⁷ Ibid, 34.

⁹⁸ Government of India. NPE 1986: A Presentation, 1. New Delhi: Ministry of Human Resource Development.

Ishwarbhai Patel was called upon to head a committee in 1977 on then-recent trends in education. While the bulk of the report focused on encouraging “socially useful” volunteer work among students, it also analyzed the topic of vocationalisation. It went so far as to give sample syllabi for such courses at the +2 level.

In 1985, an educational policy diagnostic document entitled *The Challenge of Education* was released by the Department of Education, supported by numerous subject-level papers. *Challenge* was then debated in public forums across the country; the resulting discourse was added to the mix. What resulted would become the second National Policy on Education in 1986⁹⁹. It has had a large impact on educational priorities over the past two decades. The universal education initiative *Sarva Shiksha Abhiyan*, the inclusion of vocational curriculum catalysts in future Five Year Plans, and the official policy of decentralization (aided by the later strengthening of the Panchayat Raj in 1992), were all either started or accelerated by NPE '86. The Forty-Second Amendment, which moved education to the concurrent list, further enhanced its success relative to NPE '68, as states now had an obligation to listen to central government ideas.

NPE '86 turned out to be a major milestone from which the Plans of Action in 1986 (accompanying the NPE itself), 1990, and 1992 flowed. The Eighth, Ninth, and Tenth Five Year Plans (from 1992-2002) served as evidence of the impact on central government decisions.

The United States high-level National Commission on Excellence in Education released a scathing report of that America's educational performance in the now-famous 1983 work *A Nation at Risk*. The report shocked Americans into pushing for school reform in any form. India's equivalent followed a decade later in the Yash Pal Committee's report *Learning Without Burden*.

The 1993 report highlighted disconcerting revelations about Indian education, including the prevalence of rote memorization over true learning, and the burdensome loads carried by students as early as lower primary school. Its analysis was popularly illustrated by the MCD study of class I school bags, which weighed an average of 4kg. Most states created special committees in the wake of the report with the sole task of implementing its recommendations.

A committee headed by Amrik Singh examined the role of boards of secondary education with an eye to the future. Its report recommended an overall strengthening of the boards coupled with their autonomy in increasingly chaotic state bureaucracies. As it stands today, the state Departments of Education are better organized and have sizable control over any other state-level body; this, too, is only relevant to states in which the Department controls the other apex bodies.

Singh's committee recommended that such power be removed from the political Departments of Education and be placed upon the ideally apolitical boards of secondary education. Furthermore, the committee recommended that boards have jurisdiction over all aspects of education, with the board acting as the nodal agency¹⁰⁰.

In 2001, a conference of leading educational experts examined the very same subject. Their findings were summarized in *Enhancing the Academic Role of Boards of School Education*, which sought the same Board-centric goal as the Amrik Singh committee.

⁹⁹ *Governance*, 5.

¹⁰⁰ *Remodeling*, §3.11-12

The Issues Ahead

Numerous debates reside in the quiet world of educational policy. Some have been decided, but without proper implementation ideas. Others have yet to reach a consensus. Here, we look at the issues which affect trends in secondary education today.

University Involvement

As discussed earlier, most of the early secondary board exams were conducted by universities seeking to screen incoming students. Schools seeking to turn out students fit for admission produced syllabi in accordance with university exam patterns, giving universities de facto control over secondary school curriculum¹⁰¹. Textbooks were also often written by university professors, often by those with little classroom experience relevant to the level for which they wrote.

Indeed, only recently has higher secondary education moved from a “junior college” status to the final years of school education. Even this is still in dispute in southern states like Kerala¹⁰². The names may have changed in most states, but the emphasis largely remains the same: preparing students for their assumed jump to the university level. With more students moving past primary school each year, educational experts are calling for more curricular improvements to cater to these students’ needs.

Secondary education should probably be an ending point for some students—as it is in the United States and Europe—while still acting as a stepping stone for the college-bound. Proponents say this can be best achieved by exorcising university representation from the formulation of textbooks, curricula, and examinations with replacements in the state apex bodies.

Vocationalisation

Educational committees and experts have essentially turned it into a buzzword, but this does not lessen its importance. Following from the diminished university roles discussed above, vocationalisation is the introduction of streams which build skill sets for those interested in a particular trade for which a university education is unnecessary. The NIOS system has been innovative in this field with its education on demand outside of the traditional educational structure, and is now moving into the +2 arena. In any event, vocationalisation has been discussed in one form or another since the very first Commission on Education reported in 1882; we ought to find some consensus on the implementation of this issue soon.

Standardisation

India in 1964 still had a heavily fragmented education system. Conglomerated states like Madhya Pradesh were still in the process of merging the various educational policies of their component regions. Thus, the Kothari Commission was enthusiastically promoting the standardisation of education. Not even secondary education was standard; students may have completed anywhere from twelve to fifteen years of education before moving on to university.

This is no longer the case in today’s universal 10+2 environment, though the divisions between primary and upper primary education still vary. Rather, today’s standardisation debate concerns making state policy frameworks and educational structures the same across the country.

¹⁰¹ *Remodeling* §3.03.

¹⁰² Based on results of an informal CCS survey.

At first glance, this would seem to benefit few aside from researchers. However, the diverse system makes planning centrally-mandated initiatives difficult. Public concerns over the fractious nature of Indian society lead to increased calls for standardised education for all regions and peoples as a tool of unification. In any event, the case for policy standardisation is at odds with the current popular trends towards decentralised, locally-accountable education.

Curricular Autonomy

The latter issue flows into another topic altogether: that of curricular autonomy. By this, we mean the level of independence of state-level curriculum and textbook development in the interest of regional sensitivity.

The Yash Pal Committee report showed that students felt alienated by texts and lectures which did not reflect their environment¹⁰³. This could result from Delhi textbooks being sent unmodified to schools in the South, or from rural students reading passages geared towards urban students. State usage of NCERT materials with little regional modification—which happens far more frequently at the secondary level than at the primary level—exacerbates this problem by passively creating this atmosphere¹⁰⁴.

Furthermore, a variant curriculum supported by healthy state-level bodies creates a possibility for innovation at the state level, in turn giving some hope to curricular choice. As the system is today, the curriculum is over two-thirds standardised by default, and the bulk of educational innovation occurs in the national apex bodies¹⁰⁵.

In November 2004, the directors of the NCERT and several SCERTs collaborated in a two-day workshop, with the NCERT promising greater involvement in curriculum, education, and textbooks. As if to prove the tentative relationship between the two, one state director noted that “[a]lthough at the state level we decide what our students should read, at the national level we are treated as information collecting agents.”¹⁰⁶

Completely removing this atmosphere of will likely require autonomous, dynamic educational research institutions, i.e., SCERTs. So long as the NCERT provides a convenient crutch for state institutions or takes the states for granted (depending on one’s viewpoint), this curricular autonomy and its derivatives will remain mere pipedreams.

Textbooks

Among the findings of the Yash Pal Committee was the dishevelled state of textbooks in India. First, texts were poorly written for their audience. This was particularly true in primary schools, where passages with text written in university-standard English greeted new readers; the situation in secondary education was no better. Second, the texts were of poor quality in both paper quality and printing. Lastly, teachers too often treated them as the first and last authority on a subject matter. This led to students associating school with alien texts unceremoniously dumped upon the students¹⁰⁷.

The issue of textbook quality has dogged Indian education for nearly a half-century. The 1953 Report of the Secondary Education Committee complained of the same poor quality

¹⁰³ National Advisory Committee.

¹⁰⁴ Mukhopadhyay, Marmar. 2002. *Secondary Education: the Challenges Ahead*. New Delhi: NIEPA.

¹⁰⁵ *Governance*, 95.

¹⁰⁶ Shruti Maheshwari. States Want More Say in Syllabus. *Hindustan Times*. 23 November 2004.

¹⁰⁷ learning without burden

writing, paper, and printing. Its solution was to take textbook publishing completely out of the hands of the private sector¹⁰⁸. Today, most every state has a textbook publishing unit¹⁰⁹, but private school students are still burdened with the infamous 4kg schoolbags¹¹⁰ as a result of their need to carry privately-published books in addition to the government-mandated ones. We should probably look for the answer away from the public-private debate.

Learning Without Burden recommended an increase in teacher involvement across the board, as did many educational experts¹¹¹. The Amrik Singh Report saw the Uttar Pradesh textbook scenario as perhaps the best hybrid available in the country. In their model, teachers are brought together in workshops to help write texts for the level of students they teach. These writings are refined into manuscripts, which are then handed to private publishers to print and distribute¹¹². As mentioned earlier, even the Communist-ruled state of Kerala has conceded the benefits of private players in some parts of textbook publishing and distribution.

Textbook quality is also a function of choice. Schools in the primary levels of education generally have some leeway in their textbook selection; the distinction between boards begins to appear at the secondary level. In CBSE and other NCERT-dependent schools, NCERT texts are mandatory from class IX onwards; the CISCE only requires certain language texts. One can make a rudimentary conclusion on the correlation based on the level of dissatisfaction in the former group of boards.

Conclusion

The system of education in India reflects centuries of evolution from local *gurukuls* to modern learning institutions backed by complex administrative structures. The way to this point is littered with anachronistic policies and numerous organisations badly in need of reform. At the end of this path of decades is a thirty-year-old question of just who among the Centre, individual states and local authorities should exert educational control. Indeed, this is an inhospitable place to begin any policy study.

Despite all of this, Indian educational policy holds many opportunities for research. Stated areas like centralisation, standardisation, autonomy, and textbook reform have numerous complex angles never before examined.

One common angle is that of public choice: many of the benevolent monarchs of educational policy see little option beyond the status quo. Were we to limit the scope, individual areas like research and development of curriculum may be better served through outsourcing to the private sector if the empirical evidence on textbook publishing and distribution is any indication.

We must note that data and research in education is spread unequally across subject areas. National bodies generally have more useful and more accessible information than state and local agencies. Opinions and recommendations are in far greater supply than hard data,

¹⁰⁸ In addition, it prescribed such novel solutions as the creation of national institutes of book illustration to improve textbook illustration.

¹⁰⁹ Courtesy Tyagi.

¹¹⁰ National Advisory Committee.

¹¹¹ Gupta, SC. 1998. *Emerging Challenges in Education*, 125. New Delhi: Arya Book Depot.

¹¹² *Remodeling*.

and even these opinions can vary greatly¹¹³. It will take a clever researcher to piece together the pieces to the educational puzzle for his research, but the rewards will be immense.

¹¹³ Upon asking two researchers for their opinions on patterns in a certain aspect of curriculum in separate interviews, the two offered completely contradictory answers: an occurrence which would become oft-repeated.

Annexure I: Yash Pal Committee Recommendations (summary)

1. Individual academic competitions should be discouraged in favour of group competitions
2. Decentralisation
 - a. decentralise textbook writing to increase teachers' and other stakeholders' involvement
 - b. voluntary organisations ought to play a greater role
 - c. education committees should be set up at village, block, and district level
 - d. a sufficient (>10% of a school's salary bill) contingency fund should be given to the head of a school for maintenance
3. involve more teachers in textbook writing
4. CBSE affiliation ought to be restricted to KV and JNV schools
5.
 - a. new regulations for nursery school openings, including abolishment of entrance interviews and tests
 - b. tougher private school regulations to increase quality but prevent commercialisation
6. textbooks should be kept at school unless absolutely necessary
7. no homework should be given to students until secondary level, unless the homework does not involve texts (e.g., crafts, activities)
8. decrease pupil-to-teacher ratio
9. increase electronic media in the classroom
10.
 - a. reform the B.Ed degree
 - b. increase continuing education for teachers
11. alter class X and class XII exams to increase "concept-based learning"
12.
 - a. set up project teams for syllabus analysis
 - b. improve math, language, and science texts in terms of readability, quality, and relevance.

Annexure II: Boards Recognised by the Ministry of Human Resource Development

| State | Board | Year of Establishment | Administrative Set-up | | |
|---|--|---|---|-----------|---------------------------------------|
| 1 | 2 | 3 | 4 | | |
| Andhra Pradesh | (i) Andhra Pradesh Board of Secondary Education, Hyderabad-500 001 Tel: 91-40-345343/3457344 | 1953 | Part of the State Department of Education | | |
| | (ii) Andhra Pradesh Board of Intermediate Education, Vidya Bhawan, Nampally Hyderabad 500 001 Tel: 91-40-503315 / 503316 Home Page : www.interboardap.nic.in | 1971 | | Statutory | |
| | Assam | (i) Assam Board of Secondary Education Guwahati 781 021 Tel: 91-361-23884 | 1962 | Statutory | |
| | | (ii) Assam Higher Secondary Education Council Bamunimaidan, Guwahati - 781 021 Tel: 91-361-27277 | 1984 | | Statutory |
| | | Bihar | (i) Bihar School Examination Board Sinha Library Road, Patna 800 017 Tel: 91-612-226916, 222575, 222576 | 1952 | Statutory |
| (ii) Bihar Intermediate Education Council Budh Marg, Patna 800 001 Tel: 91-612-232432 | 1980 | | Statutory | | |
| Goa | Goa Board of Secondary & Higher Secondary Education M-20, Nehru Nagar, A-210, Betim Cross, Alto Betim, Goa- 403 521 Tel: 91-832-417584,417593 | | 1975 | Statutory | |
| | Gujarat | Gujarat Secondary Education Board Sector 10-B, Gandhi Nagar - 382 043 Tel: 91-7932-20691; Fax: 91-7932-29421 | 1960 | | Statutory |
| | | Haryana | Haryana Board of Education Hansi Road, Bhiwani - 125021 Tel: 91-1664-44171; Fax: 91-1664-41611 | | |
| Himachal Pradesh | Himachal Pradesh Board of School Education Gayana Lok Parisar, Civil Lines, Dharamsala-176216. Distt. Kangra Tel: 91-1892-22773; Fax: 91-1892-22817 | 1969 | Statutory | | |
| Jammu & Kashmir | J&K State Board of School Education Rehari Colony, Jammu- 180 005 (November-April) Lalmandi, Srinagar 190 005 (May-October) Tel: 91-191-546601 (Jammu) Fax: 91-191-546604; 91-194-430821 (Srinagar) Fax 91-194-431984 E-mail : jkboard@nde.vsnl.net.in | 1965 | Statutory | | |
| | Karnataka | (i) Karnataka Secondary Education Examination Board 6th Cross, Malleswaram, Bangalore 560 003 Tel: 91-80 - 3343391, 2214350 | | 1966 | Part of the State Deptt. of Education |

| | | | |
|----------------|--|------|--|
| | Fax: 91-80-3347670 | | |
| | (ii) Karnataka Board of the Pre-University Education Tech. Edn. Building, Palace Road, Bangalore-560 001 | 1970 | Part of the State Deptt. of Pre-University Education |
| | Tel: 91-80 2264484, 2267595 | | |
| Kerala | Kerala Board of Public Examinations Pareeksha Bhawan, Poojappura Thiruvannanthapuram-695 012 | 1949 | Part of the State Deptt. of Education |
| | Tel: 91-471-341171, 325106; Fax: 91-471-325106 | | |
| Maharashtra | Maharashtra State Board of Secondary and Higher Secondary Education Shivajinagar, Pune 411 010 | 1966 | Statutory |
| | Tel: 91-20-5536236, 5536379; Fax: 91-20-5536405 | | |
| | E-mail : msecpun@ip.eth.net | | |
| | Home Page : http://www.mah.nic.in/msec | | |
| Madhya Pradesh | Madhya Pradesh Board of Secondary Education, Bhopal -462 011 | 1959 | Statutory |
| | Tel: 91-755 -551166-71; Fax: 551499,555182 | | |
| Manipur | (i) Manipur Board of Secondary Education Imphal - 795 001 | 1972 | Statutory |
| | Tel: 91-385-226770, 220889; Fax: 91-385-222562 | | |
| | (ii) Manipur Council of Higher Secondary Education DM College Campus, Imphal - 795 001 | 1992 | Statutory |
| | Tel: 91-385-224617,441429 | | |
| Meghalaya | Meghalaya Board of School Education West Garo Hills Tura, Meghalaya-794 102 | 1973 | Statutory |
| | Tel: 91-364-223948 | | |
| Mizoram | Mizoram Board of School Education Chaltlang, Post Box 7, Aizawl-796 012 | 1976 | Statutory |
| | Tel: 91-389-340993, 340992, 340995 | | |
| Nagaland | Nagaland Board of School Education Post Box, 98, Kohima -767 001 | 1974 | Statutory |
| | Tel: 91-370-22520,22521; Fax: 91-370-240198 | | |
| | E-mail: nbe@naganet.com | | |
| Orissa | (i) Orissa Board of Secondary Education Bajrakabati Road, Cuttack -753 001 | 1965 | Statutory |
| | Tel. PBX: 91-671 615484, 615460 | | |
| | Fax 91-671-615305 | | |
| | (ii) Orissa Council of Higher Secondary Education C-2 Pragnyapith, Samantapur, Bhubaneswar 751 013 | 1955 | Statutory |
| | Tel: 91-674-580126; Fax: 91-674-580126 | | |
| Punjab | Punjab School Education Board Vidya Bhawan, SAS Nagar Phase-8, Mohali -160 059 | 1969 | Statutory |
| | Tel: 91-172-570524,570081; Fax: 91-172-670524 | | |
| Rajasthan | Rajasthan Board of Secondary Education Ajmer- 305 001 | 1957 | Statutory |
| | Tel: 91-145- 422597; Fax: 91-145- 52394 | | |
| Tamil Nadu | (i) Tamil Nadu Board of Secondary Education, Department of Govt. Examinations College Road, Chennai- 600 006 | 1908 | Part of the State Deptt. of Education |

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|------------------|--|---------------------------------|---|
| | Tel: 91-44 -8272088; Fax: 91-44 -8278286 | | |
| | (ii) Tamil Nadu Board of Higher Secondary Education DPI Compound, College Road, Chennai-600 006 | 1982 | Part of the State Deptt. of Education |
| | Tel: 91-44 -8278796 | | |
| Tripura | Tripura Board of Secondary Education, Nehru Complex (Gurkha Basti) (P.O) Kunjaban, Agartala, Tripura West 799 006 | 1973 | Statutory |
| | Tel: 91-381-224818 | | |
| Uttar Pradesh | UP Board of High School & Intermediate Education Allahabad - 211 001 | 1922 | Autonomous Body under the Deptt. of Education |
| | Tel: 91-532 602367 (Allahabad);0532 239006, (Lucknow) | | |
| | Fax: 91-532-623182 | | |
| West Bengal | (i) West Bengal Board of Secondary Education 77/2, Park Street, Kolkata 700 016 | 1951 (Reconstituted in 1964) | Statutory |
| | Tel: 91-33-298594 | | |
| | (ii) WB Council of Higher Secondary Education Vidya Sagar Bhavan, 9/2, D.J.Block, Sector-II, Salt Lake, Calcutta- 700 091 | 1929 (Reconstituted in 1962) | Statutory |
| | Tel: 91-33-379661; Fax: 91-33-3345541 | | |
| All-India Boards | (i) Central Board of Secondary Education 2, Community Centre, Shiksha Kendra Preet Vihar, Delhi- 110 092 | | Autonomous body under the Government of India |
| | Tel: 91-11-2249602, 2249628; Fax: 91-11-2215826 | | |
| | Home page: http://www.cbse.nic.in | | |
| | E-mail: cepavnesh@hotmail.com | | |
| | (ii) Council for Indian School Certificate Examinations Pragati House, 47/48, Nehru Place, New Delhi 19 | 1958 | Registered Society |
| | Tel: 91-11-6411706, 6413820, 91556468-9(Noida) | | |
| | Fax: 91-11-6212051 | | |
| | E-mail : mail@cisce.org | | |
| | Home Page : http://www.cisce.org | | |
| | (iii) National Open School A-38, Kailash Colony, New Delhi-110 048 | 1989 | Autonomous body under the Government of India |
| | Tel.#91-11-6481455,57-59 | | |
| | Fax:#91-11-6211453 | | |
| | Home Page : www.nos.org | | |
| | E-mial : nossap@nda.vsnl.net.in | | |

Courtesy: Ministry of Human Resource Development. Retrieved 8 November 2004 from <http://www.education.nic.in/htmlweb/boards.htm>

Annexure III: International Systems Chart

(with regard to curriculum, examinations, and textbooks)

In the 1960s and again in the 1980s, the Japanese National Institute for Educational Research (NIER) conducted a series of workshops involving representatives of educational administration from a host of Asian countries. The resulting documents were the 1970 *Asian Study of Curriculum* and the late 1980s *Elementary/Primary Schools Curriculum in Asia and the Pacific* and *Some Critical Aspects of Secondary Education in the Countries of Asia and the Pacific*.

In 1997-98, NIER began a much larger research project: the addition of European, American, and other Asian nations' data to the comparison studies. Over the course of one year, NIER and UNESCO hosted several conferences including representatives from Australia, China, Fiji, France, Germany, India, Indonesia, Japan, Laos, Malaysia, New Zealand, the Philippines, the Republic of Korea, Sri Lanka, Thailand, the United States of America, Uzbekistan, and Vietnam.

What follows is information excerpted from the 1999 NIER report *An International Comparative Study of School Curriculum*¹⁴ with regard to curriculum, examinations, and textbooks, especially at the secondary level.

Social/economic/political/cultural contexts of curriculum policies

Curriculum policies are often made with external goals in mind, such as:

- The need to build social cohesion and national identity in global society and to preserve cultural heritage, e.g., in Australia, Germany.
- The need to impart cultural, ethical, and moral values, e.g., in Indonesia, Fiji, Lao PDR, Malaysia.
- Concern for future economic well-being, international competitiveness, e.g., in Australia, New Zealand, the United States, Uzbekistan.
- Concern for equal opportunity and equity, (urban/rural, gender, income, disabilities), e.g., in Sri Lanka, the United States, India.
- The desire to raise achievement for all students, e.g., in New Zealand, the United States.

Regulations governing curriculum policies

In all countries, schools are subject to some degree of government regulatory control of the curriculum, either at a national or state level.

- **Federally-organised education structure:** e.g., Australia, Germany, USA; no mandatory national curriculum; state regulations vary
- **Unitary education structure:** national bodies exercise complete control (e.g., China, Laos, Sri Lanka, Vietnam); or national bodies set administrative guidelines (e.g., India, New Zealand)

Countries with a high degree of curriculum regulation also tend to highly regulate textbook development and provision.

¹⁴ National Institute for Educational Research. 1999. *An International Comparative Study of School Curriculum*. Tokyo: NIER. Accessed 3 November 2004 at http://www.hurights.or.jp/hreas/3/16national_institute.htm

TABLE 1.**Curriculum Policies: An International Comparative Study of School Curricula**

| <i>Country</i> | <i>National curriculum standards</i> | <i>School structures</i> | <i>Assessment</i> | <i>Monitoring</i> |
|-------------------|---|---|--|--|
| Australia | Nationally developed curriculum frameworks. | Vocational education has changed Yr. 11 and 12 school structures. | Certificate assessments includes internal and external assessments. | Introduction of literacy and numeracy testing. |
| China | Curriculum plan for 9-year compulsory education. | No great change. | Emphasis is on testing abilities. | Three levels of management: central, local, and school. |
| Fiji | Primary framework revised for grades 1-8. Secondary framework undergoing revision. | No change. | Internal assessment conducted in Form 7 subjects. | Standardized test in classes 3 and 4 in literacy and numeracy. |
| France | National Curriculum Standards and National Curriculum Council. | Unified lower secondary school (6-9) has two types of upper secondary schools: general and technology (10-12) vocational. | External examinations in classes 9 and 12. Internal assessments conducted. | Literacy and numeracy testing at the beginning of classes 3 and 6. French, mathematics, foreign language, history, geography testing at the beginning of class 10. |
| Germany (Bavaria) | Set curricula for all schools. | No change. | Final examinations held for all types of school. | No change. |
| India | National core curriculum up to secondary level. Secondary equal to O level and Senior equal to A level. | Development of parallel structure for vocational courses, and at secondary and senior secondary level. | Continuous and comprehensive evaluation held with external assessment at grades 10 and 12. | Attempts for national standards tests at secondary level since 1990s. |
| Indonesia | Minimum national standards. | No change. | National assessments in 7 subjects. | No change. |
| Japan | Course of study. | Comprehensive course introduced. | National assessments conducted. | Introduction of school evaluation by local educational authorities. Local educational authorities evaluation by Ministry of Education. |
| Lao PDR | Move from teacher centered to student centered. | No change. | Various assessment instruments developed for use by teachers. | Positions of pedagogical adviser and supervisor created. |
| Malaysia | Move from student's profile to national standards. | 5-7 years allotted for primary level. | Growing emphasis on school-based assessment. External exams for certain levels. | Empowerment to state/district/school authority to monitor curriculum implementation. |
| New Zealand | Development of curriculum statements based on the NZ Curriculum Framework and on a National Qualifications Framework. | Flexibility introduced into school structures. Move to selfmanaging schools. Establishment of Kura Kaupapa Maori (Maori immersion schooling). | Move to school-based assessments and inclusion of internal assessment for qualifications. | NEMP Project (benchmarks, to be examined every four years). National exams held in Years 11 and 13. |

| <i>Country</i> | <i>National curriculum standards</i> | <i>School structures</i> | <i>Assessment</i> | <i>Monitoring</i> |
|----------------|--|---|---|--|
| Philippines | Identified desired learning competencies in all areas. | No change. | Year-of-level national examinations (NEAT/NSAT) are school-based. | Move towards decentralization. |
| Republic Korea | Revision of national curriculum in 1992, giving more flexibility to local and school level. | No change. | More emphasis placed on essay writing at elementary and secondary levels. | School evaluation introduced by local education authorities. Local educational authority evaluation conducted by Ministry of Education. |
| Sri Lanka | Move from teacher-oriented to competency-based. | 253 national schools introduced. (Administration by central ministry) | Continuous assessments introduced. | No change. |
| Thailand | Set national standards in all learning areas for basic education outcomes. Set benchmarks of every 3-year level. | School and community design their school structure and curriculum based on standards and readiness of school. | School-based assessment for every year in primary and every quarter in secondary by alternate year. | School has self-audit through school charter and school quality control. School quality assured by accountability assessment of administrative authorities and other agencies. |
| United States | Move from syllabus approach to curriculum framework. | No change in national level. | No change in national level. | No change in national level. |
| Uzbekistan | National curriculum standards in grades 1-9. | National schools introduced. | Continuous and comprehensive assessment. | Ministry of Education. |
| Vietnam | New primary curriculum. National curriculum standards in grades 1-9. | No change. | No change. | No change. |

In some countries there is a varying possibility for local authorities, schools, and teachers to influence curriculum development at the implementation level. For example, local content is allowed in Indonesia (20%), Lao PDR (10%), and Vietnam (15%). In other countries such as Australia and New Zealand, teachers develop their own content within centrally developed curriculum frameworks.

TABLE 2. Initiation of Curriculum Development

| <i>Country</i> | <i>Agency initiating curriculum development</i> | <i>Agencies consulted</i> |
|--------------------------|--|--|
| Australia | Education Departments (state and federal) Curriculum Corporation | Schools, teachers, parents, industry, business, other government departments, teacher unions, universities, school communities |
| China | State Education Ministry | Professional editors, colleges and universities, teachers, students parents, other professions |
| Fiji | Curriculum Development Unit, Ministry of Education | Local government, teachers unions, research institutions, employers, industries, nongovernmental agencies, teachers |
| France | Ministry of Education; National Curriculum Council | National educational organizations, teachers |
| Germany (Bavaria) | Ministry of Education | State Advisory School Council, State Institute for School Education (can propose revision and develop curriculum) |
| India | National Council of Educational Research and Training, State Councils for Education, Research and Training and State Boards of Secondary Education | School boards, official associations of teachers, individual teachers (no involvement of parents and students) |
| Indonesia | Ministry of Education | Senior officials from relevant institutions, subject specialists, universities and institutes, senior subject teachers, headmasters, representatives from the National Education Advisory Board, private companies |
| Japan | Ministry of Education | Central Council for Education (broad aims), Curriculum Council (curriculum guidelines), committee for making the course of study |
| Lao PDR | National Research Institute for Educational Science | Some departments within MOE (e.g., Department of General Education, Department of Teacher Training), representatives of trade unions, womens unions and youth unions, Party Central Committee for Ideological Education, Teacher Development Center, National University |
| Malaysia | Curriculum Development Center | Academics, teachers unions, parents, professional bodies, and nongovernmental agencies |
| New Zealand | Ministry of Education | Government departments, teachers, sector groups and organizations, teachers unions, parents, community, international and national experts, business and industry groups |
| Philippines | Bureaus of Elementary and Secondary Education | Professional stakeholders, parents, teachers, students |
| Republic of Korea | Ministry of Education (sometimes by special commission) | Research institutes (e.g., KEDI and KICE, involved in developing draft version), various groups (e.g., teachers, parents, students, industry, academic associations) |
| Sri Lanka | National Institute of Education | Foreign consultants (Asian Development Bank, World Bank) and local consultants, university staff members, Ministry of Education and Higher Education, Provincial Education Authorities, master teachers, experienced senior teachers |
| Thailand | Department of Curriculum and Instruction Development; Ministry of Education | Department of Curriculum Development, local agencies, teachers, community, welfare agencies |
| United States (New York) | State Education Department (Board of Regents) | All stakeholders |
| Uzbekistan | Peoples Education Ministry, Ministry of Higher Education | Research institutions |
| Vietnam | National Institute for Education Sciences | National Education Council, international and national experts, teachers, parents |

Dealing with Cultural Diversity

Nations around the world have been striving to include components of their respective histories, cultures, and identities as part of the curriculum. These efforts are diverse, but can be grouped as follows:

- curriculum or topic offerings, commonly including civics, social studies, history, and moral education courses (Australia, Lao PDR, New Zealand Philippines);
- use of ethnic languages as a medium for instruction (Fiji, Indonesia [primary school], Malaysia, New Zealand, Sri Lanka, and Uzbekistan);
- bilingual programs and migrant languages (Australia and Germany); and
- foreign language instruction including cultural studies.

In some cases where cultural diversity is supported, local community groups are involved in curriculum development, e.g, Maori groups in New Zealand, and aboriginal and Torres Strait Islanders in Australia.

Textbooks

Countries use a variety approaches for the development and supply of textbooks. Table 12 shows how countries develop and distribute textbooks and some comments on textbooks and other teaching/learning resources.

Textbooks are used in most education systems to ensure that all students are able to learn basic curriculum content. Most countries report that a government agency is responsible for the provision or approval of textbooks (Fiji, Indonesia, Lao PDR, and Sri Lanka). In some countries, schools select textbooks published by the private sector (Australia, New Zealand, and the United States), while in others they select textbooks from an approved list (Fiji, Germany, Indonesia, Japan, Malaysia and the Philippines).

TABLE 12. Provision of Textbooks and Other Materials

| <i>Country</i> | <i>Government provides</i> | <i>Free loan</i> | <i>Rent</i> | <i>Parent purchase</i> | <i>Comment</i> |
|-------------------|--|-----------------------------|----------------------------|-------------------------------------|---|
| Australia | | | Some primary and secondary | Some primary and secondary | |
| China | | | T (parents) [sic] | Primary and secondary | |
| Fiji | Primary | | Secondary | Secondary and | Books provided by some primary special projects in 7 & 8 and junior secondary |
| France | | Primary and lower secondary | | | |
| Germany (Bavaria) | | Primary and secondary | | | |
| India | Government school | | | Private schools | |
| Indonesia | Primary school (government schools only) | Lower and upper secondary | | Lower and upper secondary | Depends on school |
| Japan | Primary and lower secondary | | | Upper secondary | |
| Lao PDR | | Primary education | Lower secondary | Upper secondary and private schools | |
| Malaysia | | Income-based loan | | Monthly income lower than \$400 | Monthly income lower than \$400, textbooks are free |

| | | | | | |
|--------------------------|--|-----------------------------|--|----------------------------|--|
| | | scheme | | eligible for textbook loan | |
| New Zealand | | School loans | | | |
| Philippines | | Public schools | | Private schools | |
| Republic of Korea | | Primary school | | Secondary (low cost) | |
| Sri Lanka | | Primary and lower secondary | | Upper secondary | (No prescribed text books for upper secondary; supplementary materials only) |
| Thailand | | | | | |
| United States (New York) | | All schools | | | |
| Uzbekistan | | | | Primary and secondary | |
| Vietnam | | Some primary | | Secondary and some primary | |

School-based Student Assessment

The key issue for effective implementation of the curriculum involves students and their learning assessment at the school level. Countries use a variety of strategies to assess student learning. School-based assessment provides feedback to teachers with respect to the effectiveness of their teaching and provides students and parents with essential information about student progress.

Developments in assessment

At the elementary level, the most common ways of collecting data on student assessment are the paper-and-pencil tests, practical work, and teachers' observations. The situation is almost the same at the lower secondary level with the introduction of laboratory work, authentic assessment (Thailand), including project specifics and portfolios, and school-based assessment for specific year levels in Sri Lanka.

At the upper secondary level, the trend is a shift from written tests to more performance tests across the subject areas. In France and Uzbekistan, student assessment includes projects in professional, technical, and vocational education.

TABLE 14. Types, Purposes and Methods of Reporting

| Country | Secondary level | | Purposes/Uses | Methods of reporting |
|-----------|--|--|---|--|
| | Lower | Upper | | |
| Australia | Structured observation; written and standardized test | Structured observation; written and standardized test | Report student progress; curriculum development | Percentage and letter grading; checklist of criteria; descriptive assessment |
| China | Paper-and-pencil tests; observations; interviews; portfolios | Paper-and-pencil tests; observations; interviews; portfolios | Diagnosis; selection of contestants; determination quality of instruction; examination of student progress; deciding professional direction | Comments; behavior marks; percentage; place in competition; grade |
| Fiji | Paper and pencil tests; project works | Paper and pencil tests; project works, practical and laboratory work | Evaluate student performance; for promotion purposes; prepare for national and external examinations | Percentage |

| Country | Secondary level | | Purposes/Uses | Methods of reporting |
|--------------------------|---|--|---|---|
| | Lower | Upper | | |
| France | Paper-and-pencil tests; portfolio; tests; laboratory work | Paper-and-pencil tests; portfolio; tests; laboratory work; projects in TVE | Diagnosis; monitor student progress; decision for promotion | Grading and comments on achievement |
| Germany (Bavaria) | Oral/written tests | Oral/written tests; pointgraded system | Diagnosis; assessment for promotion; reporting to parents | Verbal certification for grades 1-2; written plus point-grades in upper secondary |
| India | Internal reporting; external examination | Internal reporting; external examination | Monitor learning achievements; and effectiveness of instruction | Progress report cards. Observations (elementary); marks (secondary) |
| Indonesia | Paper-and-pencil tests; performance tests | Paper-and-pencil tests; performance tests | Promotion; reporting to parents; diagnosis | Grades |
| Japan | Paper-and-pencil tests; practical work | Paper-and-pencil tests; practical work | Diagnosis; requirement for admission | Grade and comments |
| Lao PDR | Paper-and-pencil tests; oral tests; observations; tele-record | Paper-and-pencil tests; oral tests; observations tele-record | For parents to help children; for remediation; to improve the teaching/ learning performance | Ten score grading |
| Malaysia | Paper-and-pencil tests; teacher observation folios; practical work | Paper-and-pencil tests; teacher observation folios; practical work | To report student progress; diagnosis; teaching effectiveness | Grade; percentage; descriptive |
| New Zealand | Paper-and-pencil test, practical work | Paper-and-pencil test, practical work | Measure of performance; to report to student and parents on progress. Diagnostic and formative to improve learning and teaching | Grading system |
| Philippines | Paper-and-pencil tests; projects; observations | Paper-and-pencil tests; projects; observations | Improve teaching/ learning; diagnosis; improve student performance; report to parents | Percentage rating |
| Republic of Korea | Paper-and-pencil tests; performance | Paper-and-pencil tests; performance | Reporting to parents; requirement for admission | Written comments for elementary level; grade and percentage in secondary level |
| Sri Lanka | School-based assessment from 1998 in grade 6; from 1999 in grade 7-11; public exams in grade 11 | Public examination in grade 13 | To improve learning, teaching, and assessment practices | Grade; progress records; students profile; program and subject-based reports |
| Thailand | Paper-and-pencil test at the end of semester; authentic assessment | Paper-and-pencil test at the end of semester; authentic assessment | Measure performance (elementary and secondary) and making new pass at end of year (secondary only) | Grading system; end of level report to parents and concerned authorities |
| United States (New York) | Observation; homework and projects; written exams | Observation; homework and projects; written exams | Describe performance; incentive for students for promotion | Percentage and grades |

| Country | Secondary level | | Purposes/Uses | Methods of reporting |
|------------|--|---|--|----------------------|
| | Lower | Upper | | |
| Uzbekistan | Paper-and-pencil test and practical work | More paper-and-pencil test; laboratory work in professional and technical education | Evaluation of student learning; promotion for next grade | Percentage rating |
| Vietnam | Paper-and-pencil tests | Paper-and-pencil tests | Diagnosis (elementary level), assessment for promotion (secondary level) | Percentage or grades |

Main purposes of assessment at the school level

School-based assessments are used to diagnose strengths and weaknesses of students, in which case, diagnostic tests are administered at the beginning of the school year or a year level. Assessments are also used to determine student performance and progress in school, most of the time leading to promotion or admission to the next grade/year level. Furthermore, assessments are used to report the child's progress in school to parents. The evaluation of student performance is also a means to review the curriculum and results are therefore used to improve not only the curriculum but the teaching and learning process, as well.

Curriculum Monitoring and Evaluation

Mechanisms used for curriculum evaluation

The participating countries reported a variety of mechanisms and major tools for curriculum evaluation. The most common are internal and external evaluations, pilot studies of curriculum programs prior to implementation, and research and reviews conducted by various agencies to look into the effectiveness and impact of curriculum implementation, through consultations with various stakeholders, administration of achievement tests to assess performance of students, reports from school inspectors, and government reviews.

Use of results of national curriculum evaluation

Results of national curriculum evaluations are mainly used to provide information for curriculum revision and improvement of standards; improve the quality of teaching and learning at the school and national levels; address pressures from political, social, and economic groups and ensure balance; and improve programs for the educationally disadvantaged.

Monitoring of Local Curriculum

None of the countries reported any fully locally controlled curriculum. However, in cases where there is a local curriculum, it is assumed that it is developed within the framework of the national or state curriculum. Implementation of such curriculum is monitored by concerned authorities (local school board/district/ province/state).

Student Assessment for Curriculum Monitoring

Some countries use national achievement studies to evaluate the curriculum. Table 16 below shows the types of assessment, how often it is administered, and at what grade level.

Student assessment for curriculum development is a combination of school-based, national, and international tests. National tests are administered annually or periodically for selected levels (elementary, lower or upper secondary education). Most countries participate in international testing programmes.

TABLE 16. Student Assessment for Curriculum Monitoring

| <i>Country</i> | <i>Type</i> | <i>Frequency</i> | <i>Grade level</i> |
|--------------------------|---|--|--|
| Australia | International assessment (IEA) State-wide School based (continuous) | Every year | Years 3, 5 (7) in some states All levels |
| China | National assessment | Once in the last 10 years | Primary; upper secondary |
| Fiji | National assessment | Every 5 years | Grade 6, 7, 10, 12, 13 |
| France | International and national tests | Every 2 years for Grade 3, 6 Every year for Grade 10 | Grade 3, 6, 10 for all + sample for other grades |
| Germany (Bavaria) | National exams | Every year | Grade 10 |
| India | National (NCERT) | | |
| | School boards | Varying period in 10 years | Grade 5, 8, 10, 12 |
| Indonesia | Year-end, national | 3 times a year for each grade | |
| Japan | National assessment | Every 10 years | Primary + lower secondary |
| Lao PDR | National, classroom/school visits, performance tests | Once in 2 years | Grade 1-3, 6 |
| Malaysia | School based | End of year | All grades |
| | National assessment International assessment (IEA) | Every year | Grade 6, 9, 11 |
| New Zealand | National, achievement, International assessment (IEA) | Every year | Year 4, 8 |
| Philippines | National assessment | Every year | Grade 6, year 4 |
| Republic of Korea | National SAT | Every year for 0.5% of | Grade 4, 6, 7, 8, 10, 11 for NL and Maths; 4,6,7,8, 10 for ST and SS; 7,8, 10,11 for English |
| Sri Lanka | N/A | N/A | N/A |
| Thailand | School based | Year-end, quarter-end | Grade 6, 9 12 |
| | National (proposed) | Every 2 years | Primary and secondary |
| United States (New York) | State-wide | Every year | Primary and secondary |
| Uzbekistan | School based continuous International assessment (ADB) | Every year | For all levels |
| Vietnam | National assessment School-based | Every year | From primary to upper secondary |

Summary of overall trends

Curriculum Policies

During the last decade various efforts have been made in each country to revamp their education systems. The following general trends were reported by many countries:

- There is an on-going commitment to curriculum policy review and development to meet the challenges of the changing technological, social, economic, political, national, and global environments. Curriculum policies of participating countries emphasized the goals of social cohesion, economic well-being, and personal development.
- Countries appear to be developing curriculum, qualifications, and schooling frameworks and structures that are able to respond effectively both to national and international exchanges and more local needs.

- Participating countries recognize the importance of developing curriculum frameworks that ensure the learning of core content while providing opportunities for greater choice of elective subjects.
- Participating countries recognize the importance of a holistic approach to the curriculum. This kind of approach emphasizes the balance between mental, emotional, physical, and spiritual dimensions. Countries also mentioned the need to include child-centered and activity-based learning and teaching approaches that foster creative thinking and problem-solving, and encourage self-directed learning.
- Curriculum policy development, and/or approval, is retained centrally in most countries. However, there exists a trend to consult a wide range of stakeholders in policy development, and to devolve decision making on implementation issues to the local level.

Curriculum Design

Every country has to make decisions regarding the overall approach to curriculum design as well as to the subject area that will be included in the school curriculum. The following general trends were reported by many countries.

- A trend was identified to move from content-based to varying combinations of competency and content-based curriculum frameworks that ensure the acquisition of both knowledge and skills.
- The curriculum frameworks are being modified to include a range of new subject areas. These may be either integrated into existing subjects such as additional foreign languages. A significant degree of continuity of subjects offered was observed between primary and lower secondary levels in countries.
- The curriculum overload was perceived to result from a variety of reasons, including too much content, too many subject areas, and the inappropriate early introduction of some content. There was also reported pressure from the community, lobbyists, and politicians to include subjects to meet immediate and emerging needs.

Curriculum Implementation

Effective strategies for the implementation of curriculum policies are required to ensure that teachers are able to develop and teach according to the planned curriculum. The following general trends were reported by many countries:

- The provision of professional development to help teachers understand content and pedagogical changes is usually supported by central and state governments. Increasingly, however, teachers are expected to undertake professional development as an integral part of their professional role.
- The supply of textbooks at primary and lower secondary levels is generally government or state funded while supplementary material is often developed and distributed by both government and private sources. The use of information technology to disseminate curriculum information is increasing and the utilization of a wide variety of media is apparent.
- There is evidence of increasing flexibility in curriculum requirements to enable schools to make more decisions on the best way to implement curriculum policies and to take account of local circumstances and needs.
- The lack of quality curriculum resources, inadequate infrastructure and facilities, underqualified teachers, and the rate and extent of curriculum changes remain key implementation issues for many countries.
- In many countries, the priority is to enhance the capacity of teachers and schools to undertake on-going school-based assessment. There appear to be three main purposes for this focus: to enable schools to review more effectively learning and teaching

programs; to monitor student progress; and to provide internal components for public examination.

Curriculum Monitoring and Evaluation

There are a number of ways in which the national curriculum frameworks can be monitored and evaluated. The following general trends were reported by many countries:

- The range of strategies to monitor and evaluate the curriculum include participating in international surveys such as the Third International Mathematics and Science Survey; using examination results; conducting inspection and supervision; and using feedback from surveys, reviews, and studies. Only a small number of countries reported the use of systematic research to monitor the curriculum.
- They agree on the importance of continuous efforts to revise their curricula to meet the challenges of the new age, and on the usefulness of international projects such as this study as a forum for sharing ideas.