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Educational Reform in a Small State: Bhutan's New Approach to Primary Education

The last decade and a half has brought development of a significant literature on education in small states. This literature highlights the advantages and disadvantages of small national scale, and shows that size is among the factors which shape the nature of education systems. Parts of this literature have relevance to educational reform. This article focuses on a reform launched in one particular small state.

The state in question is Bhutan, a kingdom in the Himalayas with a population of about 675,000. Until recently, Bhutan had no roads and was very isolated. The last three decades have brought major development, much of it with assistance from India. The country has long Buddhist traditions, which include forms of monastic education, but the secular education system is very young and has been highly dependent on Indian traditions. These and other matters are important contextual factors which have created the need for reform and have also influenced its outcomes.

This article begins by summarizing relevant points in the existing general literature on education in small states. It then turns specifically to Bhutan, first with further background information, and then with an outline of its education system. The next section focuses on the New Approach to Primary Education (NAPE), which was launched in 1986. It explains the origins and purposes of NAPE, and shows how it evolved during its first decade. The following section comments on the implications of Bhutan's centralized administrative structure, and of linkages between primary and post-primary schools. Finally, the paper returns to the significance of smallness in national scale for the shape and implementation of the innovation.

The Literature on Education in Small States

One reason for the marked development of literature on small states has been the transition to sovereignty since the 1960s of many small territories, particularly in the Caribbean and South Pacific. Studies on education and other social processes lagged behind work on economic issues, but during the 1980s and 1990s, ex-

Photo 1. Pupils outside one of Bhutan's primary schools in Thimphu, the capital.



Smallness may be both an advantage and a disadvantage.

tensive work brought educational issues into considerably sharper focus (see, e.g., Brock, 1984; Bacchus and Brock, 1987; Farrugia and Attard, 1989; Bray, 1992; Atchoarena, 1993; Bray and Packer, 1993).

In the words of one publication (Commonwealth Secretariat, 1986, pp. 5-6):

The style of educational development . . . is too frequently modelled on what is appropriate and fashionable in large states. Small countries are not simply a scaled-down version of large countries. They have an ecology of their own. We believe there is a cluster of factors which suggest particular strategies in the smaller states of the world.

The factors to which the writer referred included the difficulties of providing specialist higher education; the need for educational administrators and other personnel in small states to be more versatile than their counterparts in large states; the fact that decision making in small states is more personalized than in large states; and the fact that small states have weaker "centers of gravity", which can exacerbate the problems of dependency.

From the viewpoint of educational innovation, smallness may be both an advantage and a disadvantage. On the positive side, planners may find it relatively easy to identify and diagnose problems. In small systems, it is easier to collect survey data from every school, and senior officials can know personally a large proportion of the people who will implement and be affected by an innovation. Decision making may be much more transparent, for it is more difficult in small societies to hide bad decisions and devious motives. Small size may also facilitate coordination, for it is much easier to call a meeting which will bring together most or all of the people affected by a decision. And, as noted by the Commonwealth Secretariat (1985, p. 2):

success has a greater effect on a small system. Any successful achievement in any part of the system can shed its light over other parts so that all can share in the afterglow. This obviously helps morale, and strengthens the sense of corporate identity for all those working in the service. Success when it comes tends to come quickly in the smaller system and to be more clearly seen, and that in time acts as an encouragement and spur to further reform.

A further positive feature is that in general, small states receive much higher per capita foreign aid than do larger states (Bray and Packer, 1993, pp. 125-140).

This partly reflects the greater needs of small states because of the limits to economic diversification and the indivisibility of infrastructural items. As noted by one report (Jackson, 1984, p. 42), "it can cost as much to build an airport in Vanuatu as in Sri Lanka." However, the flow of aid also reflects political factors. Some donors like to have long lists of countries to which aid is provided, and addition of small states extends the lists. Also, aid in small states has much greater visibility than in large states, and some donors are mindful of the fact that small states carry the same voting weight in the United Nations as do large states.

While these points stress the benefits that small states may gain, smallness may also be problematic. Small societies are sometimes arbitrary and volatile, dependent more on personalized factors than on professional issues. Because planners in small states are strongly aware of the interpersonal dimensions of their work, they may decide to "play safe", and therefore to be more conservative. Also, the fact that states with small populations have limited stocks of skilled personnel may mean first that required technical personnel are not available for design and implementation of reforms, and second that systems lack a range of alternative views to act as checks and balances.

Further, small countries are generally unable to achieve the economies of scale of their larger counterparts. The basic costs of writing a textbook, for example, are the same whether that textbook serves a small or a large number of pupils. Training sessions may also have to be once-only occasions, so that materials prepared for those sessions may never be used again. Moreover, individuals with specialisms in such skills as computer programming, architectural design, or evaluation techniques may find their expertise underutilized, despite the high costs required to gain that expertise.

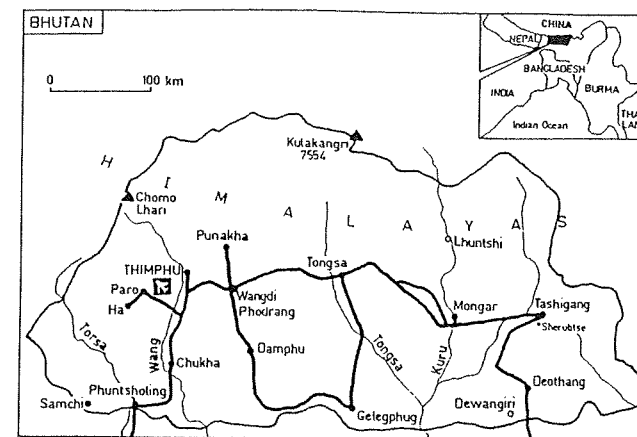
The increase in the volume of work on small states permits these general points to be made. However, much conceptual work remains to be done. Brock (1988, p. 312) pointed out that:

Whatever the eventual answers to the problems of educational provision in small states might be, they will be more likely to be found if there is much more research both into particular and general issues in the field. This means more in-depth case studies of individual systems as well as more comparative analysis across the numerous range of small states.

By providing a case study of Bhutan, this paper aspires to meet part of the need identified by Brock.

An Introduction to Bhutan

Bhutan lies in the Himalaya range of mountains, with China to the north and India to the south. Its area of 46,500 square kilometers is almost exactly the same



Map of Bhutan.

as that of Switzerland. Nearly all of the country, except for a small strip along the Indian border, is hilly or mountainous. Indeed, Bhutan has some of the most rugged terrain in the world.

Per capita Gross Domestic Product (GDP) in 1994 was estimated at US\$425 (World Bank, 1994, p. 1). Because of the mountainous terrain, only about 16 percent of the land is cultivated. Nevertheless, agriculture is the dominant sector of the economy, accounting for nearly 40 percent of GDP and employing about 78 percent of the economically active adult population. Among the recently emergent sectors is power supply, and with the commissioning of a major hydroelectric dam in 1988, Bhutan became a major exporter of power to India. Production of electricity formed an estimated 7.8 percent of GDP in 1993, compared with 0.2 percent in 1980.

Bhutan's government is headed by a hereditary king. In contrast to the monarchs of such countries as the United Kingdom, the Netherlands, and Thailand, who have been relegated to a largely ceremonial status, the Bhutanese king plays the central role in government affairs.

Bhutan was first unified under a single authority in the seventeenth century under a charismatic Buddhist leader who came from Tibet. He created a remarkable administrative and legal system, establishing a state clergy under a religious leader and a theocracy administered by monks at whose head he placed a temporal head (Hasrat, 1980, p. 59; Sinha, 1993, pp. 88-99). The nineteenth century brought a series of civil wars, but a single leader again emerged at the end of the century. He secured the cooperation of the monastic community, the civil service, and the people, and in 1907

became the first king in today's hereditary monarchy. It is interesting to note that Bhutan established its monarchy at a time when many other countries were phasing out such institutions.

Another important political element in the nineteenth and early twentieth centuries concerned Bhutan's relationship with the British from their base in India. Continual skirmishes on Bhutan's southern border from the 1830s onward escalated into a conflict in 1864. An 1865 treaty restored friendly relations, but Bhutan lost a fertile strip of land in exchange for an annuity (Hasrat, 1980, p. 117). After the creation of the monarchy, an Anglo-Bhutanese Treaty signed in 1910 placed Bhutan's foreign relations under the supervision of the Government of British India. Bhutan retained its independence, however, and like Nepal and Thailand was never formally colonized.

Following India's independence in 1947, the Anglo-Bhutanese Treaty was replaced by an Indo-Bhutan Treaty of Friendship. Bhutan agreed to seek Indian advice on foreign relations, though remained free to decide whether or not to accept such advice. India has made major contributions to Bhutanese infrastructure, among which the road system constructed in the 1960s is particularly prominent. India is Bhutan's most important trading partner, and in 1992, was the destination of 86 percent of exports. Until 1974, the Indian rupee was the only medium of exchange. Bhutan now has its own currency, the ngultrum, but it is pegged at par to the rupee, and the latter continues to circulate freely as legal tender. Nevertheless, Bhutan has preserved its sovereignty, and in recent years the government has increasingly asserted its independence in the international arena (Singh, 1978; Kohli, 1993).

Many teachers are non-nationals.

The Bhutanese Education System

For many centuries, the principal source of education lay in the Buddhist monasteries. Subjects taught there included theology, medicine, history, art, architecture, and music. Monks still comprise about 2 percent of the male population, and monastic schools educate between 15,000 and 20,000 youths. However, these are outside the framework of the government's western-type education system which is the focus of this paper.

Formal schooling in the government system was started only in the 1950s, and achievements since that time have been dramatic. According to one source (Bhutan, 1994a, p. 22), in the late 1950s there were only eleven schools with seventeen teachers and about 440 students. Almost all the teachers were Indian expatriates, and the small cadre of pupils proceeding to post-primary education mostly went to India.

Subsequent decades brought dramatic expansion, so that by 1994 the country had nearly 300 institutions, 71,000 students, and 2,400 teachers (see Table 1). However, this was still a fairly small system. The expansion had substantially raised overall enrollment rates, though at the primary level the estimated gross enrollment rate was still below 80 percent.

The formal school system consists of a year of pre-primary education, followed by six years of primary school, two years of junior high school, and two years of senior high school. Community schools, most of which cover only pre-primary to Class III and which have a stronger element of community self-help, operate parallel to primary schools.

At the post-secondary level, students take two years of junior college and three years of higher education. Sherubtse College is affiliated with the University of Delhi and offers degree courses. The government also runs a school for the blind, two teachers' training col-

leges, a polytechnic, a technical institute, and a trade training institute.

One aspect reflecting the youth of the system is the large proportion of non-national teachers. In 1994, such teachers comprised 8.1 percent of the total in community schools, 25.3 percent in primary schools, 38.9 percent in junior high schools, and 46.7 percent in senior high schools (Division of Education, 1994a, p. 8). The majority of non-nationals were Indian. Major efforts are being made to nationalize the teaching force, though efforts are hampered by the pressure for educational expansion.

For the last three decades, Bhutan's education system has placed strong emphasis on English as the medium of instruction even from the pre-primary level. Until the early 1960s, schooling was conducted primarily in Hindi. However, the third king desired to assert the place of Bhutan in the international arena, and recognized the importance of English in this goal. Accordingly, in 1962 the king announced that English would be used in place of Hindi. Various lobbies have advocated the use of Bhutanese languages. In 1961, Dzongkha was designated the national language, and it is now a compulsory subject in all schools. However, Dzongkha is only the mother tongue of a segment of the population, and twenty other mother tongues are spoken in the country. Moreover, Dzongkha is a complex language, especially in its written form which uses the Tibetan script. A move to a complete Dzongkha-medium curriculum would therefore be a major undertaking.

Curricula are also, of course, affected by the system of examinations. In former times, all Bhutanese students sat for Indian examinations and followed Indian syllabi. The government established an Examinations Cell in 1974, and upgraded it to become the Bhutan Board of Examinations in 1985. The Board has taken over the examinations at Classes VI and VIII, and envisages eventually taking over the examinations at Classes X and XII. Meanwhile, students in the latter two grades take Indian examinations following Indian syllabi. This practice has some backwash for lower levels of the system.

The New Approach to Primary Education

Origin, Focus, and Initial Organization

The origin of NAPE can be traced to a 1984 draft national plan for education. This document expressed dissatisfaction with the dominant methods of rote learning and the dependence on Indian textbooks and curricula. The draft plan stressed the need to Bhutanize the curriculum, using the local environment of school, district, and country as a source for learning.

It added the view (quoted in Collister and Etherton, 1991, p. 16) that:

As many of the children will leave school at the end of the primary stage, the curriculum should be designed to be a terminal and useful package of skills for those who will be leaving, as well as a preparation for those who will be going on to secondary.

Although the document never became an official plan, many of its sentiments were subsequently translated into policy.

One of the proposals was that the primary curriculum should have only four basic subjects. Three of those subjects were English, Dzongkha, and Mathematics, which were seen as "tool subjects" through which students could access other aspects of learning. The fourth basic subject was Environmental Studies (EVS), which was to be designed to incorporate history, geography, science, agriculture, culture, physical education, health, values, music, drama, and arts and crafts. The 1984 document argued that dropping history, geography, and science as separate subjects would permit more time for the tool subjects, which it considered the basis for all learning.

The document also recommended a class-teacher system in place of specialist subject teachers working across the grades. This change aimed to make teachers feel more responsible for their own classes and give special attention to each child. The document argued that "the pastoral care and other social development responsibilities inherent in the class-teacher system is a particularly important aspect of primary education which is not compatible with the subject teacher system" (Choden, 1990, p. 4).

This proposal became the basis for NAPE, which was launched in thirteen pilot schools in 1986. Initially the reform was confined to Pre-Primary (PP) to Class II (Choden, 1990, p. 8), though the main focus was later extended to Class III. Within the government's Department of Education was established a Curriculum and Textbook Development Division. Volunteers from the United Kingdom, Ireland, New Zealand, Canada, and the United Nations system provided extensive professional input into both design and implementation.

The Environmental Studies syllabus attracted particular attention because it was a radical change from the past. It aimed to use the environment as a source of learning, and to develop self-confidence, creative thought, and problem-solving abilities. This was in sharp contrast to the rote-learning traditions of the existing system. The class-teacher system was particularly important to EVS, for it required teachers to focus on the whole curriculum instead of "their" subjects.

The EVS curriculum demanded new ideas of discipline, because the children could all be doing different

The curriculum was reshaped.

things at the same time, working individually or in groups. This aspect at first raised considerable disapproval among people more familiar with the silent immobility of the classroom. The new approach also required redesign of classroom furniture to permit group work and other activities. Above all, EVS aimed to shift the emphasis from teaching to learning.

Collister and Etherton point out (1991, p. 19) that this framework would be unremarkable in most western countries, but rightly observe that in the Third World, such patterns are harder to attain. This is first because classrooms are not designed for these methods, second because primary teachers generally have lower levels of professional and educational attainment, and third because examinations tend to loom larger. In Bhutan, the innovation was certainly a major break with the past.

Training for NAPE

A reform of such far-reaching nature demands considerable training. Very few Bhutanese teachers had ever seen in action a learning setting of the type envisaged, and research in other contexts demonstrated the likelihood of a wide gap between reform intentions and reality unless accompanied by extensive and sus-

Table 1. Educational institutions, students, and teachers in Bhutan, 1994.

	Institutions	Students	Teachers
Community schools	100	9,425	223
Primary schools	145	45,937	1,388
Junior high schools	18	8,870	347
High schools	8	4,185	197
Sanskrit pathshala	1	21	1
Private schools	7	716	52
Post-secondary institutions	7	1,732	210

Source: Division of Education (1994a, p. 1).



Photo 2. Bhutanese children sit at low tables designed for NAPE activities.

Interim evaluation.

tained training (see, e.g., Craig, 1990; Louden, 1991; Busick and Inos, 1994).

To begin with, the main priority was in-service training, achieved through both workshops and collaboration in the classrooms. An initial workshop was held immediately prior to the launching of NAPE. It lasted for three weeks, and brought together senior administrators as well as classroom teachers (Choden, 1990, p. 8). It was followed by school-based training during the first half of 1986, in which two teams for each subject visited pilot schools for four days each, to provide training, observe classes, and elicit feedback. This process was repeated during the second half of the year. In the second year of the scheme, two three-week workshops were held simultaneously in different parts of the country to reinforce the skills of those who had received initial training and to introduce concepts and techniques to newcomers. Additional help was provided through advisory teams and school-based resource teachers. Most of the latter were volunteers from western nations who had themselves been taught and trained in NAPE-type settings in their own countries.

Parallel reform was undertaken in pre-service training in the two teachers' training colleges. This was not part of the early phases, which was perhaps a shortcoming of the initial design. However, it subsequently became an essential component undergirding consolidation and future growth. Awareness of the importance of this training was made evident in an official publication (Department of Education, 1990, p. 4), which also pointed out the inadequacy of mere graduate qualifications:

The programme depends on . . . well-trained primary teachers with a good understanding of children and how they learn and of a modern primary curriculum and how it can be taught effectively. Teachers with high academic qualification such as B.A., B.Sc., and M.A. are unsuitable for NAPE unless they have also received primary training.

Expansion and Development

In 1987, four pilot schools were added to the initial thirteen. Care was taken to select schools from different parts of the country, so that almost every district had a pilot school. Evaluation in mid-1987 identified generally positive patterns, and in particular that "the new draft curriculum had gained solid foundation in the pilot schools" (Choden, 1990, p. 13). Then, since many other schools were showing interest in NAPE, the Department of Education decided to add eight more schools in 1988, giving a total of twenty-five.

Before going further, the authorities felt the need for more thorough evaluation. This was undertaken in 1988 by a team comprising an Australian consultant recruited by UNICEF plus four senior officers in the local education service. The team visited both project and non-project schools, held extensive informal discussions, and undertook detailed examination of curriculum and teaching materials. The team considered the innovation too young to merit a formal test of pupils' achievements and attitudes, but did conduct an informal test of arithmetic and reading.

The overall comments of the team were very positive. The consultant, in particular (Harley, 1988, p. 1), considered the scheme:

successful to quite an extraordinary degree, given the fact that the project has tried to do a great deal very quickly. . . . [It] has created a climate for change in primary education which must be applauded and supported.

However, he also noted problems arising especially from the recency of the innovation and the time it takes to change ingrained attitudes. He criticized standards in the teaching of English, and recommended revision of some curriculum materials. The consultant also noted that many headteachers lacked clear understanding of NAPE and its goals, and were therefore handicapped in their leadership and supervision.

Particularly significant were issues arising at the transition from NAPE to non-NAPE at the end of Class III. This point in the system happened to mark a change in personnel, for the government had chosen to concentrate its national teachers, who had received the most training in NAPE methods, in PP to Class III. By default, the non-Bhutanese teachers were concentrated in Class IV upwards. The consultant noted (Harley, 1988, p. 21) that:

Grade 4 reverts to the traditional methods of teaching with the secondary organization of subject teachers and thirty-five minute periods. It was clear from discussions in the schools that grade 4 is the main point of opposition to expansion of NAPE. Teachers clearly feel threatened, insecure, and exhibit a degree of inflexibility in their thinking which is frightening.

To illustrate the problem, the consultant presented several quotations from teachers (p. 8). Three, which were described as typical of teachers in the upper grades, were:

- NAPE doesn't prepare [the pupils] for grade 4. I have to cover the syllabus and get them ready for grade 5.
- [The pupils] come into grade 4 and want to ask questions and talk and discuss so I have to get proper discipline back or they'll never get through the syllabus.
- The trouble with NAPE is that it ruins the discipline in the school.

Consolidation and Further Expansion

Although the 1988 review was on balance strongly positive, it recommended a period of consolidation. This was to permit further in-service training for headteachers and District Education Officers, and overseas study for as many teachers as possible. The evaluators further recommended that the curriculum materials be repackaged in a more presentable form. However, the Australian consultant did endorse expansion during 1989 to the degree that United Kingdom and New Zealand volunteer teachers were available for guidance (Harley, 1988, p. 28).

The year 1988 also brought a slight political change of heart. The fact that design and implementation of NAPE had been strongly influenced by western volunteers was to some extent controversial. Moreover, the orientation which encouraged questioning conflicted with the Buddhist values of obedience and respect for authority. The approach appeared also to offend the national tradition of learning the tenets of religion by rote and using much the same method for more secular instruction. Collister (1989, p. 17) suggested that these factors contributed to a conservative backlash. The reaction, he added, was partly linked to the small size of the country, which contributed to a sense of vulnerability when faced by an onslaught of what appeared to be foreign values.

However, the forces for expansion proved stronger than either the professional desire for consolidation or the political forces of conservatism. To the twenty-five schools operating the NAPE curriculum in 1988, eleven were added in 1989. Further momentum was derived from the report of another consultant sponsored by UNICEF and focusing on curriculum (Crellyn, 1989). A plan drawn up at the end of 1989 envisaged "horizontal" expansion to 174 schools (Table 2), i.e., the total number existing at that time. The authorities also considered "vertical" expansion, i.e., to Class VI in all schools, though did not present such a firm timetable for this.

In 1992, the government embarked on a further review, in conjunction with UNICEF and Swiss Development Cooperation (SDC). This was the most extensive evaluation yet. Four teams of government officials and other concerned personnel were appointed, and three consultants were recruited. The teams made

Table 2. Expansion of NAPE as envisaged in 1989
(number of schools).

1990	36 PP-III + 50 PP
1991	36 PP-III + 50 I + 88 PP
1992	36 PP-III + 50 II + 88 I
1993	86 PP-III + 88 II
1994	174 PP-III

Source: Department of Education (1990, p. 16).

Professional and political dimensions.

extended field visits, and the draft report was the focus of thorough discussion. The final report was released in mid-1993 (Bhutan with UNICEF and SDC, 1993).

The 1993 review was very positive, stating (p. 25) that:

In general, NAPE in classes PP to III is operating effectively and with enthusiasm for teachers and learners alike as a unique nationwide system of basic education. In almost every classroom where NAPE teachers were observed, there was a great evidence of children's active participation in learning. Classrooms were used as functional teaching areas; simple materials and equipment were effectively used; and in general, reasonable teaching strategies were employed, consistent with the respective curricula.

However, the review also noted that change takes time and, in particular, that in many NAPE classes, teachers still followed teacher-centered styles. It also noted widespread uncertainty about what precisely NAPE was. Teachers generally thought of it as a method, but the aspects of curricular organization and the significance of teachers being assigned by class rather than by subject were not widely comprehended. The review also observed (p. 18) that "people sometimes remark that their children are kept outside the classroom to play all the time." This observation underscored the fact that although events had moved rapidly, NAPE was a fundamental reform in a traditional society. At that time, it was still barely seven years old, and was not fully understood by parents and the broader community.

The 1993 review made fifty-nine recommendations, covering details of curriculum, assessment, teacher training, facilities, and teaching materials. It recommended that plans for vertical expansion to Class IV and above should be shelved for the time being. However, this particular recommendation was not heeded for long, because 1994 brought moves for vertical expansion within the original pilot schools and an intent in the medium run to extend the NAPE approach throughout the system. The need for such vertical expansion was emphasized by contrast between typical modes in Class III, where NAPE stopped, and Class IV, where the old system began. Echoing Harley's (1988) comments, the 1993 review observed (p. 26) that:

There was an overwhelming sameness about teaching in the upper primary grades. The focus was consistently on textbook learning, employing very limited and unimaginative teaching strategies. . . . The principal teaching techniques used were: teacher-talk, teacher writing

Tensions between reorientation and expansion.

on the board; children being asked to stand and answer specific questions; children transcribing from their textbooks or from the chalkboard. Most of the time, children sat listening to the teacher or writing in their notebooks. In some cases teachers taught the books, not the students.

The most serious constraint on expansion of NAPE, either horizontally or vertically, was a shortage of trained local teachers. In turn, this required doubling up of classes and continued recruitment of Indian expatriates who had not been trained in NAPE methods. The teacher shortage was exacerbated by ongoing expansion of the system. Although Bhutan had made massive quantitative strides in the previous thirty years, the country was still some distance from the declared goal of universal primary education. The targets set out in a 1993 Education for All Action Plan (Division of Education, 1993, p. 3) envisaged raising the gross primary school enrollment rate from 67 percent in 1990 to at least 90 percent in 2000. It is in practice doubtful whether this rate will be achieved, especially because rapid population growth means that the goal is a moving target. The importance of the quantitative objective should not be underestimated, however, even though it will be in constant conflict with the parallel qualitative objective.

To complete the chronological story of the history of NAPE, in 1994 the government decided that NAPE was no longer the *New Approach to Primary Educa-*



Photo 3. The school day begins at a rural community school.

tion. Instead it had become the national system of education. According to the official announcement (Division of Education, 1994b, p. 6), "the new approach with all its elements but without necessarily the acronym would be continued as heretofore as a regular feature of the general primary education system". The system was decreed to have evolved beyond the experimental stage, and the term NAPE was therefore considered redundant.

Assessing NAPE at this point, perhaps the greatest achievements had been in its curriculum reform and complete reorientation of the nature of lower primary schooling. While there were of course modifications in details, the basic goals of the scheme had remained intact throughout its history. These goals had survived a decade of experimentation, part of which included opposition from conservative forces both within the educational establishment and in the broader society. The decision in 1994 to abandon the name and to consider the approach to be the core of the whole education system did raise the question of whether the methods and approaches would get submerged in the general operation of the system. This danger arose from the fact that the NAPE methods and approaches would no longer be clearly identifiable and could no longer act as a rallying point. However, the policy decision was in many respects exactly what the architects of NAPE had originally hoped for.

NAPE and the Administrative and Educational Hierarchy

Havelock's general survey of the nature of innovation in education (1975, pp. 155-164) presents three basic models. They are the problem-solving model, the social interaction model, and the research, development and diffusion model. NAPE most closely fits the third model, for it was conceived at the center and then fed into the rest of the system. As noted by Collister and Etherton (1991, pp. 10-11), the initial formulation of NAPE arose from a confluence of two forces. The first was a political leadership which wanted stronger Bhutanization of the system, and the second was a newly-emerged educational leadership which had been exposed to education systems in Europe, North America, and Australia, and wanted to emulate elements of these systems in Bhutan. Once the central leadership decided to go ahead, in the highly authoritarian system there were few dissenting voices.

However, there may of course be a wide gap between centralized pronouncement and school-level implementation. In the early years this gap was not too great because NAPE was still a pilot project, and despite the logistic difficulties of getting to remote schools, the people in charge of the project ensured a close linkage between the institutions and the center.

The main challenge will come with nationwide expansion, which inevitably dilutes the impact of those who have the clearest vision and the most vigorous energy. As noted by Kemmerer (1990) and Shaeffer (1994), full-scale implementation presents different, and in some respects greater, challenges than those of pilot projects.

Moreover, even from the start the NAPE ideal had had constantly to grapple with the ways in which reforms at one level of the education system dovetailed with practices at other levels. As noted above, although the Bhutanese government now controls examinations at Class VI and VIII levels, students in Classes X and XII still take Indian examinations. These examinations place greater value on rote learning than on creativity, and this has some backwash on lower levels. Further, the format of the Class VI and VIII examinations is also still influenced by traditions. As one Department of Education document (1990, p. 14) noted:

Teachers often fear that their children may do badly in the common examinations which currently emphasise memory rather than intellectual ability, skills and understanding. Consequently they tend to fall back on the old way of teaching.

The document further observed that the examination system which had been followed for many years could be very difficult to modify, though efforts were being made.

Nevertheless, the fact that NAPE was introduced at the bottom of the system did at least mean that it was distanced from demands of the top; and if in the future the efforts to extend NAPE-type approaches to Class VI are successful, the bottom levels will have further protection. A marked change of pedagogical style would remain at Class VII; but perhaps in time there will be reforms at that level too, possibly in conjunction with Bhutanization of the Class X and XII examinations.

The Implications of Small National Size

Returning to the starting point of this article, it is instructive to highlight more clearly the importance of small national size in this pattern of events. Some aspects have already been noted, including the way that the feeling of national vulnerability, which itself was partly linked to small size, affected political perspectives on NAPE. Other aspects should be added to this discussion.

Among the most important considerations was the small number of schools in the total system. As noted above, NAPE was launched in 1986 in thirteen schools. That may seem a small number, but it was 8 percent of the total number of primary and junior

Influence of the examination system.

secondary schools (which also had primary sections) existing at that time. By the time NAPE had grown to thirty-six schools in 1989, it was operating in 21 percent of the total. Expansion to cover all schools was a task that seemed relatively easy to manage in a small system. Allied to this was the fact that Bhutan had only two teachers' colleges. It was therefore easy to coordinate the necessary pre-service and in-service training.

A further aspect concerned liaison both at the top and at lower levels. Since Bhutan has a small bureaucracy with innumerable overlapping interrelationships both in and out of the workplace, it was easy to achieve a coordinated team approach for direction of the project. Bhutan's mountainous terrain and the difficulties of communications did pose challenges to liaison with the schools. However, as noted by Collister and Etherton (1991, p. 30), in the small system, "direct and vicarious information about the new methodology and new curriculum was . . . quickly disseminated" not only to the project schools, but also to the other schools. One aspect was potentially negative, namely that some teachers in the ordinary schools felt that the NAPE schools were gaining unfair treatment in the allocation of resources; but this had the positive side of encouraging the ordinary schools to find out what NAPE was about, and to ask to join in. Moreover, there were elements in Bhutan of the type of situation described in the 1985 Commonwealth Secretariat document quoted at the beginning of the article, namely that success could be seen more clearly in the small system, which in turn acted as an encouragement and a spur to further action.

On the issue of economies of scale, the project incurred much higher unit costs in production of textbooks, design of curriculum, and training of teachers than would have been incurred in a larger system (Bray, 1995). In 1991, the Curriculum and Textbook Development Division had no less than twenty-five people. The Division was responsible for secondary as well as for primary schools; but in proportion to the number of schools, this was a much greater team than would have been found in a larger system. The government also incurred high unit costs in teacher training.

However, the point made at the beginning of this article about the relatively large flows of international aid is true no less of Bhutan than of other small states, and such aid helped defray the extra costs. In 1986/87, aid disbursements accounted for 30 percent of Gross Domestic Product. This proportion declined to 12 percent in 1989/90, partly because of GDP growth and

partly because of fluctuations in aid. However, the proportion rose again to 25 percent in 1993/94 (Bhutan, 1994b, p. 2).

The aid to Bhutan was human as well as financial, and NAPE particularly benefitted from the input of expatriate volunteers. They worked as teachers and curriculum developers, and also from the late 1980s as district resource persons. In 1989, just sixteen volunteers from three different agencies were working on the NAPE project (Collister, 1989, p. 19), but in a small system, they had a large impact.

Conclusion

Bhutan's experience with the New Approach to Primary Education is an instructive example of what can be achieved when the conditions are right. NAPE cannot of course be declared an unqualified success, but it has radically changed the nature of primary education in Bhutan. Most people would say that the change is for the better, and even the strongest reactionary forces would now find it impossible to move the system back to its pre-NAPE shape. The curricula are much more closely oriented to the nature of Bhutanese society, and NAPE has to a large extent replaced passive rote learning with a much more active, enquiry-based approach.

While of course many features of Bhutan's experience are distinctive to that society, some have parallels elsewhere. Most positive is the potential impact of a group of people, assisted by external inputs of various types, at the center of a centralized system. These people were handicapped by the youth of Bhutan's education system and, therefore, by shortages of expertise at all levels. However, the youth of the system was also an advantage, for the initiators of NAPE were faced with a lump of clay rather than a hardened rock.

The tension between qualitative reform and quantitative expansion is also common in developing countries. NAPE would have made even faster and more sustained progress had it not been for the existence of the parallel and important goal to expand primary education with the eventual goal of universalization of enrollment. This parallel goal was made more difficult to handle by rapid population growth, which meant that the authorities had to "run to stay in the same place". However, the extent to which progress was made would certainly be envied by educators in other developing countries (see, e.g., Graham-Brown, 1991; Lockheed and Verspoor, 1991).

The article has particularly emphasized the implications of smallness for educational reform. Smallness is not always an asset; but in the story of NAPE, it seems to have assisted reform more than obstructed it. By providing another case study for the broader literature on education in small states, the paper has contributed

along the lines envisaged by Brock (1988), who was quoted above as stressing the need for more in-depth studies of individual systems as well as for more comparative studies across the range of small states.

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