

CHAPTER SIX

DISCUSSION

INTRODUCTION

This study set out with three objectives. One was to assess whether the curriculum met the learning needs of the children, the second was to look at how teachers interpret and implement the contents of the new curriculum. The third, concerning the implications of the study, will be addressed in Chapter Seven. To fulfil these objectives, six research questions were formulated corresponding to the six key areas that operated more or less in relation to each other in schools. The six key areas were: curriculum organisation, curriculum practices, assessment and evaluation in schools, teacher preparation, management and facilities in schools, and support from the Education Division and Dzongkhag. The terms *key research areas* and *key research questions* will be used interchangeably to refer to these six areas.

A set of quantitative data and qualitative data was analysed to find some answers to the six *key research questions* given in Chapter One. These were:

1. How did the teachers interpret the new curriculum in terms of clarity of content and relevance to children's learning needs and their social and cultural context?
2. What issues and problems did the teachers encounter while teaching in the school?
3. How did teachers assess and evaluate the performance of their students?
4. How did teachers find the way they were prepared for the implementation of curriculum through pre-service and in-service teacher education programmes?
5. What did teachers think about the management and leadership in their schools and the facilities provided to them?
6. What kind of support and encouragement did the teachers receive from the Education Department, Dzongkhag Education Offices and from parents?

This chapter contains discussion of the data presented in Chapter Five that draws upon ideas from both its context of the Bhutanese school system (Chapter Two) and aspects of the analytical framework (Chapter Three).

Chapter Three provided some insights into the implementation of the post-1986 curriculum (NAPE), in the primary schools, that was expected also to have a catalytic affect on change in secondary schools. Although the new curriculum had intended to be a departure from the *Stage of Formalism*, there appeared to be a *tension* between the intention and the practice during the implementation period. One demographic feature of Bhutanese teachers, their low educational qualifications, was recognised to be a possible cause of the tension (see above p.81). Discussion of the results in this chapter is expected to shed more light on the difficulties.

CURRICULUM ORGANISATION

Most teachers thought the syllabuses, manuals and textbooks were relevant to children's learning needs. But the syllabuses and textbooks were mostly too vast to complete within the stipulated time. Math and English were the most problematic at primary level, while Social Studies and Science were vast and the problematic at secondary levels. Contents were considered vast and problematic because they were activity oriented while there was inadequate information available in the text to facilitate the activities and to answer the questions given in the text (see above p.110). Many teachers asked for an in-depth explanation of some concepts and more information to help students do the activities. Teachers needed the full specification of curriculum content.

These interpretations of the curriculum by teachers point to a tension that exists between the policy intentions and classroom practitioners. The manuals were intended to help teachers to plan their lessons (see above p. 45) drawing on their experiences, and creativity by adapting the ideas in the manuals according to classroom situations. The fact that most teachers relied primarily upon the textbooks to inform their teaching was a clear indication that they were working within the *Stage of Formalism*. This indicates their lack of assimilation of the new ideas (see above p.79-80) in the new curriculum. Furthermore,

analyses from the present study showed that teachers wanted enough information to be able to use the textbooks. Beeby's (1966) story about the problems related to the first attempt to introduce progressive teaching in Western Samoa illustrated a similar problem to that in Bhutan. The new curriculum in Bhutan would have demanded that the teachers perform at an advanced *Stage of Transition*, if not the *Stage of Meaning*. However, the way teachers interpreted the curriculum, as Beeby (1966) argued, was largely determined by their education and training. Since Bhutanese teachers on the whole were neither well educated nor highly trained (see Table 3.3), their needs were understandable.

As mentioned above (see above, p.108, 116), how teachers interpreted the syllabuses and manuals were different from the way they were intended to be used in the classroom. Their choice was less informed by professional judgements in selecting appropriate activities. Hence, too many activities were seen as problematic. Besides, there was clearly a problem of insufficient supply of required materials. This did not help improve the situation.

This study also showed that teachers believed many important Bhutanese values were being identified and taught from primary to secondary classes. However, several issues emerged from their comments. Teachers, parents and those who have a stake in education should be aware of issues, such as, smoking at an early age, peer and media influences and teenage pregnancies. Teachers thought that parents generally presumed that enrolling their children in schools took care of other aspects of the latter's development towards adulthood (see above p.115-6). This was one of the main concerns raised by the government as mentioned in Chapter One (see above, p. 6-7). This over-dependence of parents on schools was perhaps one of the reasons that youth problems are emerging, owing to less guidance available at home, according to the teachers.

The problem of using English as a medium of instruction was mentioned in Chapter Two (see above p. 40, 78-9). Although no specific question was asked on this issue in the study, the quotation below illustrates some teachers' poor English language ability.

This is a great boon for the younger generation of pre-service teachers. Their pre-services in the school classrooms notwithstanding work areas make us especially belonging to the school family. Their subtle but quiet dealings fascinate them inspire every boy and every girl a lot. Pre-service teachers on their part show a great deal enthusiasm plus workmanship. This boost up their apprenticeship career here as teachers. I mean an added grace to the vigour they already possess (ID 296).

The fact that many adjustments had to be made to quotations in Chapter Five illustrates the almost ubiquitous problem Bhutanese teachers have in using English. With such teachers, learning in English for students must be difficult.

Summary

The teachers' interpretation of the curriculum was somewhat different than intended, supporting the presence of *tensions*. The conclusion is that syllabuses, manuals and textbooks were used in the fashion of Formalism that the introduction of the new curriculum was trying to replace. Teachers were still highly dependent upon the manuals and textbooks and hence were stuck when there were questions and activities that required answers from beyond the textbooks. Beeby's (1966, 1980b) theory of low academic and professional qualification of teachers affecting their ability to function beyond the *Stage of Formalism* has been found relevant in the Bhutanese situation, as this study found.

There were also other contextual factors such as shortage of teachers, time constraints due to engagement in too many periods and activities, youth related problems, parents' negligence, a deficiency in the supply of essential materials, all of which added to teachers' difficulties. Some doubts were already raised regarding the hundred percent success of NAPE if the number and qualification of teachers remained unchanged (see above p. 81) and these concerns are supported in these data. It was noted that perhaps teachers' lack of in-depth understanding of the syllabuses (see above p. 78), which was exacerbated by the use of English in the manuals as well as a tool of instructions.

CURRICULUM PRACTICES

In Chapter Two, it was said that before 1986, the method of teaching was generally teacher talk and rote learning of notes dictated by teachers, that is, *Formalism* in Beeby's terms. The 1984 policy paper, as well as subsequent documents such as the Quarterly Policy Guidelines and Instructions (QPGI), were critical of this method. In Chapter Two, these criticisms were noted and showed that, therefore, the new curriculum was intended to be a "catalyst to liberate the primary schools from the deadening effect of the age-old traditions" (see above, p.44). At the same time, it was also noted that to change a system from a *Stage*

of Formalism to Stage of Meaning required changing the role of teachers, especially in practicing the child-centred pedagogy. This change in practice implied that certain pre-conditions were in place before the change began. These pre-conditions were - manageable class size, appropriate furniture, enough adequately trained teachers, and availability of the required materials (Beeby, 1988, Collister & Etherton, 1991 and Harley, 1993).

It was found that activity-based teaching was considered “good” although very little of this nature was actually happening in most classrooms (see above p.136-9). The previous section (on curriculum organisation) revealed that without adequate information specific to the contents and related questions, teachers faced difficulties in using the manuals and textbooks. There was evidence that although lessons were planned, teachers did not use the plans as much as recommended in the manuals (see above p. 138). It is very likely that in the classroom, the situation was generally teacher-talk and memorisation.

Broadly, teachers implied that conditions in the classrooms were not suitable for teaching methods different from those characterised by the *Stage of Formalism*. First, the classrooms were overcrowded. This can be understood in terms of the generally small classrooms and inadequate number of teachers (see above p. 81, 122-4), leading to combining classes. Second, covering the vast syllabus, as discussed above. Not only did this not help the use of a child-centred pedagogy but also teachers complained that they had little time for revision in preparation for the examinations. Third, most schools had inadequate supply of teaching and learning materials. Even when the supply eventually came, the quantity was often insufficient. Fourth, classrooms did not have suitable or enough furniture for children to work in groups and interact with each other as required or implied. A combination of any two or more of these would exacerbate the situation (see above p.121-5). Thus, the pre-conditions required for change were largely not fulfilled.

There were several other issues that affected the success of good teaching in schools (as defined by NAPE). First, the deployment of subject teachers was not always according to school needs. Sometimes teachers had to teach subjects for which they were not prepared (see above p. 125). Second, transfer of teachers after returning from NBIP apparently left the school unprepared to make adjustments. The transfer situation was noted by Collister and Etherton (1991) who point out that frequent transfer of teachers in the late 1980s and early 1990s in Bhutan was adversely affecting many schools where teachers had started off well in NAPE. This practice appeared to have continued. Third, the study also showed that

monitoring, guidance and good links with CAPSS, that could have improved teachers' work had apparently weakened (see above p.126-7). Fourth, children changing schools, and lack of cooperation from other sectors such as Forestry, Agriculture and Animal Husbandry also affected their teaching (see above p.127-8). Taken together, these indicated that despite intentions it was most difficult within the available means of the teachers to change their style of teaching. In short, teachers' *subjective realities* have not been sufficiently addressed.

Most of the difficulties affecting teaching in the schools were caused by a combination of several classroom and school factors. However, in addition, teachers were responsible for many other activities such as games and sports, values and moral education, cultural activities, and so on both outside and during school hours. These indicated the realities of schools in Bhutan at this time. The ambivalence about NAPE was due to the conditions in which teachers were working as much as it was to their low level of professional competence. The importance of the conditions was stressed by Guthrie (1980), Beeby (1980b) and Fullan (1991) as one that would adversely affect the direction of change if not attended to.

Question and answer sessions, students discussing in-groups and finding answers to questions were apparently equated with activity based teaching (see above p.120). A recent World Bank study of a project in Namibia showed that learner-centred education was similarly equated with group work and teacher-pupil interaction (Craig, et al, 1998:40-1). The Namibia study was an example of teachers not fully understanding the model of learner-centred teaching and yet Namibian teachers believed that change from teacher talk to teacher-pupil talk was learner-centred. This was what Fullan (1991) called *false clarity*. In terms of curriculum practices in this study, *false clarity* of Bhutanese teachers was also evident.

Of the two aspects of the new curriculum discussed in Chapter Three (see above p.76-7), the pedagogical aspect was perhaps the most difficult for teachers to achieve, because it overestimated the capability of the system. When the DRT support was discontinued and Bhutanese teachers, who were supposed to have been trained as resource teachers, did not take over, the teaching method remained essentially in the *stale practice* mode, to use Beeby's term, because teachers' *subjective realities* remained unchanged.

Teachers in Bhutan were passing through a zone of uncertainty circumscribed by a conservative phenomenon (Schon, 1971 in Fullan, 1991:31-2). There is no reason to “point the finger” at the teachers alone while their functions were equally affected by elements outside their control. Collister and Etherton (1991:32) pointed out that the failure of NAPE was in not ensuring an adequate supply of teachers before launching into the scheme. These early warnings do not appear to have been heeded. Collister and Etherton (1991) also pointed out that the short supply of books and furniture was minor. This study’s finding was the opposite, especially when changes in the teaching learning process required a completely different design of furniture, and books of different kinds. These findings are consistent with the importance that Fullan (1991) gives to the *objective realities* in a change situation.

Summary

This part of the study revealed a gap between intentions and practices in Bhutanese classrooms. Although some teachers said many good things were happening in their classrooms, which were consistent with NAPE, many more reports suggested that all was not well. The reasons for this appeared to be overcrowded classrooms, shortage of teachers, lack of adequate resources and the many other requirements of teachers’ time.

This problem of inadequate level of resources, coupled with low levels of teacher readiness for change has been identified by Beeby (1980b) as a common cause of failure in education change in developing system. This problem of inadequate levels of physical resources is significant but must be considered together with judgements about the capabilities of teachers to understand and implement the NAPE pedagogy, even under conditions of ideal resources. This combined focus is precisely what Beeby referred to as a “... complex interlocking system” (Beeby, 1980b: 462).

ASSESSMENT AND EVALUATION IN SCHOOLS

The history of examinations in Bhutan’s education system was described in Chapter Two. For a long time, end of year examinations had been the sole criterion for deciding the

selection of students for promotion to the higher classes, as well as their selection for jobs when leaving schooling. Consequently, Bhutanese teachers have focussed much, if not all, of their teaching preparation for examinations (see above p. 81-83, 131-3). Recognising the fact that one-time tests were limited in their capacity to evaluate the real worth of students, several steps were initiated to change this situation. One of them was the introduction of continuous assessment of students' performance, almost simultaneous with the introduction of the NAPE (see above, p.46). However, it was noted that the written examination was to continue to determine selection as usual even though continuous assessment would also affect the final decision for selection. Not surprisingly, examinations have continued to dominate the classroom practices (see above p.81-83).

The data from the present study revealed that assessment was mainly checking homework, class work and project work of students (see above p.131-3). Teachers apparently considered assessment as a part of their daily lessons, which was further explained in the qualitative data where they reported stressing class work, because they doubted the authenticity of homework and project work. A large number of citations in the data suggested that such extended works produced by children were being evaluated with marks, thus emphasising the importance of examinations. But in practice what they were doing was smaller units of summative assessment, which was evident in the comments such as "students remaining absent on the day of assessment". The data also showed that teachers focussed on non-academic behavioural aspects like attentiveness, cooperation and attitude, which indicated an extension of assessment as required in NAPE (see above p. 133). It can be argued that assessing students working in the class and their behaviour on daily basis needed a lot of time. This added to the problem mentioned in the preceding section. These points may well indicate *false clarity* of teachers about the purposes of assessment, and continuous assessment specifically (see above p.133, Rinchen, 2000: 155).

A minority of teachers certainly believed that continuous assessment had merit. For example, they said that assessing students' work provided useful feedback to teachers about their own lessons as well enabling them to identify students with learning problems so that they could provide additional assistance (see above p.129-131). Such teachers clearly did not suffer false clarity about the purposes of assessment. But even for them, with a class of 60 students (see above p.133-6) they were hardly able to do any justice to individual student's formative assessment. Here again, and as noted in the previous section, inadequate resource levels can override teachers' willingness to adopt new assessment

practices. This point notwithstanding, the major problem in achieving a change in assessment practices appeared to be lack of conceptual clarity in the minds of teachers.

Summary

This section shows that for most teachers, assessment of students' work was smaller versions of formal tests. This was an indication that continuing importance of written examinations had affected the way teachers assessed students.

Many teachers were confused about how to conduct continuous assessment. Management of time and large numbers of students in the classroom were the two other problems confronting the few teachers who appeared to have understood the concept of continuous assessment.

TEACHER PREPARATION

Improvement in teachers' knowledge, skills and the application of the skills in the classrooms was crucial for the success of the new curriculum, especially the NAPE. It was pointed out above that for teachers, whose educational attainment was relatively low, successfully implementing the syllabuses and textbooks would be rather difficult (see above p. 79-81). Consequently, support of teachers through both pre-service and in-service education would be crucial.

The study showed that pre-service teacher education (PRESET) helped teachers' confidence and understanding of the learners. They had also learnt skills such as planning lessons and classroom management. In-service education for teacher (INSET) also was beneficial in updating some teachers' knowledge and about new development in curriculum and teaching. This was especially true of the older group of teachers. Teachers were also able to share their experiences with colleagues from other schools and learn from each other (see above p.140-1).

However, the evidence also suggested that both PRESET and INSET courses could have been more useful if the situation in the school was favourable. For example, if a teacher

taught according to the methods shown to them during the training, they would not complete the syllabuses in time. Another thing that the evidence suggested, was that interest in teaching and commitment was an important aspect of a teacher's character. Literature revealed that resistance to change was a function of attitude (see above p. 62-3), which the above examples illustrate for Bhutan.

The inference is that the PRESET and INSET course did not have much impact on the implementation of new curriculum. This is consistent with the findings of the recently completed INSET study in Bhutan, which found that teachers had attended the programmes but rarely implemented them (Laird, et al, 1999:83-5). That study also concluded that INSET courses too often were organised by central personnel without sufficient attention being given to the learning needs of the teachers. In Fullan's terms, the teachers' *subjective realities* of the NAPE were not being addressed. A further deficiency of the INSET programme was that it only operated annually. According to Fullan, when teachers are learning to cope with change, support services need to be provided more frequently (see above p. 65, 69).

Summary

Similar to the findings of Laird et al (1999), the study showed that in-service teacher education had little impact on the implementation of the new curriculum, particularly on the NAPE in which the method of teaching was a major shift in terms of teachers' work. In addition to the shortfalls of teachers' capability and resources already noted, teachers' limited commitment to their work had adversely affected the shift to new practice of teaching. *Formalism* remained dominant.

MANAGEMENT AND FACILITIES IN SCHOOLS

Child-centred learning certainly required the classrooms to be spacious and equipped with furniture that enabled free movement around the room. But many classrooms had inappropriate furniture and blackboards that did not match with, and contribute to, child-centred learning (Harley, 1993 and Chewang, 1999). Further, with little training in the management of schools, it is likely that many head teachers and principals based their

management style upon past experiences, which for the majority was what they saw as teachers before the NAPE started (see above p.146-8). Largely this was a routine administrative style of management that was consistent with *formalism*.

As mentioned above, particularly in the first and second sections of this chapter, a shortage of teaching materials, lack of adequate furniture, small classrooms with large numbers of students and a shortage of teachers were expressed problems in schools (see above p.124-6). When the materials arrived there was usually a shortage in the quantity they received. Schools across the country experienced this problem and this definitely affected the way schools functioned. Somehow, relative to others, central and local authorities overlooked the rural schools in the maintenance and supply of materials (see above p.126-7). Comparatively, schools in remote areas were more fortunate in terms of school building and classrooms. This was probably because local communities built these schools rather recently and they also maintained them. Moreover, these schools had relatively smaller numbers of children, as they were located in sparsely populated areas.

Many schools in rural areas were in dilapidated conditions and needed repair work, due to the lack of proper maintenance (see above p.144). The rate of schools upgraded to the next higher level (say from primary to junior high, and junior high to high school) did not coincide with resource planning. These schools were often the ones that either did not receive materials at all or else received inadequate quantities.

A positive sign in the area of school management was the delegation of responsibilities to teachers and committees. Teachers also felt that there was a congenial atmosphere, characterised by cooperation among teachers and leadership of the head teachers, in their schools contributing to good management (see above p.146-8). The lesser number of teachers commenting in this area suggests that school management is seen as administrative routine rather than following up on problems.

For many head teachers, a brief introduction to school management would have been most helpful. Again, as Fullan describes, *paper work* was put to work by providing a guideline (booklet) for the head teachers. The concept of *intervision* introduced in Bhutan sometime in 1990 to promote staff development and work together at a time when the new curriculum was being expanded to more schools (Thinley, 1999). The *intervision* had a parallel with the 'joint work', which is considered the "strongest form of collaboration" in school, for example, team teaching, planning, observation, action research, sustained peer coaching

and mentoring (Thinley, 1999: 217-219). Schools without a collaborative culture were examples where not only change had not succeeded, but also learning had become impoverished, in what Rozenholtz called 'stuck' schools. It is the collaborative culture, the joint work or the way in which teachers maintain their *working relationships* - such as exchanging ideas, talking about teaching practices and supporting each other - that determine the success or failure of implementation of change at the school level. The SBIP and the inter-vision cycle, the DBIP and other INSET programmes also have the potential to address and promote this culture in schools. So far, that potential has not been realised to the extent possible, and necessary, if curriculum change along the lines of the NAPE philosophy is to be achieved.

Summary

Most schools did not have adequate materials or facilities with which to implement the NAPE curriculum. The evidence again showed examples of *subjective realities* of teachers not being addressed as discussed in the preceding sections. The availability of materials and other facilities for use was an indispensable component for effective implementation of the curriculum change. But without these very important items, claims of change could be equated with *false clarity* (Fullan, 1991:37). Even if teachers fully understood how to use the new syllabuses and the manuals and textbooks, lack of materials was still a handicap in the effective implementation.

SUPPORT FROM THE EDUCATION DIVISION AND DZONGKHAG

Teachers needed much support at a time when they were learning to use new materials and adopting the practice of new methods of teaching (Fullan, 1991). The Education Division, particularly CAPSS and other monitoring agencies, like BBE and EMSS, could have established stronger links and communication with the schools, according to teachers in the study. Although the newsletters served some purpose, better efficiency in communication should be developed in future, the teachers argued (see above p.149-51). This is an example of *episodic* communication rather than the *processual* interaction that, according to Fullan is more interpersonal and critical to making change work (see above p.69-70).

As noted already, schools also needed supply of sufficient materials, in time, as well as an adequate quality of the materials to ensure better teaching. The general requests for materials were mainly basic items for use in classrooms such as – library books, reference books for teachers, science equipment, games items and stationery. The request for material support came from across all levels of schools (see above p.151-2). Teachers wanted a more professional relationship with those who plan and prepare curriculum materials for them, but it is clear that central authorities were not able to fulfil these desires (see above p.152-4).

Teachers would benefit more from frequent workshops and training. Teachers would also benefit by the Education Division recognising those who worked very hard. They would like *competent* people from the Division and Dzongkhags to visit them and give guidance. In other words, they invited support (see above p.154).

As mentioned earlier (see above p. 69-70), one of the most important points in the implementation of change is the flow of interaction between the proponents of change, the centre, and implementing agents – the teachers. Teachers in this study very clearly pointed out that frequent visits, newsletters, and information about change before it actually started to be implemented were crucial to their understanding of the new materials and practices. This could help avoid *false clarity*, and at the same time assist teachers' to gain mastery and commitment to innovation (Fullan, 1991:199). In other words, the teachers themselves were aware of the importance of altering their *subjective* and *objective realities*, but recognised that they needed increased assistance from Dzongkhag and central agencies to do so.

Both *support* and *pressure* were given during the initial stages of innovation, that is, during the late 1980s and early 1990s. It was not surprising that teachers wanted to be frequently in touch with the Division. Their desire to have more training was also in line with the necessity of the support. As noted in Chapter Two (see above p.47-8) NAPE pilot schools' teachers in Bhutan relied heavily on the guidance and support of the resource teachers (Collister & Etherton, 1991:22). One is reminded that both support and pressure are essential ingredients of change process, as Fullan (1991:91) says, "pressure without support leads to resistance and alienation; support without pressure leads to drift or waste of resources". But such *support* had largely reduced by 1993 and the responsibility had been transferred to local authorities, especially the DEO, who was expected to play an increasing role in the academic supervision and counselling (see above p. 33-4), in addition to the

regular administrative responsibilities. Unfortunately, DEOs generally were not well placed to provide this support. In addition to their onerous administrative tasks, they were not always sufficiently skilled in classroom practices to be able to offer educational leadership (see above p. 33).

School level monitoring, which is a form of *pressure*, and *support* is said to be not an easy job. According to research in other countries, head teachers “demonstrated a tendency to engage themselves in the most current and pressing situation (and) invested little time in reflective planning” (Martin and Willower, in Fullan, 1991:140). With the exception of a few, it was possible that our head teachers could have totally withdrawn themselves from teaching responsibility, reflective planning and from making the best use of other expertise among the staff in their respective schools. Like the DEOs, leadership of educational change was generally not high on their agenda.

Moreover, most of our head teachers in schools were given this responsibility straight from classrooms. Apart from attending head teachers’ conferences, they had no training in management courses. This happened at a time when the new curriculum was being introduced and extended to more schools year after year. This was also a time when teachers needed professional support while the schools needed an efficient management system. Beeby (1966:38-9) argues that most teachers were, “shut up with their ... children in a classroom”, practicing their art unseen and unaided. While both head teachers and DEOs were potential sources of support, in practice, neither provided much.

Summary

One could say that lack of a processual relationship with and support for teachers by regional and central agencies has hampered the effective implementation of the curriculum. Teachers wanted a long list of materials, which were very basic and essential for classroom use. They also needed frequent effective in-service courses and communication with the centre. It was obvious then that the *one-shot* workshop organised for familiarising teachers with the new books and syllabuses was not enough, and this was consistent with Laird et al’s (1999) conclusions and the advice of Fullan (1991: 85).

In Dorji (1999), alluded to in Chapter One, it was noted that there were uncertainties among the teachers regarding the implementation of policies such as values education and continuous assessment. Teachers in Bhutan do expect specific instructions from the authorities in these matters. This is consistent with the system operating within the *Stage of Formalism*. Chapter Three also argued that support from the CAPSS, EMS and the DEOs was crucial, which could have been strengthened at a time when teachers were beginning to absorb new practices (see above p. 83). The data from this study clearly points out that this support was weak.

CONCLUDING SUMMARY

Evidence in Chapter Five revealed that the curriculum innovation that began with the introduction of the New Approach to Primary Education and later extended beyond the primary to the secondary level (up to class X) had made very little progress. In the first section on curriculum organisation, evidence revealed that teachers were trying to use the manuals and textbooks in the traditional rote learning style. Shortage of teachers and the consequent time constraints as well as insufficient materials were apparently the main causes of this failure to change. Teachers' English language proficiency was a limiting factor in their understanding and efficient use of the curriculum policies, manuals, textbooks and materials.

The second section on curriculum practice or teaching showed contradictory evidence across the system. Child-centred teaching was reported to be happening and it may have been happening in some classrooms to some extent, but in most schools, overcrowded classrooms, shortage of teachers and lack of adequate resources were hampering activity-based teaching and classroom interaction between teachers and students. Evidence from assessment showed it was difficult to monitor and assess all students fairly and successfully. Problems were again the same as in the other sections – growing strength of student numbers in the relatively smaller classrooms, shortage of teachers and lack of *clarity* in teachers' minds about how to implement such new practices.

The next section showed that although the pre-service teacher education programmes were generally good as far as the teachers were concerned, they did not often relate to the real situations in the schools. In other words teacher training did not include problems such as how to deal with overcrowded classes or fewer number of teachers.

Evidence in the section on management and facilities more or less echoed the same concerns expressed in the preceding sections. There was a general lack of adequate facilities and good infrastructure. Management was said to be good, due to cooperation among the teachers and the effective administrative leadership of the head teacher, according to teachers, although it did not appear as a priority among them. But head teachers did not have exposure to techniques of educational leadership, so what happened in schools was simply day to day routine administrative events rather than problem-solving, discussions and making schools move forward in their educational programme. The changes required by the NAPE were not adequately developed and supported.

Quite appropriately so, in the last section on support, teachers generally indicated that linkage and communication between schools and relevant authorities in the Division should be improved. Supply of materials should be improved and the existing infrastructure should be renovated and maintained. They needed frequent in-service programmes to improve their own knowledge and skills and to help implement the changes. The roles of CAPSS, EMSS and Dzongkhags have been rather weak in providing support to schools, according to teachers.

Finally, through this study evidence has emerged to suggest that although the new curriculum was meant to be a departure from the *Stage of Formalism*, there has been little progress in the direction of the *Stage of Meaning*. From the philosophical point of view, the method of teaching and learning was generally informed by *formalism*. Time constraints for teachers, resource constraints, increasing number of students and lack of proper support as well as lack of *clarity* about the NAPE intentions were the five main causes repeatedly emerging from the data. These have tremendous implications for the policy decisions, curriculum implementation, teacher education and resource planning in future, which is discussed in the next chapter. It is evident that in spite of the efforts made, there was very little progress towards achieving enrichment of students' learning in our schools. This certainly indicates the possibility that many of our teachers were far from prepared for the change. Beeby (1966:36) rightly says that:

Few reforms in the content and methods of teaching are of any value until they are understood and willingly accepted by the teachers who are to apply them.

In Indonesia, Beeby (1980b: 464-5) found that the main problem was in changing the skills, habits, attitudes and purposes of the teachers in implementing the change.

As noted in Chapter Two, the education system in Bhutan had come under tremendous pressure for expansion from two sides. The first was the Bhutanese parents who became eager to send their children to schools. Consequently the number of students in schools soared from a mere 50,000 in 1990 to over 100,000 in just under ten years. But the number of new schools constructed to accommodate these increasing enrolments was proportionately far fewer. As a result, the existing schools have had to take in more children than they were designed to accommodate. The second pressure came from the multinational agencies, mainly UNICEF, which was following up on the Jomtien Agreement (UNICEF 2000) to ratify education for all (EFA) by 2000 (see above p. 16-9).

Although multinational agencies like the UNICEF, UNCDF, World Bank, SDC and UNESCO, CIDA and others were readily supporting Bhutan, the resource requirements were very high. As mentioned in Chapter Two, Bhutan had achieved tremendous progress towards the EFA target to the extent that many schools were overfilled with students. The recent education statistics noted that while primary school capacity was almost full with 98 percent, junior high and high schools were over-booked by 24 and 78 percent respectively (ED, 1999:9). Nevertheless, as this research found, EFA was not the same as quality education. Beeby (1966) rightly noted that most developing countries were (and still are) grappling with the numbers game at the cost of quality. As the economy of the country gains maturity, and as the number of well qualified teachers increase, this obvious tension between quality and quantity will reduce, but it cannot be achieved overnight. The immediate task at hand for educationists in Bhutan is not to loosen their grip on the quality that we have embarked upon, while at the same time accommodating all our children in schools will continue to be a priority. This will be a continuing tension.

Third, resources in developing a country like Bhutan are constrained as its economy is yet far from maturity yet the requirements for education are a huge financial burden for the government. Books, stationery and other equipment have to be procured from India where the market often proliferated with duplicate products. The transportation of the goods along rough geographical terrain is not easy either, often reaching the schools in damaged

condition, and late. Until recently, teaching was not a preferred job among school leavers. So better qualified people opted for teaching only in the last few years or so thanks to the thoughtful policy of the government (see above p. 28-9).

Having explained the scenario, the immediate concern is to find the means to improve upon the situation and avoid the mistakes that have permeated the system in the past. The findings in this study, therefore, had certain implications for future course of direction that policy makers and educators in Bhutan may like to consider. Therefore, the focus of the next chapter will be on the implications of the study for education policies and programmes.

CHAPTER SEVEN

REFLECTIONS AND CONCLUSIONS

INTRODUCTION

Chapter Six addressed the six research questions by way of discussing the data and concluded with some pertinent findings on the NAPE and secondary school curriculum change in Bhutan. This chapter will consolidate these findings by first describing the current situation of education in Bhutan. Then some implications of the findings of this research will be offered for *curriculum development, teacher education and implementation of innovations* in Bhutan. This will be followed by some reflections on the theoretical framework and research methods. Finally, some implications for future research will also be discussed.

The situation of present education in Bhutan

Evidence from all the six key research areas, when considered collectively, revealed that although the contents in the curriculum materials were found to be suitable for children in Bhutan, the learner-centred pedagogy had not materialised. There were several limitations that had affected the process of change. First, the shortage of qualified teachers was coupled with the generally lower educational attainment of the teachers who were already employed. Their interpretation of the contents in the syllabuses, manuals and textbooks were informed by *Formalism* (Chapter 3) whereas NAPE required that teachers should have mastery of subject matters as well as a repertoire of child-centred teaching skills that is consistent with the *Stage of Meaning*. Second, there was an apparent lack of sufficient support, guidance and pressure from the authorities in terms of providing effective INSET programmes, visiting schools, communicating with schools and getting feedback from schools. There was also insufficient support for materials and equipment. Sometimes schools received books, stationery and science equipment late, and often in insufficient quantities. Third, the increasing enrolment of the student population did not coincide with a proportionate increase in the physical establishment of new schools. Schools, particularly secondary, were booked well over their capacity while primary schools were near saturation (see above p.18). Finally, many classrooms were built for around 35 students

while there were over 45 or more children in each. The furniture was mostly designed for students to sit in rows facing the teacher in the front whereas NAPE and the learner centred teaching required students to sit in-groups and have enough space to move around for teachers and students. The supply of furniture was also inadequate for the number of children in each classroom.

All these point to the fact that Education in Bhutan stands at the Stage of Formalism. Unless it is possible to dramatically improve these physical resources, while at the same time improving both the number and overall quality of teachers, then it is difficult to conclude that implementing syllabuses consistent with the Stage of Meaning is an attainable goal in the short term. If roughly the same resource levels that presently exist are likely to be carried forward into the immediate future, then it follows that syllabuses should be written and manuals/textbooks developed that reflect goals consistent with the Stages of Transition, at best. Such a re-direction of curriculum policy should not be seen as necessarily implying unsatisfactory outcomes from the Bhutanese school system, for as Beeby (1966) notes, “many of the great national figures” of the west were products of the Stage of Formalism. Equivalent to this point, it can also be said that the leaders of Bhutan today were also the product of *formalism* of the 1960s and 1970s. Most of my colleagues believe that formalism has its own virtues and that some elements in it, such as learning by memorization with some understanding, can help strengthen the memory power of the learners. Memorization, should, therefore, be retained, although teachers in the study do not support the idea (see above p. 117).

In the discussion that follows, this conclusion is justified and expanded.

The lessons from the NAPE experience

In one of his recent works, Fullan (1999:63-6) writes about the difficulties in transferability of change. In this, he gives three reasons why complex innovations are difficult to disseminate and replicate, which in many ways are true of the curriculum changes attempted in Bhutan. First, there are subtleties hidden in imported ideas where practitioners know more than they can say. Emphasising what is essential is not usually visible to the eyes. He quotes Schorl (1997) who says practitioners operate with an “iceberg of tacit knowledge and artistry beneath the surface of readily accessible descriptions of effective practices” (p.63). It seems that the essence of the original ideas also change with the change of hands. This study found that what came to Bhutan in the form of NAPE was

only the tip of the iceberg. It suggests that *tacit knowledge* has not been translated into what is also called the *explicit knowledge* (Fullan, 1991:15-16), meaning that much of what people knew about NAPE had not been written adequately and disseminated to the teachers. Not enough attention has been given to the *subjective* and *objective realities* of teachers, hence, the resultant problem of *false clarity* (Fullan, 1991) as the study found. Although the change of curriculum content was a Bhutanese matter, the method of delivery was something that neither fitted in the context nor was understood in depth. Collister and Etherton (1991) had previously pointed out that the NAPE method was imported from somewhere where they apparently worked well in small size classes, and where qualified teachers and resources were not a problem. Furthermore, before Bhutan's teachers understood NAPE in depth, support was reduced.

Fullan's second reason was that "successful reforms in one place are partly a function of good ideas and largely a function of the conditions under which the ideas flourished" (Fullan, 1999:64). The conditions in Bhutan were very different from that found in the countries where the ideas of new approach to teaching originated, that is, Canada, Ireland and Britain. Collister and Etherton (1991) clearly mentioned that the volunteer teachers who supported the NAPE in Bhutan were those who had experienced and used the method at home. Fullan explains that people's *educational needs* and *aspirations* and *context* differed from place to place and suggested that it should be the "conditions, which give rise to the reform in the first place that should be replicated" (Fullan, 1999:64). As this research found, conditions in Bhutanese classrooms were characterised by large numbers of children seated in rows in smaller rooms, shared textbooks, limited materials for teachers and students, a teacher working on his/her own leaving to his/her discretion whichever methods to use. At times there were classes without a teacher. These conditions were not considered when so much was asked of the teachers and students during the decade of the 1990s, when implementation of NAPE was expected.

In focussing attention here upon the inappropriate physical conditions in the Bhutanese schools system, recognition of the teachers' "educational needs and aspirations" should not be lost. As Beeby has emphasised,

All factors, human and material, that act as constraints on improving education form a complex, interlocking whole – in modern idiom a system – and it is unreal to treat them, even intellectually, as isolated units (Beeby, 1980b: 462).

Assuming Beeby's theory is correct, that the quality of the teaching cadre is also a major determinant of the kind of curriculum that can be successfully implemented, then it follows

from the analysis of data assembled during this study that Bhutan's teachers are not yet uniformly capable of implementing a *Stage of Meaning curriculum*, such as the NAPE. On both counts, then, that teacher capability and the conditions under which they currently work, Fullan's second reason why reforms so often fail appears pertinent in the Bhutanese context.

The third reason that Fullan (1999) gives is that complex reforms depend on local capacity to manage change. Complex reforms, such as the introduction of NAPE, with its two aspects of change, that is, the content change and the pedagogical change, demands multiple priorities that impinged on the individuals and the organisation. Until the local capacity is built up to be able to manage the change, reforms will not institutionalise. In Bhutanese schools, good classroom teachers were made head teachers. They were removed from a job they could perform at their best, and put in positions for which they were not trained. As instructional leaders the head teachers definitely had subject expertise and better skills to teach, but they were not shown how to share the expertise with their colleagues. Teachers needed continued development through SBIPs and NBIPs. But these had not happened effectively and one or two training courses did not have any significant and lasting impact on the classroom learning. The change had been undermined by *false clarity*.

Figure 7.1 illustrates, in a nutshell, how different components of effective teaching and learning in schools are interrelated with one another in the Bhutanese system. Teachers need adequate clarity about both syllabus content and pedagogy. They need continuous support and pressure to assimilate such new understandings. To be able to cope with this, the presence of adequate numbers of qualified teachers is necessary. This forms the enabling conditions in the school. The number of students, accommodated in spacious classrooms and the availability of learning materials for students and teachers are also essential components. Together, they will assist in making teaching and learning effective, to make progress and therefore change effectively. An absence of any of these components will result in superficial change, as Beeby (1966) pointed out.

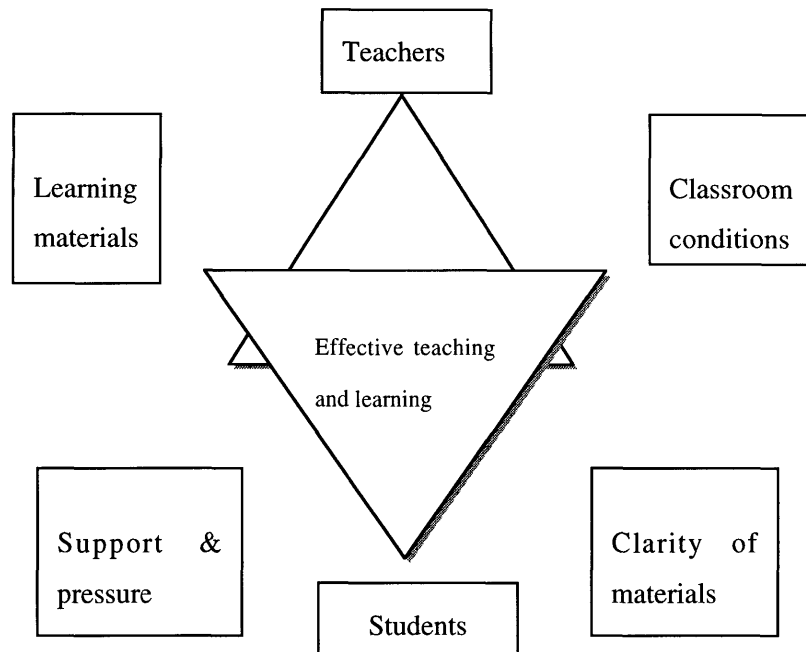


Figure 7.1. Diagram showing interrelationship between various components of an effective school in Bhutan

From this perspective, some implications should be drawn for *curriculum development*, *teacher preparation* and *implementation of curriculum change* in Bhutan. This is proposed in the next part of the chapter. While proposing implications, some strategies are also thought to be appropriate.

Implications for curriculum and materials development

A curriculum that was oriented to the Stage of Meaning was found to be rather too difficult under the given situations in schools in Bhutan. This implies that any change in the curriculum that requires major adjustment in the existing school must be sensitive to the subjective and objective realities of the teachers and avoid, to the maximum extent possible, the so called *false clarity*. As noted above, unless adequate resources, classroom spaces, teacher-pupil ratio and appropriate equipment are ensured persistence with the Stage of Meaning curriculum, like the NAPE, will only lead to further expenditure of resources with little or no improvement in results.

Strategies for curriculum development

1. Educational policy-makers in Bhutan should review the goals and expected outcomes from the curriculum, taking into account the foregoing reasons why the NAPE initiative has not succeeded. As argued already, it seems most likely that these will

align more closely with Beeby's *Stages of Formalism and Transition* than has been the case with the NAPE policy.

2. It follows from 1 above that the existing NAPE syllabuses will then need revision to reflect this new curriculum emphasis. Syllabuses and manuals need to be explicit and directly prescriptive of the techniques of teaching to be used. Attainable goals and skills need to be specified for each level of school so teachers can determine the achievements in measurable terms.
3. In addition to the above, it also seems appropriate to make information on various topics and issues available to teachers for their use with the students. It may be envisaged that information technology will be able support this through the resource centres.
4. Information regarding any decision to change the curriculum needs to be disseminated clearly through available communication media such as radio, newsletters and brochures and even frequent visits and personal interactions.
5. Any change in the curriculum should incorporate a comprehensive plan over time for in-service programmes, resource support, monitoring, research and feedback.

Implications for teacher education

It has been accepted that improvement in the implementation of a new curriculum is a function of teacher efficiency, which in turn is a function of the educational background and training they receive. This study revealed that a new curriculum that demands teachers perform at a level beyond their education and training is too ambitious a project, resulting in resource waste with least benefit to students and the country. Furthermore, in-service and pre-service education programmes for teachers have not been very effective to prepare teachers adequately (see above p.65-6). One obvious example is teachers' lack of *clarity* about continuous assessment in which students' work had been graded as part of summative assessment rather than using it to identify learning problems and the provision of remedial measures for improvement (see above p. 164). Problems such as those mentioned above have, therefore, tremendous implications for in-service and pre-service teacher education in Bhutan.

Consideration of advice in the literature about the nature and management of educational change leads to the conclusion that it must be thought of as personal learning process rather than an event. Furthermore, having known that the teaching cadre is not a homogeneous group in terms of its educational and training needs, it becomes clear that in-service courses must be varied and designed using information gathered from teachers about their practical needs. The following two points in INSET study's (Laird et al, 1999: 104, 105) recommendations support this argument.

- (i) The INSET programme should reflect a balance between courses that focus upon the Centre's concerns and those that focus upon teachers' expressed concerns about classroom practices.
- (ii) Where relevant, INSET courses should be based upon appropriate needs analysis of teachers' concerns.

Strategies for teacher education

1. During the revision of any syllabuses, planning should be concurrently undertaken to incorporate the changes into both the pre-service and in-service teacher education and training programmes. As many teachers have pointed out, teacher education should not be far removed from the realities of classrooms. Training in pedagogy should incorporate how to deal with overcrowded classes, time management, and large numbers of students, even material shortages because this is a problem that is likely to persist in Bhutan for a long time to come.
2. In-service teacher education cannot be a *one-shot* course. Instead, in-service courses should be on-going and part of a focussed sequence to the extent that resources will permit. Learning new skills and practices takes time and should be supported on a regular basis. Principles by which this might be achieved are set out in the INSET Project Report (Laird et al, 1999: 104-116).
3. In-service courses at the resource centre based in-service programmes (RCBIP) and SBIP should be based on teachers' needs and closely linked with classroom realities. The national based in-service programmes can focus on preparing resource persons from the resource centres on identifying needs and addressing these needs at local levels.
4. Teacher accountability should be a part of the package. The purpose of this is to enable the teachers to use the materials effectively and incorporate new practice gradually as with their belief and trust for the new methods.

5. Research and experimentation of new ideas or ideas that work effectively in Bhutanese classrooms should be disseminated to every school.
6. This research also found that head teachers' leadership plays an important role in the school life. A convinced and self-confident head teacher can do much more in implementing an innovation than anyone from outside the school can impose. Academic leadership of heads will need to be more effective and in-service courses for them should be designed accordingly.

Implications for implementation

The Collister & Etherton report (1991), the CAPSS report on NAPE (Choden, 1990) and the Review of Primary Education in Bhutan (Harley, 1993) all pointed out the lack of resources, monitoring and support for teachers. The present study confirmed the same limitations occurring repeatedly at the turn of the century. It also raised questions why the reports of about a decade ago were not heeded and how responsible officers might have taken note of such information. These findings question the soundness of the plans and strategies at the implementation stage by the Education Division. Therefore, the study also points to some implications for the implementation of any innovations of a similar nature in future. It means that the design of new programmes should incorporate explicit strategies for implementation at every stage of implementation in order that the innovation is institutionalised and considerable care needs to be exercised by central staff learning from previous experiences.

Strategies for implementation of innovations

1. Prepare explicit plans for implementation to ensure resource supply and teacher support programmes are a part of the design and development of the innovation. Where the supply of such resources cannot be guaranteed, then the wisdom of proceeding with the innovation must be questioned.
2. Organise resources and ensure distribution of the materials to school well inside time.
3. Conduct regular visits to schools to provide moral support, guidance to teachers, clarification of grey areas, exert pressure, and to boost the morale by staff from the Education Division.

4. Devise effective national and school based INSET programmes for the maximum number of teachers, which should then be followed by monitoring any impact.
5. Organise negotiations and discussions with head teachers as well as their training on a regular basis.
6. Start a strategy by which each subject officer, at the CAPSS, should devote one day each week answering queries from teachers and writing to them, apart from spending a chunk of their time visiting schools annually.
7. Information flow between schools and CAPSS or other relevant organisations should be ensured at all cost. This includes publication of action research papers carried out by teachers and at the centre.
8. Excellent performance of some deserving teachers should be recommended for due recognition.

The implications in this chapter focussed upon three areas, such as the curriculum development, teacher preparation and implementation of the innovation. Several strategies have also been mentioned that collectively enhance the course of action related to the three areas. As a preliminary thought upon these strategies, a schematic diagram has been designed to provide a perspective view of how these strategies might be followed (see Appendix X). This diagram may require further criticism and refinement, but it also provides a mental map of how an innovation might be proceeded in Bhutan.

Educational change and *Bhutan 2020*

Education will have evolved in ways that foster the development of the innate potential of children ... who will appreciate the importance of moral and ethical choices in their lives (The Planning Commission, 1999).

The vision statement for education can be interpreted in two ways. First, “Fostering innate potential of children” means that education in schools should be exploratory, meaning making and intellectually satisfying. It implies that school education should aim at helping children *how* to learn rather than *what* to learn. Teacher talk and rote learning of the facts will become insufficient in helping children to develop their innate potential.

In fulfilling this requirement, teaching and learning as well as the curriculum contents in schools will need to be placed at the Stage of Meaning. The evidence that this study has

produced points out that such a venture is resource intensive and time consuming and beyond the present capacities of teachers. Nevertheless, it remains appropriate that the system's long-term goal should be to operate at the Stage of Meaning. It remains the responsibility of the system's policy-makers to judge the pace at which the system can be progressed through the stage, as Beeby (1980a) argues. In order for the system to progress through the Stages, training of the present 3000 teachers in service should be rigorous, regular and monitored frequently. Supply of stationery and other learning materials that schools will require should be enhanced. More qualified teachers should be employed and more schools built so that classrooms are not overcrowded and teachers get enough work but are not overloaded. The educational qualification and training of teachers will need to shift towards the Stage of Meaning like the skewed curve on the right side in Figure 7.2 below. It will be a considerable achievement if this happens.

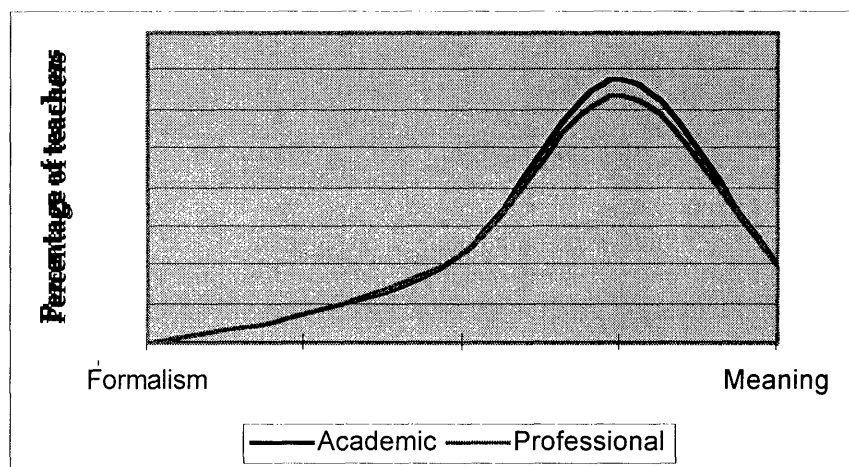


Figure 7.2. Position of teachers in Bhutan in 2020: a hypothetical reversal of the present situation to fulfil the vision

The second interpretation of the above extract from *Bhutan 2020* is that having completed an intrinsically useful education both in terms of knowledge and skills, the ability to choose, followed by exhibition of moral and ethical values in the educated population, will be vital. This implies that while providing an enjoyable experience of learning that fosters clarity of meaning, schools should also provide opportunities for children to make choices and practice moral and ethical principles required in life as adults.

This interpretation entails that education for personal development should not be restricted to the school premises. While teachers might be expected to enhance their roles beyond mere classroom teaching to half parenting the children, parents and educated people in Bhutan have a shared responsibility in this respect. Many years ago, Cropley and Dave (1978:4) have pointed out that socialising influence such as television, sports heroes, pop stars, film stars, and similar models have already started counter parenting the children in a changing world. This idea holds importance now for Bhutan. The question is, how to support a system as complex as education to change so much in 20 years?

There is reason to be optimistic though, that is, as a vision endorsed by the Government, the political will to support change towards Meaning is assured.

Reflections on literature

In the literature review in Chapter Three, Beeby's (1966) "Stages of Educational Development" was largely used to critique the curriculum change and implementation that had taken place in Bhutan since 1986. The main purpose of using this framework was to understand the stage of educational development in Bhutan. It was also stressed that the curriculum reform in Bhutan was a departure from the stage of Formalism. The reform encouraged child centred learning through the use of activity methods, problem solving, enquiry methods and internal assessment. The academic and professional qualifications of teachers, the availability of better buildings and essential equipment were also said to be necessary to enable the education system function at a Stage of Meaning. The framework proved to be useful in making some assessment of the syllabuses, textbooks, the classroom situation and the kind of teaching and learning as a whole. But there were also some points that emerged not from the framework, but from the analysis of the Bhutanese system. These are discussed below.

Beeby's (1966) notion of teacher quality was closely interlinked with educational attainment and professional training. It seems Beeby has overlooked the important role that English plays, especially when it is a foreign language as well as the medium of instruction, in determining the quality of education in developing countries. This is found to be particularly true in the case of Bhutan. Harley (1988), Collister and Etherton (1991) and Bray (1996) have all identified English as a problem. I also happened to learn recently from the BBC that the "tertiary sector", including Education, is language intensive and in many developing countries access to good English is difficult (BBC, 26 October 2000).

The low academic qualifications and relatively poor standard of English have obviously not equipped teachers in Bhutan sufficiently to understand the ideas of NAPE, which were written in English, and then to handle the effective teaching in English to students for whom English, too, was a foreign language.

Scale of economy in the production of materials has been recognised as an issue in small countries (Bray & Packer, 1993 & Bray, 1996) and limitation of resources has also been problematic (Collister & Etherton, 1991) as affecting the supply of materials and reliance on donor support. This study found that beside teachers' qualifications, availability of essential equipment, sufficient teaching and learning materials and suitable buildings had affected the successful implementation of the new curriculum in the direction of *meaning*. The stage of economic development of Bhutan itself needed to attain maturity to be able to provide spacious classrooms, appropriately designed furniture, and also adequate quantity of quality materials and qualified staff as required by NAPE and other equally challenging innovations. One of the merits of the Beeby framework is that it helps to understand at which level the system functions so that appropriate materials and methods can be designed along with the right support that might be needed to advance to the next higher stage. Otherwise, as Griffith (1968) had pointed out, in his review of Beeby's work, that one may misjudge the system and cause much wastage of money and effort and produce widespread confusion and despondency.

Moreover, in many Asian countries, and Bhutan is no exception, examination and competitive entrance tests are the measuring tool of students' capabilities. In a recent comparative study of classroom situation in Chinese Taiwan and Australia, Taiwan's teachers were found to be under great pressure to produce good examination results and therefore teacher-centred teaching and rote learning was the "most practical way" (Aldridge, Fraser and Huang, 1999).

Beeby himself had admitted, in reply to Guthrie's criticism in 1980, that the criteria he used for the stages, particularly of the *Stage of Meaning*, were "essentially those of developed western countries" (Beeby, 1980a: 442-3). Beeby pointed out that the capacity of the economy and educational plans in different countries would have to be the basis for alternative models of education (Guthrie, 1980). This means that for Bhutan the choice it makes for a particular educational stage will need to be weighed by its ability to support the programme on a sustainable basis. In the context of the present situation, the Stage of Meaning may be far from applicable even if there is a felt need.

Another characteristic of the quality of teachers, which Beeby did not mention, is the commitment and dedication of the teachers to their profession and to the children. This importance of this aspect of the teacher's quality in Bhutan cannot be ignored, as it has great potential for educating. Children can also learn by observing what teachers do and say. The Public Report on Basic Education in India (PROBE) estimated that although a teacher was supposed to spend six hours a day at school it was usually about 4 hours (with late arrival and early departure) and that "effective teaching time is closer to 2 hours a day" (Evans, 2000:5). In the absence of commitment and dedication, quality of curriculum, teacher qualifications and equipment and buildings would matter very little.

Reflections on methodology

(i) The theoretical framework

Two lessons were learnt from the theoretical framework based on Habermas. The first was about the nature of knowledge that found its application in the research. I have learnt that the essence of understanding lies in interaction with those whom I am trying to understand. In the case of this research, teachers in the field have full knowledge of the realities and this came to light through the questionnaire. It would have been more fruitful if this writer were able to visit the classrooms and make first hand observations in addition to the questionnaire, or interviewing the teachers. However, the personal experiences described in Chapter One have been helpful in interpreting the comments made by teachers in response to the open questions.

Owing to the shortage of time and lack of direct interaction with the teachers participating in the study as samples, the questionnaires were administered by officers sent from the Education Division, who distributed and collected the papers within a limited time. The officers were only prepared to clarify doubts about the questionnaire and not interact with the teachers. This and the limited choice in the rating of the statements and statistical treatment of the numerical data were, in fact, pointed to a technically oriented method.. On the other hand, having such a huge response to the open ended items (together with the data handling capacity of NUD*IST) made it possible to consider a full range of issues regarding teachers in Bhutan and thus making it possible to understand them better.. However, the real potential that the practical and emancipatory interests presented, were not utilised to an advantage, which led to another limitation of the study. The other possibility of a continued discourse with the Task Force was also lost in its eventual dissipation, leaving the matter to the researcher. Nonetheless, the constant negotiations and

reconstruction of the thesis, during the contact with the supervisors, have given a positive lead in the process of the study, an illustration of constructivist approach which is implicit in Habermas's cognitive theory.

The second lesson is the interpretation of the way curriculum content is being delivered to the children in schools. The framework has been useful in so far as assessing the methods with which teaching and learning matches with the stage of Formalism or the stage of Meaning. The acquisition of knowledge in the technically informed system was more relevant to the social and economic situations prevailing in Bhutan and with the efficiency of the teachers. In the context of the social situation, people still expect their children to do well in the public examination, which in turn decides their chance to go to higher education or for jobs. The economic situation in Bhutan is such that in attempting to provide free education, the entire cost being born by the Government, there has been some limitation in giving schools adequate resources, classrooms, furniture and buildings and teachers. Under the pressure of covering the content, teachers invariably take refuge in the technically oriented teaching, that is, in teacher-centred and rote learning.

(ii) The research methods

One limitation of the study is perhaps in choosing such a vast area in trying to cover all subjects from pre-primary all the way to class X. This was, however, unavoidable as explained in Chapter One, due to its close link with the Curriculum Review in which I was directly involved. The effect of the wider area on the study was felt while analysing the data. At times, it seemed that in trying to see so much, too little detail was found. On the other hand, it has enabled me to attain a broad overview of the school curriculum and the conditions that influence it, thereby putting me in a relatively enlightened position to make informed decisions in future. This is important for me in my role as the Head of NIE (Paro) which is responsible for pre-service teacher education and curriculum development.

(iii) Effects of the workplace

One of the features of the Ed.D is that it can connect directly with the student's professional workplace (Lee, Green and Bennan, 1999). This was certainly the case with this study. The decision to do so provided clear benefits: for example, the advice of colleagues could be sought and the study and the Review work could be mutually supportive. However, the

close linkage of this study with workplace realities did have another important impact upon the conduct of the research reported here.

The linking of the review with the Ed.D research created time pressures on key decisions that affected both. There was a clear need to get data quickly for the Review and the questionnaire approach was the way to do this. The Review Task Force believed their knowledge of the situation in Bhutan could be used to assist in the interpretation of these data for the Review. The Task Force also had a say in the questionnaire design resulting in compromises being made. Items were added to the questionnaire that did not conform to the original conceptualisation of the Ed.D. These included items 10 and 12 in Curriculum Organisation and item 6 in Curriculum practice.

Another problem that affected the quality of the numerical data is that of the response set. A response set occurs when respondents choose answers that they think the researcher would want rather than what they think best fits their opinions. This problem became an evident factor when lack of variation across likert responses contributed to an inability to define factors and scales. Survey questionnaires are somewhat unreliable in Bhutanese context where respondents tend to provide answers that others would like to have rather than what the respondents think is their best answer (eg. Laird, et al, 1999). This has implications for future research in Bhutan.

However, as an overall policy study and understanding of the situation in schools in Bhutan, this study has provided some important indices in the way education in Bhutan was functioning. The other reward from the study was the richer experiences and training, which will be helpful in the work that this writer is currently involved as an educational administrator and teacher educator.

Implications for future research

This study revealed some useful insights that will be helpful in future for curriculum development and other related activities. This certainly implies that similar but more focussed research should continue that would help make more practical informed decisions in future. Some areas are suggested below:

1. The study found that situations in schools were not properly understood before initiating new curriculum and asking teachers to practice new methods. Any new initiatives of similar nature in future, particularly if the ideas are borrowed, will need to

be preceded by an in-depth study of the situation in schools. Such studies could focus upon the actual situations for particular subject at particular grade levels.

2. The management of schools, about which only some, but pertinent, information was collected needs further research in order to see whether the head teachers are adequately prepared to handle the responsibility they have been given. Either in the change management or in maintaining the status quo, the head teacher's role is of paramount importance to the system. The needs of head teachers have to be ascertained.
3. The study also revealed that English and Math have major problems at the primary level while Science and Social Studies have major problems at the secondary level. Further study is necessary to see what exactly these problems are.
4. Primary teachers view teacher education more positively than secondary teachers in the data. There is a need to study what makes them view teacher education differently from their secondary colleagues.
5. Pre-service and in-service teacher education are in good demand as the study revealed, but their impact is minimal as shown by the INSET study (Laird et al, 1999). Recommendations of this study also need further research, particularly in looking at the contributions that INSET can make in the classroom practice of teachers. One way that this might be achieved could be research which identifies best practice in INSET in Bhutan. Teacher training institutes need to carry out a study of the efficacy of their training programme in the classroom practices of teacher graduates. This will be most useful information for the improvement of pre-service education for teachers. Qualitative methods will be mostly useful in the studies suggested above as they generally involve understanding which can be captured better through interviews, observations and other forms of communication.

FINAL CONCLUSIONS

This study is significant in that it revealed some useful insights about the conditions under which teachers are working. It also pointed out a tension between the intentions and the difficulties that affected the implementation of the NAPE. It is evident that important decisions need to be made about the kinds of curriculum demands that are being placed on

teachers. Administrators will need to decide what adjustments should be made in curriculum content for teachers to be able to practice within their capacity. Any future plans for curriculum change must be preceded by a proper study of teachers' needs, the match between the possible intentions and the capacity to implement them in the schools. At the policy level, perhaps any challenge put to teachers should be considered in the light of support for teacher development and resource supply.

It appears from the literature that expansion is essential for many reasons, among which increasing literacy in the country is a priority. Experiences from other countries such as those shown by UNICEF (2000) and Beeby (1966, 1980a) show that grappling with increasing numbers of students while maintaining and enhancing the quality of learning is a daunting task. In order to blend the quality in the delivery of the content, entry into pre-service teacher education institutes needs to be considered in the interest of the long-term impact on the teaching cadre. Poorly qualified teachers enrolled in the service will continue to affect the system for as long as they remain in schools.

As my dedication in the beginning shows, this research does not sing the praise of the unknown teachers, but it certainly attempts to indicate that under the most difficult circumstances, they have kept the system alive and growing for the last 40 years. Hence they deserve the dedication. At the same time, it also implies that there is an urgent need for teachers to make deliberate attempts to discover the merits of changing their beliefs and practices.