

Teachers as transformers

*Learning from outstanding
primary school teachers*

Vijaya Sherry Chand

Shailesh R. Shukla

Teachers as transformers

Learning from outstanding primary school teachers

Vijaya Sherry Chand

*Ravi J. Matthai Centre for Educational Innovation
Indian Institute of Management, Ahmedabad*

and

Shailesh R. Shukla

Gujarat Council of Primary Education, Gandhinagar

Supported by UNICEF, Gujarat

1998

PREFACE

This monograph is based on a study conducted in 1994-95 of outstanding district-*panchayat* primary school teachers of Gujarat—teachers who have achieved their educational goals and overcome environmental constraints through their own effort and initiative. The study's focus was on what the wider teaching community can learn from the experiences of these teachers. The report, in Gujarati, was brought out by the Government of Gujarat in September 1995. A few copies of the English version of the report were also circulated, and the present monograph has been brought out in response to requests for copies from other states. The teachers' narratives presented in the report have been retained in this monograph, but an introduction and a brief analysis of the teachers' experiences have been added. The biographical sketches of the teachers represented in this study have been updated.

The teachers who have participated in this study have been the single primary source of our inspiration. In this connection our grateful thanks are due also to Shri Narendrabhai Bhatt and Shri Naranbhai Desai, former Presidents, Gujarat State Primary Teachers' Federation, for helping us identify the teachers concerned and facilitating the study. Shri Bharatbhai Chauhan of the Federation was helpful in organising our meetings with the teachers. The current President, Shri Dilipsinh Gohil, has continued the tradition of support for learning from the strengths within.

Shri K. Ramamoorthy, former Additional Chief Secretary (Education), Shri Suresh Sharma, former Secretary (Education), and Shri Sudhir G. Mankad Additional Chief Secretary (Education), Government of Gujarat, have provided support at various stages of the study.

We wish to thank Professor A. H. Kalro, Chairperson, Ravi J. Matthai Centre for Educational Innovation, for making available the institutional facilities; Professor Anil K. Gupta has provided valuable advice regarding the conduct of the study.

Dr. Sarvar V. Sherry Chand provided editorial assistance. A grant from UNICEF made the original study possible. We acknowledge with gratitude the help of Shri Tomoo Hozumi and Smt. Ila Verma of UNICEF, Gujarat in this regard. We are particularly thankful to Shri Murali Dharan and Shri L.T.M. Kotian of UNICEF, Gujarat for facilitating the printing of this monograph.

**Vijaya Sherry Chand
Shailesh R. Shukla**

September 1998

CONTENTS

Preface

Chapter 1: Introduction

Vijaya Sherry Chand and Shailesh R. Shukla

Chapter 2: Innovations for Change

Vijaya Sherry Chand

Chapter 3: Teachers' Narratives

Vijaya Sherry Chand and Shailesh R. Shukla

1	Kantilal B. Donga
2	Nanji J. Kunia
3	Jasubhai M. Patel
4	Hasmukh M. Acharya
5	Taraben B. Upadhyaya
6	Ajitsinh M. Solanki
7	Shambhavi K. Joshi
8	Bavabhai G. Sondharva
9	Bhagwati M. Joshi
10	Ramanlal B. Soni
11	Kalpanaben J. Acharya
12	Zohra D. Dholiya
13	Natwarbhai J. Vaghela
14	Sushilaben K. Vyas
15	Bhanumati B. Upadhyaya
16	Kanubhai M. Solanki
17	Pratimaben H. Vyas
18	Shankarbhai R. Patel
19	Daood I. Macwan
20	Manjulaben R. Upadhyaya
21	Manjibhai B. Prajapati
22	Keshavlal A. Purohit
23	Savitaben S. Parmar
24	Sardarsingh F. Patel
25	Narbheram G. Trivedi
26	Ashwin M. Patel
27	Motibhai B. Nayak
28	Shankarbhai Raval
29	Thakarshi P. Kunbar
30	Manjari K. Vyas

Biographical Sketches

Glossary

CHAPTER ONE

INTRODUCTION

Vijaya Sherry Chand and Shailesh R. Shukla

This monograph is primarily addressed to teachers working in our state-run primary schools. It derives its rationale from a very simple approach to teacher development: building on the strengths that exist within, more specifically building upon the experiences of those who have performed well in spite of many constraints. There has been a lot of debate in recent times on the competence and commitment of our teachers. However, there are many teachers evolving 'practices' on their own in response to specific socio-economic and classroom situations—practices which may be assumed to have overcome the common constraints that many teachers face. Their own reflection and creativity are often the only resources available to them; and their voices usually remain unarticulated, unheard or lost in the cacophony of reform talk. National policy documents seldom draw upon their insights and experiences. The neglect of their experiences, conspicuous as it is, also partly explains, in our view, why the goals of universalization have remained unmet.

This volume is a modest effort at highlighting the work of a few such outstanding teachers of Gujarat. Many of them have received best-teacher awards and some have not. A few have retired; many are still employed. All of them, however, are acknowledged by their peers as outstanding teachers who, in their own ways and in their own spheres of activity, have transformed various dimensions of primary education. Their work was first recorded in 1994-95, and a set of case studies, in Gujarati, was brought out by the Government of Gujarat in 1995. Copies were circulated to teachers, teacher training institutions and other interested individuals. After a few months many teachers started writing back to us with their feedback. The dominant theme of the feedback was that the practices reported by the case studies may not be very important in themselves, but the triggering effect that they have in terms of inspiring and motivating those teachers who would like to do something innovative, may be more crucial. Many teachers undertook a series of experiments on improving the learning climate in their schools and raising achievement levels; some, for instance, Dahyabhai Kataria and Ramesh Thakkar, have undertaken systematic attempts to reform their schools. Some, like Samant Dabhi and a circle of like-minded friends, established their own sub-district-level network for professional development. In the meanwhile, requests for the English version of the cases have been made by teachers and a few District Institutes of Education and Training in other states of India. Therefore, we are now bringing out the English version, which may be of use to a wider audience.

The field work for this study was carried out about four years ago. So the preparation of this English version provided us with an opportunity for revisiting the experiences reported then. We realised that these experiences, though located in specific social, economic and cultural contexts, were relevant for teachers, if only from the point of view of inspiring other teachers to experiment and innovate on their own.

The genesis of the original study dates back to late-1993, when the Ravi J. Matthai Centre For Educational Innovation, Indian Institute of Management, Ahmedabad, was invited by the Government of Gujarat to suggest managerial improvements under the State Plan of Action For Universalization of Primary Education. The working group, after considerable debate, agreed that one could not think about improving the systems of management without learning from outstanding performers. This provided the initial impetus for our search for outstanding teachers and the field work that resulted.

The content of the case studies has been derived from various sources of information like interviews, written responses and discussions. However, we maintain a consistent first-person narrative in each so as to enable readers to hear the 'voices' of these teachers. The Gujarati version used the third-person narrative, since the teachers felt at that time that the first-person format was suitable for an English version, whereas the third-person format would be better for the Gujarati version.

We are aware that lessons from only a few innovative teachers, from only one state, will be unable to illustrate the entire spectrum of choices that is available to national policy makers. But we are confident that a case has been made in this monograph for departure from the conventional policy-making processes and perspectives. Without listening to the voices of the key actors at the grassroots, the policy framework cannot even begin to understand the situation in the primary education sector. Training and development of teachers undertaken by those who have themselves not excelled in education, and exhortation of teachers by those who have not understood the spirit in which many teachers try to achieve educational goals, cannot be of help. What will? Perhaps, allotting a leading role to outstanding teachers in the design and implementation of national and state policies may make a difference.

This study was undertaken with the active participation of the Gujarat State Primary Teachers' Federation (GSPTF) in the identification of the outstanding teachers and in facilitating the visits of the authors to the various schools and villages where these teachers worked. The participation of the GSPTF in this process then raises the question, "Can teachers' unions or federations be instruments of change?"

The unions of various public sector organisations have often been considered as bodies protecting the sectarian interests of their members. That may well be so in many cases—including teachers' federations. But our interactions with the GSPTF give us hope that the state federations can play a key part in shaping policy as well as implementing it by adding value to the experiences and voices of outstanding teachers (Vijaya Sherry Chand 1998). This is a role which, if operationalized, can reduce the transaction costs of the state's supervisory machinery enormously. By emphasising performance, peer culture can evolve norms of censure against the non-performers. At the same time, peer recognition for performance and attainment of the goals of universalization of education will provide far greater motivation than any other material incentives. This is a role we are exploring at the moment in Gujarat and a few other states.

Selection of teachers

The thirty teachers represented in this volume were selected from a list of 130 outstanding teachers prepared by the GSPTF. The GSPTF is approved by the state's Education and Labour Departments as a body which can affiliate district-level associations of teachers to itself, and thus in practice represent the teachers of the state. For the selection of the teachers, the GSPTF tapped the district-level associations and even the branches of the district-level bodies. The main criteria laid down were that (a) the teachers should have innovated on their own, from their own ideas, without the intervention of outside agencies, (b) through these innovations they should have solved some problems which they had been facing, and (c) they should have achieved universal enrolment in their villages and high levels of retention in their schools.

A questionnaire designed to collect information about their innovative efforts was then sent to the teachers. About 100 of the 130 teachers responded. Based on these written responses, 30 teachers were selected for in-depth interviews and observation. The schools of the serving teachers were visited and discussions held, wherever possible, with the colleagues of the teachers and with the village people and children among whom the teachers work.

Transcending boundaries

A broad theme which holds the thirty case studies together concerns the teachers' attempts to transcend the boundaries of what is conventionally regarded as the educational practice in which a teacher is supposed to engage. These attempts imply a search for meaning which is motivated by a set of personal as well as external forces. The latter are often the specific problems and constraints that the teachers, children or village communities face. These problems have to be answered. Or, the support of colleagues, mentors and family members has been important in sparking off the motivational process or in sustaining it. The personal factors are evident in many teachers' attempts to learn more about their practice through studying for degrees. What runs through the narratives is a strong sense of purpose, however defined: education of girls, education through toys, developing village-school links, and so on. And frequently, as one would expect, the motivated teachers do not rest on their own achievements. They inspire other teachers or community members to go beyond what is usually expected of them.

Another feature common to all, is an implicit or explicit recognition of the fact that education takes place in particular socio-cultural, economic and pedagogical contexts. Often, improving educational performance implies simultaneous attention to the community's role in education: this may take place through dealing with socio-economic deprivation, community contributions for infrastructure, the formation of institutions like village education committees, increasing parental involvement in educational activities. A special case is the concern of certain teachers for issues related to the education of girls in particular, and to gender discrimination in general.

Organisation of the monograph

A brief analysis of the teachers' experiences is presented in Chapter 2, focusing on the questions of how, and what, one can learn from the experiences of outstanding teachers. Chapter 3, which constitutes the bulk of this monograph, contains the 30 narratives. It is this chapter which will be of greatest interest to teachers. The monograph concludes with brief biographical sketches of the teachers.

Reference

Vijaya Sherry Chand, P. G. 1998. Teachers' associations. *Seminar*, 464:31-36.

CHAPTER TWO

INNOVATIONS FOR CHANGE

Vijaya Sherry Chand

'Lateral learning', or learning from the good practices of one's outstanding peers, provides the rationale for this study. The teachers who have evolved practices which have worked for them have, in a sense, countered the constraints posed by their specific socio-economic and classroom situations. Their innovations (in spite of the limitations imposed as a result of the specificity of the socio-economic contexts in which the teachers have worked) may be relevant to the wider teaching community, since they take into account some of the actual contextual constraints most teachers face. The question, therefore, is how we can learn from the experiences of the outstanding teachers. This chapter attempts to answer this question through an analysis of the experiences of the outstanding teachers. The teachers' innovations are discussed in terms of certain crucial components of the universalization of primary education: strategies for enrolment; pedagogical and curricular innovation designed to promote learning with enjoyment and hence to retain children in school; institution-building initiatives; resource mobilisation strategies and personal motivation and self-regulation. Certain examples are provided but these are only illustrative. The narratives in Chapter 3 provide further examples as well as the contexts under which these innovations were evolved.

Shaping the context, educational practice and the self

The most important theme that is communicated by the answers that the teachers give is the concept of active shaping — shaping of the context in which the school is located and schooling takes place, shaping schooling practices in accordance with particular conceptions of education that the teachers hold, and very importantly, shaping oneself into a better teacher. However, these three elements, the self, educational practice, and the socio-economic and cultural context, cannot be compartmentalised. From the point of view of attaining educational goals, the consonance that is achieved among the actions on the three elements is perhaps more important than focusing on only one or two of the elements. For instance, in matters of homework, if the teacher does not reflect on his or her own homework-giving practices, and does not make arrangements for out-of-school support to first-generation learners, any effort at building community-school partnerships is bound to be more difficult. Another example is building on the cultural traditions of the community (tapping the traditional skills the teacher possesses and incorporating culturally-attractive educational pedagogies into schooling). Similar examples are to be found in the various experiments that the case studies narrate.

Shaping the contexts in which schools and schooling are located

The pre-service training that teachers receive prepares them for the professional (teaching) role that they have to play; how to deal with the interface between schooling and society is usually

a neglected aspect of the curriculum. Perhaps teachers are expected to develop their skills in dealing with the community while on the job. Teachers in rural state-run schools especially need such skills since their schools are usually clearly identifiable with a particular neighbourhood (the village or hamlet), the problem of non-enrolment is still severe in many places and teachers are expected to play a mobilisation role in addition to a teaching role, and they have to depend on local resources for helping them achieve their educational goals. The responses of the teachers in this study to these features indicate how the teachers have tried to shape the socio-economic contexts in which they functioned.

Drawing on local cultural experiences

Given the strength of cultural traditions in most villages, it is not surprising that the teachers have used cultural elements in their educational practice, extensively. What is interesting, however, is the creativity shown by the teachers in using specific local features to make decisive impacts on their educational goals. A few examples are provided below.

Folk drama was, and still is, a popular form of entertainment in villages. In the mid-1950s this form was used to communicate the need for enrolment of girls with great effect by Nanji Kunia, to communicate the message that the school is the common property of everyone in the village (Tara Upadhyaya) or just to raise some money for the school (Moti Nayak, Keshav Purohit). A closely-related intervention is the use of the *katha* (religious discourses on the *Ramayana* and *Mahabharata*) to involve people (Thakarshi Kunbar). Shankar Patel used the *dayro* folk form to communicate the importance of education.

Culturally significant events or days have also been tapped to great effect. *Rakshabandhan* is an occasion on which women tie sacred threads around the wrists of men, who then become their 'brothers'. In return, the men present them with gifts. The 'gift' which Bhanumati Upadhyaya asked the village men for was their daughters for the school. Culturally speaking, the gift could not be refused and a dramatic impact was made on the enrolment of girls. Days of significance to the community—*ekadashi* and *poonam*—were set aside by Keshav Purohit for parent-school interaction and the meetings were also used to collect small sums for the school. *Navratri* is a festival which brings girls together; Manjari Vyas used the occasion to mobilise non-enrolled girls who were later enrolled in school.

The *Satyanarayan pooja* is a religious event which involves the distribution of *prasad*; this *prasad* cannot be refused by the people to whom it is offered. Kanu Solanki used this norm, sanctioned by religion, to achieve a breakthrough in inter-caste relations. He himself belongs to a scheduled caste and his *prasad* (food) distribution to all the castes in the village helped him in building bridges with others in the village as well in attracting children from caste groups which had remained traditionally outside the schooling system.

Introducing new cultural elements and new roles for people

The teachers have not restricted themselves to drawing upon existing cultural traditions. Many of them have introduced new elements in order to achieve their educational goals. The experiment of Thakarshi Kunbar with birthday greetings is worth noting. Many of his students were children of salt-pan workers. There was no tradition of celebrating children's birthdays; in fact many parents did not even note down the dates of birth. During discussions with the principal of a college, Thakarshi hit upon the idea of sending greeting cards to all the school-going children. The *panchayat* supplied the first set of cards; then a few parents and he himself took up the task of supplying the cards. But a more crucial modification he made was to send birthday greeting cards to the parents of infants still to be enrolled in school. The parents were happy that a new practice of celebrating birthdays was introduced; but more importantly they were reminded that the time for enrolment of their children in school was approaching. Other teachers, like Manjula Upadhyaya and Shankar Raval, introduced systematic involvement of the community in the celebration of national festivals like the Independence and Republic days.

Nanji Kunia created a new role for the *maulvis* in planning the school cultural events so that they could change the timings of the *madrasa* which provided religious instruction to Muslim children. This move made it possible for some children to combine religious and secular education. Bhanumati Upadhyaya, Sardarsingh Patel and Shankar Patel found new roles for mothers, initially by discussing with them, in their own idiom, the importance of educating girls. Shankar Patel even had a system of special meetings for mothers, the notices for which were sent in with reply slips. The mothers noted down their concerns and suggestions, often by taking the help of others, and these formed the content of the discussions. According an important role to mothers in the public sphere runs counter to the general cultural environment in the village, in which women are not seen as significant actors in the public sphere, and, therefore, also acts as a means of empowerment for the mothers by sending a message to the community that their opinions on public matters are valuable.

A slightly different new element, introduced by two teachers, is a consciousness of the impact of child labour on education. Shambhavi Joshi's response to parents who pulled out their children during school hours was that just as they needed the children for their work, she also needed them for her work, teaching. Moti Nayak worked towards substitution of child labour with adult labour or paid labour, with some success. He also successfully countered the practice, prevalent in a community, of not sending children to school for 12 days after a death in the family.

Teachers as entrepreneurs: 'Edupreneurs'

Another role that almost all the teachers in this study seem to stress is their role as resource mobilisers. This role demands a lot of enterprise from the teachers. The financial status of *panchayat* schools is too well known to need any comment. The only resources available to the teachers were meagre contingency amounts for meeting the costs of chalk and dusters. Maintenance of infrastructure is erratic; in any case there are often fewer classrooms than the

student strength calls for. In the absence of state funds (or district *panchayat* funds) for educational activities that teachers may want to take up, there is perhaps no alternative to mobilising local resources. Most of the schools that we are talking about are themselves located in economically-poor contexts, adding to the difficulty in raising resources. Mobilisation of resources from the community may sometimes act as a spur for social participation in school activities, or participation in school activities may lead to resource mobilisation. Involvement of the community in resource mobilisation also influences the quality of the utilisation of resources. In other words, source of funding is related to the efficiency with which funds are utilised. The teachers have also developed a variety of funds, each with its own institutional features, norms and purposes; these features are greatly dependent on the specific contexts within which the resources were raised. These are some of the issues that the 'edupreneurs' deal with in their narratives. A few examples, however, are given below to illustrate the range of approaches adopted.

Some teachers have built on the cultural traditions of contributing on auspicious or religious occasions to mobilise resources for the school. The motivation behind such attempts is best explained by Manji Prajapati, "If the priest can beg for help in godly matters without any sense of shame, I should not hesitate to beg for the betterment of the school." Thakarshi compared, with the people, their private expenditures on religion and education, and Ajitsinh explained to marriage parties visiting his village that primary education was equivalent to prayer. Others have used occasions like gatherings on *poonam* day and the child's first and last days in school to build up school funds. Ajitsinh also organised *Ram kathas* (religious discourses) for which people had to pay. The collections went into a school building fund which was then matched by the government. Children's entertainment and cultural programmes have also been used to build up sizeable funds (Bhagwati Joshi and Sushila Vyas).

Shankar Raval raised funds, on principle, only from the village people. But the others have relied on outside sources, including Indians who have settled abroad, for building up facilities in their schools. The narratives of Kanu Solanki, Ajitsinh Solanki, Shankar Patel, Sushila Vyas, Narbheram Trivedi and Nanji Kunia provide excellent examples of how large amounts, often running into lakhs of rupees, were collected systematically.

Often the non-financial resources that exist within the community were also mobilised. The skills of carpenters, masons and others have been used by many teachers to make improvements to their schools, or even to build educational aids and models (Kalpana Acharya).

A few principles the teachers have followed stand out. Firstly, all insist that transparency in all financial matters is absolutely essential if funds have to be raised over long periods of time. The accounts have always been open, and donors publicly acknowledged. Secondly, there are official restrictions on teachers raising money through the school; most have overcome this constraint by forming associations with village elders in which they are also present. Thirdly, many teachers have started with their own contributions. For instance, Nanji Kunia started one particular drive by donating part of his house for a classroom. Finally, many teachers show an ability to improvise and be resourceful when an opportunity presents itself. Many years ago

Sushila Vyas once met, in her village temple, a woman who was visiting the temple. The woman wanted to build a water room for the temple. Sushila immediately responded by saying that her school was in greater need of a water room. The woman pondered the request and decided to leave it to god to decide. She prepared two pieces of paper, one which had the school's name and the other the temple, and asked Sushila to pick one. If the school turned up, the water room had to be built in three days, otherwise the money had to be returned. Fortunately, Sushila picked the school's name, and by mobilising the community managed to build a water room in three days. This room even today meets the water needs of the school.

Work with community as means to educational goals

The experiences of many teachers indicates an explicit realisation that often community-level interventions are needed to achieve educational goals in the school. This is an important aspect of the shaping of village contexts that are often characterised by alienation from the school and low levels of education among parents. Community activities, strictly speaking, do not form part of the duties of a teacher. However, in practice, many of the teachers have involved themselves in organising mothers, conducting adult education classes and forming social service associations in order to create a more supportive climate for enrolment and retention in school.

Tara Upadhyaya, in 1948, identified the low levels of literacy among women as a barrier to the enrolment of girls in school. She organised education classes; when this did not work she organised *bhajan mandals* which resonated with the needs of the women. Since the women belonged to the scheduled castes, Tara had to face resistance from the upper castes in the village. Later, in the early 1960s she used the same approach to target older non-enrolled girls, and succeeded in most cases in opening up educational avenues for the girls. More than 35 years later, many of these girls are still in touch with her. Literacy initiatives have also been used by Manjari Vyas (who used children of the upper primary classes and children who had just completed their schooling as resources), Thakarshi Kunbar, Bhanumati Upadhyaya, Bava Sondharva and Shankar Patel.

Other levels of involvement include initiating development activities in the village (Ajitsinh Solanki), social service like arranging for blood supply or using indigenous medicines (Raman Soni), struggling with the people against exploitation by seeing to it that cotton growers got proper prices or that labourers engaged in cutting wood got their dues (Sardarsingh Patel), or just helping people in times of need (Ashwin Patel).

Institution building efforts at the village level

The teachers' efforts to raise resources or work with the community on non-school issues have usually been accompanied by attempts to give a formal institutional shape to the activities. Thus many teachers formed youth associations which then took up repair work in the schools or involved themselves in village development work. Parents' associations have been another form that community-school collaboration has taken. Shankar Raval formed a group of 15 'life

members' from the village who were interested in education, since this group was seen as having the moral authority to decide for the good of the school.

A more formal form of collaboration has been the school committees set up by some teachers. Some were set up only for specific purposes like building a school. Ajitsinh Solanki mobilised Rs. 475,000 for a new school building on land supplied by the village *panchayat*. As soon as the school building was inaugurated, the committee was dissolved. Nanji Kunia formed a more permanent 'governing body'. Shankar Patel's initiative was even more institutionalised in that he formed a registered trust to handle school-community linkages. The latter is a rare example of using the non-governmental organisation format, subject to control of the Charity Commissioner, for developing *panchayat*-run primary school and community linkages. In a few other cases, informal village education committees have been formed. Some of them are very active; for instance, the committee set up by Kanu Solanki takes up repair work, construction of new classrooms and the organisation of various *mahotsavs*, and also approves every request that goes out for funds. This committee has also rewarded good teachers. Many of these initiatives predate the current concern for involvement of *panchayati raj* institutions in the management of basic education. The manner in which the teachers in this study have gone about building up the commitment of the people—evolving committees rather than legislating them—offers lessons for the establishment of village education committees which is part of official educational policy in the District Primary Education Programme districts.

Shaping educational practice

How teachers shape their educational practice in the light of their understanding of the socio-economic contexts in which they work and of their attempts to develop themselves professionally, constitutes the theme of this section. As noted earlier, the consonance that teachers achieve between their actions on the self, educational practice and socio-economic contexts ultimately determines the achievement of their educational goals.

Flexibility in organising school timings

In matters of organising the school calendar, primary school teachers are guided by the regulations laid down for daily timings and the number of days of schooling. Many of the teachers in this study recognise that these regulations are often restrictive and may not mesh with local realities. The response has usually been to allow flexibility in matters of timings or organisation of classes. These variations, that are often necessary in practice, are not usually reported in inspection reports for instance, but according to most teachers, the educational administration does recognise the need for flexible timings and is usually supportive of such efforts. The patterns of flexibility fall into three major categories: extension of school hours after a break in the middle of the day for domestic work; allowing certain children to come late or leave early to attend to their domestic work with compensatory attention at other hours of the day (for instance, Pratima Vyas and Zohra Dholia) and setting aside specific hours to meet children's needs (for instance Manjari Vyas setting aside one hour daily after school for embroidery practice since she needed to attract girls belonging to the Ahir community which is

skilled in this work and depends on it for income, or Sardarsingh Patel setting aside one hour before school for local songs and games).

Physical facilities and infrastructure

Many teachers attach a lot of importance to creating a pleasant environment in which the children can study or feel comfortable. There are many examples in the narratives but particularly interesting efforts are the school beautification initiative of Daood Macwan, the school gardens set up by Manjari Vyas and Tara Upadhyaya to which children brought plants they preferred or found in their own localities, the creation of bathing and dressing facilities for children so that they could take pride in their appearance—felt by the teachers to be particularly important in the social contexts in which they operated (Bhanumati Upadhyaya and Shambhavi Joshi). Sometimes the improvement of facilities went along with giving children a special identity through uniforms.

A few teachers have deliberately, and successfully, concentrated on building up libraries in their schools or in the villages where they worked. Jasu Patel developed a library informally over a ten year period from 1964 to 1974, before mobilising Rs. 70,000 for expanding the facilities in 1974. Daood Macwan and Shankar Raval are the other teachers who have specifically addressed the issue of having a good library.

Management experiments in schools and 'earning while learning'

The concept of a *shala panchayat* (school *panchayat*) has been used by many teachers to teach self-management in the schools. The efforts of Shankar Raval, Daood Macwan, Ashwin Patel and Narbheram Trivedi have been particularly prominent. Most of these initiatives date back to the 1960s when the movement for local self-government was strong and many teachers decided to adopt the *panchayat* concept in a limited way in their schools. The children's *panchayats* have been more in the nature of experiments in managing their educational material, tours and school practices like debates. The teachers have usually been directive and the influence of the experiment on reforming schooling practices is not so clear. The school *panchayats* have also not been extended into the school-village interface in the sense that issues like non-enrolment or drop out have not been the concern of the experiments. However, within the limited aims that the teachers set for themselves, the school *panchayat* has provided children some exposure in managing their own affairs.

More organised and demanding efforts were the children's cooperative store set up by Shankar Raval, the *Sanchayika* savings scheme for books and uniforms established by Bava Sondharva and the children's hand-written newsletter (which lasted for less than two years) started by Keshav Purohit. Sometimes similar efforts have been converted into 'earn while you learn' schemes. The most outstanding example is provided by Nanji Kunia with his newspaper distribution and *mandap* setting up activity which are handled by children. These activities have been going on for about 40 years now. In the socio-economic contexts in which he worked, such activities were felt to be necessary to make schooling attractive.

Handicraft skills possessed by children have been used by some teachers to provide the children with some income. Door mats and wall hangings were produced by Tara Upadhyaya, Manjula Upadhyaya and Zohra Dholia who also used the activity to teach children, an approach similar to the *nai talim* model of education proposed by Mahatma Gandhi. In the case of Kalpana Acharya, the activity provided a means to channel the energies of unruly children. Other teachers like Bava Sondharva and Shankar Patel have used the school land to raise saplings or set up orchards in order to provide some income to the children and to use the profits for student welfare and infrastructure. Behind such attempts is a recognition of the fact that in economically poor environments, the skills that children already possess can be tapped in order to help them earn while they learn. Opponents of the working-in-school approach would no doubt question the wisdom of enabling children to earn income through the school, but the teachers concerned appear to have consciously adopted work practices to attract children to school and retain them in it.

Exposing the school and the children to the outside world

This is another theme which is emphasised by some teachers as very important for developing an awareness about other schools and places. Nanji Kunia and Natwar Vaghela made it a point to make their schools compete in fairs and competitions. Shankar Raval created a fund for children's travel since some children were not in a position to pay for their travel. He linked the fund with the afforestation of school land with neem trees. The leaves were auctioned to camel owners and the branches sold to the people, under the supervision of a *panch* (committee of elders); the income went into the children's travel fund. A similar fund was created by Tara Upadhyaya. Narbheram motivated all children to save for purposes of travel and then pooled the money to take the children on educational tours. He also ran a shop in the school which was managed by children and sold educational material; the profit was set aside for educational tours.

Children as educational resources

A very important feature of the teachers' work is a recognition of children themselves as educational resources. Many teachers have adopted various forms of child to child learning. The children may be in school or out of school. Moti Nayak mobilised out of school children to take part in his plays and brought them into contact with school-going children. This was one of the factors which contributed to his achieving his target of enrolling all the girls in school within a three-year period. Manjari Vyas used school-going girls as researchers who studied and interacted with non-enrolled girls. Thakarshi Kunbar and Nanji Kunia tapped children who had passed out of school to mentor and teach school-going children. Many teachers have motivated such children, boys and girls, to become volunteers for adult education. Thakarshi also assigned the responsibility for bringing children new to school, to the upper primary children. Savita Parmar made the students of class six responsible for collecting text books from the batch passing out of class seven, repairing the books in collaboration with class five children, and recycling these books among themselves. These examples indicate a recognition that children,

whether they are in school or have passed out, or have not been enrolled, can act as resources for teaching, enrolment or mentoring other children.

More commonly, many teachers have used various forms of peer group learning and cooperative learning. These forms usually involve grouping children according to ability and letting the academically sounder children teach the weaker ones, or grouping children across grade levels so that the older children teach the younger ones. An interesting example of tapping the creative talent of children is Kantilal Donga's experiment of allowing children to collect waste paper, write articles on the paper and circulate them in the school. Daood Macwan organised annual exhibitions of children's achievements, during which the children explained their work to other children and visitors.

Teachers' use of their own traditional skills and interests

Pre-service or in-service teacher training efforts usually do not build on the skills that the teachers may possess or may have developed. The narratives in Chapter 3 bring out a range of toys and educational aids developed by the teachers to make their educational practice more interesting and entertaining. Outstanding examples are provided by Manji Prajapati and Thakarshi Kunbar who used their pottery skills to develop a range of teaching aids. Manji even exposes parents, every year, to the methods which he uses, since he believes parental involvement in their children's education will increase if they are aware of how children learn in school. Jasu Patel's narrative provides an outstanding example of the use of stamp collections for educational purposes. There are many other examples of indigenous educational aids, like the 'number reader' and the set of 39 aids of Hasmukh Acharya, puppets (Manjula Upadhyaya and Moti Nayak), indigenous projectors (Natwar Vaghela) and toys and paper pulp models (Savita Parmar).

Learning methods

As is to be expected, many of the teachers have experimented on alternative teaching methods. These experiments have been dictated by their personal development (the skills they possessed or developed) and the composition of the children's groups they taught. Moti Nayak uses dialogue between two puppets that he has designed to teach language and local geography. He speaks the various dialects and accents of different regions of Gujarat and is in effect promoting an awareness of cultural diversity. This aspect of classroom practice is in contrast to the general homogenising trends usually observed.

Sardarsingh Patel uses a 'benchmarking approach' to knowledge development. Whenever a new topic is introduced, children are given pieces of paper on which they write whatever they know about the topic. A summary is then made by a few selected students, and then teaching proceeds. What happens is that a benchmark of existing levels of awareness and knowledge is established, enabling him to build on it, or to assess the progress made subsequently.

A common practice adopted by many teachers to promote learning, which is perhaps dictated by the cultural contexts in which they teach, is to translate the lessons of the syllabus into skits, plays or songs. Bava Sondharva, Sardarsingh Patel and Natwar Vaghela have developed fairly extensive repertoires of plays. Raman Soni has developed a collection of about 150 songs on science and the environment, set to popular tunes. Some teachers use objects which attract children in the class. For instance, wooden spoons used to eat ice cream and then thrown away attracted the children in Savita Parmar's school. She used them as 'question papers' by writing problems on them.

Ashwin Patel experimented with the period system of instruction but realised that the 'minor subjects' (like socially-useful productive work) were being neglected; he introduced monthly reviews for the neglected subjects and took on children as helpers for such subjects.

A few teachers have tapped the alternative knowledge systems, about plants for instance, that the children possess. Bava Sondharva sent the children to the marginal lands of the village to collect varieties of thorns which were then converted into an exhibition. Sardarsingh, after dividing the unruly children into groups named after national leaders, called them half an hour before class to use their knowledge about agriculture to plant and nurture trees.

Some teachers have adopted alternative forms of organising teaching; for instance, Daood Macwan has experimented extensively with the project approach to teaching and Zohra Dholia has experimented with the 'open classroom' concept, in which children were inducted into school through a three-month period during which they were free to explore drawing or handicrafts, before being introduced to the formal syllabus.

Testing and evaluation of children

Periodic testing of the children is stressed by some teachers as necessary for identifying children who need additional support or for improving the achievement levels among children. Shankar Raval was particular about quarterly tests so that after the second test at the end of six months, the weak students could undergo a remedial programme in the mornings before school started; the evaluation during the tests was done by the teachers who taught the children and teachers who taught other classes. Narbheram Trivedi had a strict regime of weekly tests for the upper primary children. These tests were held on Saturdays, the papers corrected on Sundays and the results and weaknesses discussed with the children on the following Mondays. Regardless of the merit of burdening children with a heavy system of tests and evaluation, these teachers feel that in a context where parents were desperate to use education as a route to social mobility, these tests have resulted in better academic achievement, as evidenced by the number of children who have become professionals like doctors and engineers over the past 30 to 40 years.

Help provided to students outside school hours

A major factor that contributes to poor retention in school is the lack of parental support in matters of homework due to low educational levels among parents. The teachers in this study are particularly aware of this issue and many have made attempts to provide support to first-generation learners outside school hours. The form this support has usually taken is coaching in the evenings, either on a regular basis or during examination time. Another form, adopted by Manjula Upadhyaya is a system of directed and guided self-study, especially for girls.

School management

Apart from the academic initiatives described above, there are examples of teachers taking steps to improve the organisation of school activities or to encourage peer development. Savita Parmar paid particular attention to detailed organisation of school hours through a rigorous time table; as principal she also instituted the practice of assigned homework to her teachers. The unintended result she experienced was the teachers getting together to discuss their assignments. Other teachers maintained close watch on the irregular children in an effort to anticipate dropping out of school. Natwar Vaghela introduced a mission statement for his school: action on energy savings, use of indigenously developed educational aids and encouraging teachers to prepare essays. The first part of the mission led to redesigning of *chulahs*, and then to resources from the Indian Oil Corporation for school infrastructure. Shambhavi Joshi introduced a *balmandir* in the milk cooperative office which used to be shut during the day time. She linked this initiative with schooling since children could be inducted through the pre-primary cycle gradually into formal schooling.

Shaping oneself

Inspiration

Most of the teachers who participated in this study are able to identify specific sources of inspiration which have been powerful enough to sustain their motivation over long periods of time. These sources range from individuals like *gurus*, parents or children themselves, to critical incidents or the scriptures. The range is indeed vast, but one characteristic common to the teachers is their ability to reflect on the nature of the inspiration provided by the sources: usually the inspiration takes the form of a personal lesson which either provides a guideline for behaviour or serves as a solution to a personal problem. A few examples of both kinds are provided.

For Nanji Kunia, a reading of the scriptures, and his *guru*, have enabled him to derive support from his interpretation of the principle of accountability. "Accountability comes out of being a duty-lover and developing a sense of consciousness about a sense of duty." This understanding of accountability has enabled him to follow a rigorous time table and to set aside time specifically for his own learning, a principle worthy of emulation. Ajitsinh Solanki, early in his career, was inspired by the extremely bad infrastructure that he found in schools and an

innovative class one primer that had been developed by a senior teacher and was being used to great effect by the children. His reflection was, if conditions could be better, innovative ideas would have greater impact. This lesson has perhaps inspired his constant effort to mobilise money for schools and support the innovative efforts of his co-teachers. Raman Soni, when he became a teacher, was told by his primary school teacher never to judge a child and never to predict that this particular child would turn out to be dull or weak in the future. These words of advice have shaped his philosophy of education. The importance of having the right mentors during the first few months of one's career is stressed by many teachers. In fact, Keshav Purohit and Shambhavi Joshi suggest that every new teacher should undergo mentoring for a few months in his or her first year of service. For Daood Macwan, learning from children has been the most important source of inspiration.

For Shankar Raval, the realisation that “ordinary people can do things” and a sense of balance—“neither a full tide, nor an ebb, is good”, have served as guiding principles. For Keshav Purohit, his struggle to list the talukas in his district during an inspection visit early in his career in 1946—he had not paid adequate attention to the map hung on the wall in the school—resulted in his guiding principle: teacher competence is primary. Raman Soni was initially ashamed of his status as primary school teacher, but his father's characterisation of children as gods in human form and his advice to Raman to develop the *drishti* (vision) required to understand this characterisation, was a crucial turning point in his career. In 1950, Savita Parmar was asked by a class one student a simple, but what for her turned out to be a significant question: “Why do we see more of the large black ants attracted to jaggery and the small red ants to white sugar?” She did not know the answer, but the result was a willingness to learn from any source, including children. Sardarsingh Patel was once punished by his teacher during his teacher training course for being absent without leave. The punishment was to clean the grounds of the institution, but the teacher who had awarded the punishment joined in the cleaning, perhaps punishing himself. This incident has given Sardarsingh a base on which to develop his ideas about value education.

Reflective practice and personal philosophies

These examples indicate that during a critical period of their careers (usually the very early stages) the teachers have responded to certain influences in such a manner that they were able to derive powerful lessons which have stood them in good stead. This ability to reflect on experience at a young age and translate the reflection into guidelines for behaviour is perhaps an important trait that teachers need to develop early on in their careers.

The reflective ability also leads to certain tacitly held theories of what educational practice should mean—the ‘theories in use’ that organisational behaviour theory talks about. These, as is to be expected, take a variety of forms. A few are listed below to illustrate the range that emerges from the case studies. For Nanji Kunia the rural school needs to be valorised, for he believes that these schools have very poor infrastructure but it is not realised that they may in fact be better than well-endowed schools in the efficiency of utilisation of resources. So when he visits any village, he first visits the school to communicate to the people the importance he

attaches to the school. Secondly, his goal is just to develop the inner creativity of children. For Jasu Patel it is simply “do full justice to your profession” and for Raman Soni, the dignity of the profession must be maintained at all times. Hence he took it upon himself to provide proper plates, at his own cost, to all the children using the mid-day meal scheme. Apart from lowering the standards of schooling practice, improper arrangements for the meals, in Raman’s view, lower the dignity of the teacher involved in the activity. For Tara Upadhyaya education has to promote independence in all children, including neglected children like the physically disabled. Some teachers hold what may at first glance appear very simple approaches to education: students’ lives should be made better (Bava Sondharva); nothing is difficult for a child, whatever is difficult is difficult only for the teacher (Sardarsingh Patel); three items should be ensured in schools: textbooks, writing materials, breakfast (Ajitsinh Solanki); how pupils learn is more important than how to teach (Manji Prajapati). Many of these principles may seem very personal. But the efforts of the teachers to translate these principles into activities so that they do not remain mere platitudes, offer lessons for other teachers.

Priorities and setting personal examples

A third important theme that informs the ‘shaping oneself’ dimension of the teachers’ practice is the communicating of educational priorities through personal action and example. This theme is especially important when one is trying to shape educational practices in contexts of socio-economic deprivation. The example of school cleaning and beautification is taken up to illustrate this point. In the poorly endowed schools that we are talking about, the teachers and children themselves have to undertake the job of cleaning the school. There is no money to employ someone for the purpose. But in some places, as shown in a recent study (Vijaya Sherry Chand 1997), families, which are already in economically-dependent relationships with better-off sections of village society, resent this practice, since they interpret it to mean a reinforcement of their economically subservient status. The first working day after a vacation is particularly dreaded since the cleaning load is heaviest on that day. On the other hand, some castes may consider cleaning public places (like schools) outside the social definition of their role. The outstanding teachers in this study appear to have handled this issue by themselves taking up the broom. Kantilal Donga, Savita Parmar and Bava Sondharva especially make a point about the importance of the teacher leading in those tasks which have the potential to be interpreted as demeaning or reproducing exploitative social relationships. The teachers have also avoided the gendered division of sweeping labour by involving boys and girls in the activity. In many schools, girls tend to get a heavier share of ‘domestic’ duties like sweeping.

A similar approach of leading by example is evident in other activities like beautifying the school (watering the school garden, whitewashing). An example of a different kind is provided by Bava Sondharva. He wanted to compile a song/ prayer book that drew on many religions. Many parents objected to this, but his commitment to developing the book for his own use first and his explanations to the community were appreciated and now there is a demand for the book from other schools. These examples primarily show how the priorities that the teacher sets for improvement of schooling practices are communicated through demonstrating the teacher’s personal commitment to the tasks.

Teachers as researchers

In recent educational practice, there has been a strong move towards empowering practitioners to undertake research. This move has received its impetus from various forms of action and participatory research which encourage an active action-reflection role for teachers. Ultimately it is teachers who are at the cutting edge of educational practice, and such research, apart from addressing problems that are relevant and of concern to teachers, also adds a researcher dimension to the conception of a good teacher. Many of the teachers in this study, though unaware of the theoretical underpinnings of action research, have adopted research as an important facet of their educational practice.

Usually the research efforts of the teachers started off with questions that intrigued them or represented problems that they faced. A few examples follow. Raman Soni was intrigued by two questions: 'Why did very young children often invert the order of digits when they wrote a two-digit number, though they read out the number correctly?'; 'Why were some children able to read the titles that flashed through rapidly in a movie whereas other children with similar backgrounds were unable to do so?' The former question led to a very interesting piece of original research that resulted in identifying the practice of calling out the units digit first in Gujarati as responsible for the problem, thus leading to a new system of calling out two-digit numbers. The second question led to speed-reading experiments. An interesting feature of these experiments was that Raman Soni compared the new methods with the traditional methods in an experimental research format. Natwar Vaghela was interested in finding out the effectiveness of self-designed audio-visual aids in teaching and constructed an indigenous projector, taught his subjects with this aid, and compared the results with the traditional methods of teaching.

Bhagwati Joshi wanted to understand the dreams of children in an effort to mould her teaching to the children's needs and interests. Another question she asked was, 'How can the dissonance between the home environment and the school environment, which often present to children contradictory role models, be reduced?'. The same question was asked by Shambhavi Joshi, who also undertook research on the games that children played and organised the school activities around the findings of her research. Many teachers have studied the problem of non-enrolment through research efforts. Sushila Vyas undertook a systematic effort of interviewing ten girls from each caste in order to study the interactions between non-enrolment and caste status; an interesting effort to use school-going girls as researchers was made by Manjari Vyas who wanted to study why the proportion of non-enrolment among girls was high.

These research efforts, except in one case, were designed by the teachers themselves, and conducted in their spare time with their own resources. Secondly, the kinds of research undertaken indicate a concern with researching the classroom context as well as the school-society interface. A third feature is that most of the teachers were happy with using their results in their own practice and did not make special attempts to write up their experiences for

a wider audience. The rare exception is Raman Soni who used his research as the basis for further research for a postgraduate degree in education. A few teachers, however, have retained the notes they had made at the time of the experiments. A fourth aspect of the research is that the teachers have not stopped with one experiment. Whenever a new problem cropped up, new experiments were designed. In the final analysis, though developing research capabilities is one aspect of shaping oneself, it is difficult to separate it from the shaping of one's immediate schooling and socio-economic contexts. This is perhaps the reason why these outstanding teachers have not been so concerned about communicating their research efforts to a wider audience.

Addressing gender biases

Literature on the gendered division of labour in society indicates that certain professions have come to be associated with 'feminine' qualities, and therefore women are expected to constitute most of the labour force in these professions. Examples include nursing and school teaching. In Gujarat, however, only about 44 percent of the primary school teachers are women. In certain educationally-problematic districts like Banaskantha, the proportion is very low—women constitute only slightly more than a quarter of the teaching force. Apart from facing general difficulties like inability to work in remote areas and lack of peer support, women may also have to face the gender biases of male colleagues. One example, of Manjari Vyas, is cited here to illustrate the awareness of gender bias that exists among some teachers, as well as intelligence in handling bias as a demonstration to others without getting into angry confrontation. When a male teacher ridiculed her and suggested that she would not be able to answer a question he would pose, her reply was that she would answer, provided he answered the question she would pose after answering his question. Her women colleagues realised that they could also assert themselves. The issue of redressing gender biases through an appropriately conceived framework of teacher development has not received adequate attention up to now. The *Mahila* Cell which has been established within the GSPTF has just begun to address issues relating to the problems faced by women teachers. Developing a broader gender consciousness, among both male and female teachers, is a task in which outstanding teachers may involve themselves fruitfully.

Concluding remarks

The narratives in Chapter 3 provide a spectrum of intense and concerned grassroots initiatives for improving performance in the primary education sector. These communicate a vision which is a challenge alike to the general lethargy of the average citizen and to the large-scale official initiatives in this area. It is necessary for such teachers to be part of policy-making processes, and for initiatives such as theirs to feed into policy procedures, so that the country's educational policies become the considered products of the practitioners' own reflections and outstanding activity shared with their peers. Such policies are likely to have greater relevance to the actual situations in which teachers find themselves and to be more feasible; and the

inclusion of teachers in the process would tap, organise and provide institutional support to potential which has already been transformative in the hands of single individuals.

Reference

Vijaya Sherry Chand, (with G. B. Patel, Mohan Nogas, C. K. Rabari, and Shailesh R. Shukla). 1997. *School, economy and society: The Rabari and Thakore communities of Banaskantha*. Palanpur: District Institute of Education and Training, Government of Gujarat.

CHAPTER THREE

TEACHERS' NARRATIVES

Vijaya Sherry Chand and Shailesh R. Shukla

This chapter consists of the case studies of the 30 teachers who participated in this study. These case studies were prepared during 1994-95 and they have been retained in their original form. The first person narrative format has been used in order to enable the readers to hear the voices of the teachers themselves. A few words on the methodology used to prepare the case studies. The main source of data was conversations with the teachers, at their homes and at their schools. The teachers also wrote up some of their experiences and pulled out material they may have written many years ago. In addition, discussions were held with the children and colleagues of the teachers, and with some members of the communities among whom they worked. The visits to the individual teachers were preceded by a meeting of all the outstanding teachers organised at the Indian Institute of Management, Ahmedabad. This meeting served to communicate to the teachers the aim of the exercise; the methodology to be followed was also discussed and finalised in this meeting. During the field work, which was spread out over a period of six months and divided between the authors, the teachers were kept informed of the progress of the study, and the drafts of their case studies sent to them by post as and when they got ready. All the teachers returned the drafts with their own comments. The revised drafts were then sent to them. Once this process was over, all the drafts were sent to all the teachers, and a two-day workshop was organised to discuss the report.

For the workshop, an English version was prepared along with the Gujarati version. Up to that time, all the transactions had been conducted in Gujarati. During the workshop the teachers discussed each others' work and also decided to use a third person format for the Gujarati version and a first person narrative format for the English version. Four of the 30 teachers (Shri Natwar Vaghela, Ms. Manjari Vyas, Dr. Bhagwati Joshi and Shri Raman Soni) constituted themselves into an editorial committee for the Gujarati version since they felt that the language skills of the authors were not up to the mark. This committee stayed back for an additional two days and completed the editorial tasks. The final version was then brought out in September 1995.

A final comment on the order of the cases in this chapter. The teachers decided that the cases should be randomly ordered; two orders were derived, one for the Gujarati version and the other for the English version. The order decided in 1995 has been retained in this chapter. Each case is identified by a serial number and the name of the teacher.

CASE 1

KANTILAL B. DONGA

“ . . . if a roti which is being cooked is not moved around, it will burn. Likewise, teachers should constantly upgrade themselves by looking for learning opportunities, if they are not to stagnate”

I was a pupil of the well-known educationist and administrator of Saurashtra, Shri Dholarraji Mankad. He influenced me greatly. The institutions in which I studied, Gopaldas Maha Vidyalaya and Aliyapada Adhyapan Mandir at Dhoraji, inspired me to become a good teacher. The Gondal area of Saurashtra had a tradition of compulsory education when it was under princely rule. The former ruler of Gondal state, Shri Bhagvatsinhji, was a far-sighted ruler. I have great admiration for his educational administrative acumen. The literacy levels in this area were reasonably good when we undertook the literacy mission in our village.

My main educational goals have been the following:

- Improvement of the physical environment of the school.
- Children-run children's shop (self management).
- Publication of compilations by children.
- Developing creativity in children.
- Instruction in the *Ramayan* and the *Gita*.
- Teachers' credit cooperative in school.

When I started working in my present school I found the conditions very insanitary. People used to use the land attached to the school as an open-air toilet and a rubbish dump. I tried to reason with them not to do so, but my words did not have much effect. I then decided to let the people use the land as a rubbish dump, but made it a point to clean the area myself everyday. Soon my students and fellow teachers joined in this regular cleaning drive. The people in the village were shocked and stopped using the school land as a place for rubbish. However, the practice of students cleaning the school compound everyday continues even today. I believe that the physical environment in which children study and play should be clean and teachers should ensure such an environment.

Children's shop

The children's-shop scheme was introduced around 20 years ago. This initiative had three objectives:

1. To provide the children with a learning experience based on small business transactions.

2. To provide a facility for children, managed by the children themselves, as well as to develop in the children a sense of pride.
3. To raise small amounts of money for welfare activities.

The students manage the shop with some guidance from their teachers. We keep costs to the minimum possible. For instance, one of our teachers who is visually handicapped, suggested that he could buy the stocks for the shop from the town since he did not have to pay bus fares. The shop initiative has been very successful. The children enjoy running it and the school gets some money every year for children's welfare activities.

Learning through writing and visits

We also collect paper which is not being used and encourage children to write articles. The topics covered have included literature, interesting facts, things children should know, short comic stories. Usually the matter is compiled from various sources, though sometimes original matter does appear. The output is brought out under the children's names. One particularly good compilation was a collection of various photographs of Indira Gandhi which was brought out when she died. This collection had some very rare pictures. Initiatives like these bring out the children's creativity and also make parallel learning possible.

We take our students for visits to good educational institutions, cooperatives and *panchayats* so that they are exposed to the working of these institutions. Another experiment I carried out involved selecting passages from scriptures like the Ramayan and the Gita and instructing the children in the morals such scriptures teach us.

Television is a recent development. Many children watch TV regularly nowadays. I was intrigued by their behaviour and asked them, "What do you see most on TV?" They told me film-songs. I found that children imbibe a lot from the fantasies that are presented in the songs. I think that TV has its strengths from the point of view of education. But the misuse to which it is put needs to be controlled. I explained to the students that the behaviour one sees on TV is far removed from what happens in daily life. Some of the students realised this point.

Resource mobilisation

I must have collected about Rs. 400,000 for my school from various donors. In addition, I maintain a school fund to which the following contribute: children's shop, parents when they enrol their children in school for the first time, former students and students who leave school on completion of their primary schooling.

Initially I did not get much support from the community. So I decided to work with individuals who could directly contribute to the school. For instance, I got desks made by our village artisan. I explained to him that he had to contribute some of his labour free to the school. He agreed. He had the satisfaction of doing something worthwhile for the school and I had the desks made at a low cost. I believe that even in an economically backward area like the one

where I live, one can raise resources for the school provided one's commitment to the school and to the children is obvious. Many of the parents of the students are labourers. The most satisfying moments for me are when they present me with small amounts of Rs. 20 to Rs. 50 as their contribution for my labour. Slowly I roped in other members of the community into raising funds for improving the assets of the school. We now have a tape recorder, radio, physical training equipment like dumbbells, and musical instruments like harmonium, all mobilised from the community. I believe that for children from economically poor backgrounds, such additions have a far greater meaning in terms of quality of education. We also have an intercom system in each class which was set up by one of our former students. The water tank and lights have been contributed by our former students.

Networking with the village community and high school

My relationship with the village community may seem paradoxical. My personal belief is that there are more disadvantages than advantages in *panchayat* administration of primary education. At the same time, we have a functioning village education committee, comprising *panchayat* members. The committee takes part in school development activities. We involve *panchayat* members in mid-day meal scheme review meetings and in the pay-centre school meetings. The electricity bills of the school are paid by the *panchayat*. If the teachers think that a particular television programme is of educational importance, arrangements are made in the school compound for everyone to sit and watch the programme. What has possibly helped in maintaining good relationships with the *panchayat* is my principle of not gossiping about school matters in the village and not bringing village politics into the school.

I have also established good links with the high school teachers and the boys' school in the village. We share laboratory equipment and sometimes we organise science experiments in the high school.

Involving colleagues

I received the state best-teacher award in 1984. However, the credit should go to all my fellow teachers. I have always believed in developing positive peer relationships. A peacock can look graceful only if it has feathers. I have also instituted the practice of encouraging my teachers to involve themselves in improvement of the schools attached to our pay centre. One of our teachers has undertaken to repair the boys' school. Also all teachers do not take up such activities at the same time. We take turns. This year (1995) we have selected two schools under an infrastructure improvement project. We have already persuaded a well-off doctor to contribute to one of the schools. We visit our associated schools regularly, interact with the teachers and try to solve their problems collectively. Such activities help me to train the junior teachers also. I hope they will continue the tradition. I also tell my teachers that if a *roti* which is being cooked is not moved around, it will burn. Likewise, teachers should constantly upgrade themselves by looking for learning opportunities, if they are not to stagnate. The education system also needs to be under constant scrutiny so that changes can be made at the appropriate time.

As an active member of the teachers' federation I have been involved in the study circles set up for teacher development. We are also working towards the establishment of a research centre for primary education. This should be ready in another two years. Such a centre should provide small research grants to good teachers because till now what we have seen in primary education are many experiments. Some of these have been short-term in nature. What we need to know are the effects of such interventions. Information exchange is another area for improvement and use of audio-visual educational aids should also be promoted.

After retirement I plan to start a private primary school in the village. I have already registered a trust called the *Mahadev Vidyalaya Trust*. I hope to continue some of the good practices which I have been following. I believe in steady and well thought out work. Only the light shed by consistent action will dispel darkness.

CASE 2

NANJI J. KUNIA

“Mobilising resources has never been a problem for me. I believe that if one’s work is for the social good resources automatically follow”

I entered primary school in 1946 at the late age of 11 years. At that time a teacher whom I consider my guru, Shri Nagardas, persuaded a group of 25 boys to undergo education. We used to prepare dramas which focused on prevention of alcoholism and social problems. I was a bright student and won many prizes. I completed my schooling in 1954 and entered high school. But my guru called me back and asked me to become a primary teacher. I started my career as a primary teacher in Thakarwada in September that year. My guru has been the source of inspiration for whatever I have achieved.

Early years

I started teaching the first standard, but was immediately shifted to the seventh standard. Very early on I was able to achieve pass results of 95 to 100 per cent. This motivated me. Whenever the inspectors remarked that I was well trained, not knowing that my training was very limited, I felt very happy. In the mid-fifties we introduced night classes for standard six and seven students since they found it difficult to attend during the day. This was one of our early experiments in flexible school timings and in combining an alternative form of school with the regular day school. In 1958 we introduced a *Bal Manch Vikas Yojana*, a savings scheme for children. Very soon we collected Rs.1,200 and this led to *Vastu Bhandar*, a shop. This shop was run by the students themselves and I used to teach them how to run a small business.

Use of drama to improve enrolment of girls

During the mid-fifties only about 60 per cent of the children of school-going age were enrolled in school. The situation of girls was very poor—only about 35 per cent were in school. I decided to employ the social drama concept to motivate girls to enter school. I wrote the scripts which focused on education and social problems. Since the medium through which the message was communicated was familiar to the people, and the message itself was powerful, the campaign was successful. By 1960 the enrolment was 100 per cent. I then left the village for a year in order to undergo my training course.

Donations for the school

Soon after my return in 1961 we celebrated independence day. During his speech my guru expressed the need for a secondary school in the village. I responded by starting a fund, with my own contribution of Rs. 251. He added an equivalent amount. The other villagers were inspired and we were able to raise Rs. 7,000 in a very short time. Since the school was supposed to cover the surrounding villages also, we initiated a fund-raising drive in these villages. We

mobilised Rs. 25,000. I donated part of my own house for the school, keeping only one portion for myself. We appointed a teacher from a neighbouring village and started with the eighth standard. Gradually, we added the high school classes. We formed a governing body for the school and I was appointed Secretary. As the years passed the infrastructure needs increased. In 1970, I went to Bombay with my guru and collected a fund of Rs. 150,000 from various businessmen and donors who had links with our area. We also instituted a norm that the village community would contribute to the school fund on all national festivals. In return, school matters were made an agenda item in the Gram Sabha meetings. This cemented the village-school relationship.

“Learn and earn”

I also started to think of ways in which students could be initiated into small business activities which could help the student community at large. Two such activities which have stood the test of time are newspaper distribution and construction of *mandaps* (platforms for functions like marriages). In 1956, I took up an agency for newspapers and magazines to be handled by the students. The teachers of our school undertook to support this activity informally. The students of classes 5, 6 and 7 took turns to distribute the newspapers within the village and in neighbouring villages. This activity was carried out between 8 and 9 in the morning. The agency is still in business. The annual profit of Rs. 2000 supports the school’s educational activities.

Mandap construction was the second activity. The *mandaps* were made of wooden planks and poles. The students’ association bought the material and kept it in the school. Whenever there was a function in any house in the village, the students of classes 5 to 7 used to go to that particular house and construct a *mandap* under the guidance of two teachers. The activity spread to the surrounding village schools. At present, the students do not construct the platforms themselves but organise the activity and transport the material from the school to the house. They take the help of artisans for the construction. Village people donate generously for this *mandap* activity.

I also initiated a Books Savings Bank in which the students of well-to-do families donated used books. These were bound and given to needy students. One donor has contributed a television set for the school.

Mobilising community leaders for improving enrolment

In 1966 the people of village Tokariya demanded my services and got me transferred to their village. The school had classes 1 to 4 and only three girls. The village was dominated by the Muslim community and members of the scheduled castes. My initial aims were to increase enrolment and reduce the drop out rate so that the school could progress to the upper primary stage. I adopted a two-pronged strategy. First I contacted the leaders of the various communities -- the Muslim *maulvis* and the leaders of the traditional scheduled castes’ *panchayats*. I also included the village sarpanch. I held a series of consultations with them. The *maulvis* were especially important since I wanted to see Muslim girls educated. I managed to

persuade them to change the timings of the *madrasa*. This move on the part of the leaders enabled many parents to send their girls to school. I was very satisfied with the enrolments which started increasing. Secondly I mobilised the children who were attending school to start a publicity campaign. I designed various slogans which were written on the walls outside the school and changed every Saturday. This created interest in the community since they were eagerly anticipated new slogans. I also sent the children on a door-to-door campaign in the entire village.

Within two or three years we were able to extend the school up to the sixth standard. The number of teachers went up to four from the initial two. I also got two classrooms added to the initial room. For this purpose I mobilised Rs. 70,000 from the community, just as I had done in Thakarwada. I also succeeded in installing water supply for the school.

Another significant feature of my stay in Tokariya was the integration of the Hindu and Muslim communities in cultural programmes. The Muslim students did not take part in programmes which had prayer songs. I held discussions with the Muslim leaders and convinced them that children needed to be together at least for cultural events. We then worked out a system by which the leaders were also involved in the preparation of the school cultural programmes. Though Muslim girls did not take part in my dramas, the boys played the female roles.

My guru retired in 1971. I had organised a farewell for him which was also attended by the then Education Minister of the state. I had mobilised Rs. 25,000 as a retirement gift but my guru did not accept the money. Instead he suggested that the money be used for constructing a high school for the village. Around this time, the people of Thakarwada got me transferred back to the village.

Thakarwada school -- the best in the district

In 1972 I took over as principal of the Thakarwada school. We established an informal *panchayat* village education committee of which I am a member. I also felt that students needed a forum of their own. I initiated a students' association to which a president and two secretaries were elected by the students.

I wanted to see my school become the best in the district. Our enrolments were almost 100 per cent. We persuaded the remaining few children, who were mainly girls belonging to the scheduled castes, to come to school. In 1973, I introduced a weekly test for the seventh standard children. Four of our students succeeded at national-level scholarship examinations. From 1976 to 1980 we secured 100 per cent pass results in our school. During this period we also ran night classes for students who wanted to learn more. In 1978 I established a good library in the school. In the same year we won the first prize in the district level best school competition. We also won first prizes in science fairs. At that time the district education officials advised me to apply for a best teacher award but I refused as I felt that the school needed to develop more. In 1982 I received a prize for promoting the education of girls in our area. In 1992 our school was again declared the best school in the district.

Mobilising resources: transparent aims

Mobilising resources has never been a problem for me. I believe that if one's work is for the social good resources automatically follow. When I was principal I wrote a letter to a Bombay-based businessman asking for help in installing a drinking water pipeline for the school. He immediately responded with Rs. 11,000. During a public meeting attended by the district *panchayat* leaders I issued an appeal for the school. The leaders started a fund then and there and in a short while I collected the Rs. 15,000 needed for the school at that time. A businessman donated money for a radio and TV set. The school needed a low stone parapet. I organised a children's fair and mobilised the required Rs. 8,000. The school has facilities like telephone and a microphone system. I also see to it that the primary and secondary schools in the village share resources. For instance, equipment for experiments is shared. One of our old students, now a doctor in America, recently donated Rs. 65,000 for two additional classrooms. I persuaded the government to match this amount with Rs. 35,000. The construction is going on and when it is completed more money will flow in for additional infrastructure. I have also mobilised Rs. 1,000,000 for the high school from well wishers, businessmen and friends who believed in my earlier work with the primary school. If money is utilised sincerely and effectively, people see a moral value in donating.

In 1991 I received the state-level best teacher award. The people of Thakarwada were very happy and contributed a total of Rs. 20,000 as a reward for me. I deposited this money as a fund for instituting awards and scholarships for students performing well academically. One of my old students added Rs. 10,000 to this fund.

I also associate myself with various social development activities of the village. For instance I raised money for a pilgrim house in the village. I am also planning a hospital for my village and have already initiated steps in this direction. In 1986 there was a severe drought and with the support of village leaders and outside donors we organised a cattle camp for about 2000 cattle. The camp was maintained for about six months. The initiative had to be repeated during the drought of 1987. This camp was run for eight months.

Students' activities and children as instructors

The students' association of the school conducts about 50 different educational activities in the school. Students of classes 5 to 7, and children who have passed out of school but are still in the village, run adult literacy classes at night for illiterates either in their homes or on the streets. The children also read out the daily news everyday. In my village there is no illiteracy in the age group of 15 to 40. The night school experiment is still going on because of the cooperation of the students, parents and the genuine guidance of the teacher community. The students believe in the famous Gujarati slogan *dive divo pragatavo* (light a lamp with a lamp). The older children, who had passed out of school, also taught school-going children.

We have frequently organised study circle meetings and meetings for outside teachers in our school. Our school is the pay-centre school. Ten other schools are in regular contact with us. These schools have been provided guidance. Since our school is one of the best schools in our district many other schools visit us to observe our activities and for guidance.

I started a scheme called 'learn and teach' in collaboration with other teachers of my school. Some of the students were very good in academics. We constituted groups of four students, with one outstanding student in each group. On specified evenings, like weekends, the groups used to meet at the residences of various teachers. The good student then instructed the others under the guidance of the teacher. The idea was to encourage group work, and also reward the good students. The students worked till late night and slept at the teacher's residence.

Till some time ago our school did not have a teacher who could teach the students English. I requested my son to help out and he voluntarily taught Class 5 to 7 students for some time. Then one of my old students who is a graduate took up the job. As part of the Socially-useful productive work (SUPW) classes, we taught the students weeding and organised weeding outings on various farms. In return the farmers were asked to donate to the students' association. About Rs. 12,000 were collected this way for student welfare activities.

On a personal note, I wish to state that the source of my inspiration has been my firm conviction, originating in my reading of the scriptures, that accountability comes out of being a 'duty-lover' and developing a consciousness about a sense of duty. If one does one's work well, help follows. I believe in rigorous discipline to make the best of the time available to me. I get up at five o'clock in the morning every day and do not take more than five days off in a year. I also believe in setting aside time for learning. I have attended many meetings and have visited many good schools, all at my own expense. I have always received support from students, teachers and community. What pleases me most is the recognition that the community has accorded me. When people ask me, "How are you sir?", I feel that the respect in the question is my greatest wealth.

Till now I have been busy creating educational infrastructure and seeing to it that students do not suffer on account of lack of resources. A lot has been achieved. I am now concentrating on how to maintain whatever I have done. I am training a couple of teachers. I still spend time in the school everyday. I am a religious person and hope that God will give me courage to accomplish this wish of mine.

CASE 3

JASUBHAI M. PATEL

“High schools are provided with benches for seating their students. I find it hard to believe that the tender backs of little children attending primary school are stronger”

I would like to be known as someone who used his personal hobbies to improve the quality of primary education. I have always endeavoured to increase the knowledge base of children through my collections of stamps (Indian and foreign), envelopes, post cards, inland letters, coins and currency notes.

Stamp collections as teaching aids

During my childhood, when I was in class 1 or 2, I used to paste torn off calendar leaves on to the plain windows of my house. Indian stamps also found a place on my windows. This was before 1947. Stamp collection emerged as a natural sequel. My father was a farmer and I had to help him during the day. But in the evenings I used to review my collection of Indian stamps and dream of enlarging it. My parents did not care for my fascination with stamps. When I asked for small amounts of money for stamps they thought I was wasting their money. I had to lie that this work would fetch me a lot of money in the future. This satisfied them. I cannot forget the indirect inspiration that they always provided. Unfortunately they died before I could receive the state and national best teacher awards.

When I became a teacher in 1958 I came into contact with a person who knew English. He wrote to some people in Europe who sent me some foreign stamps. My salary at that time was about Rs. 60 a month and I used to spend a lot of money on notebooks for the stamps and buying old stamps. One day it struck me that my knowledge about other countries was increasing. But what about the children who were under me? Shouldn't they also benefit from my pleasure? My stamps were of various types and they had to be organised if they were to be of educational value.

I classified them according to different themes and pasted them on post-card size pieces of cardboard. Each card contained brief descriptions of the stamps and the themes which were culled from various reference books. The cards had to be small because children could not handle large cards with ease. Some of the topics which I have covered over the years include freedom fighters, poets, writers, social reformers, saints, animals, birds, butterflies and other natural life, mother and child, workers, great personalities, Presidents, Indian dances, parts of the body, railways, aeroplanes, planets, boats, Gandhiji, Nehru, housing, women, geometry, and many others. I also prepared a special section on achievements in outer space. Sometimes I classified the stamps according to their shapes. My special collections include Indian leaders and a comparative set of stamps from India, England and America.

Initially I asked the students to just go through the cards. They found them very interesting. They were delighted to touch the stamps and read the information I had written down. There was an element of novelty and fun in such experiments. They could travel all around the world at no cost. Later on I started using the cards as supplementary teaching aids to illustrate regular subjects. I generally use my stamps in all classes. The themes used most often are the human body, animals and birds, and household items in the lower primary classes, and cultural events, saints, reformers, freedom movement, geographical landmarks and historical events in the upper primary. I am now planning to teach the subject of environment through stamps. I have formulated my own syllabus and teaching methodology for this purpose.

Children have been motivated to collect stamps on their own and I have seen them deriving personal satisfaction from the fact that they could create something on their own. Whenever I obtained new collections we had lecture sessions on the depictions on the stamps. The curiosity of children increased.

Extension of the hobby

I have extended the stamp collection to include the following:

- A range of Indian postcards, from the earliest post cards issued to the latest. Likewise I prepared a collection of postal envelopes, from the earliest times to the present.
- Another collection included ancient and modern coins of India and some foreign countries.
- An album of Indian currency notes and foreign currency notes, old and new.

Every one has supported me—my students, family, colleagues, friends. Friends with similar interests have helped me in adding to my collections. However, my relatively weak economic status has made it difficult for me to maintain my hobbies, which are quite expensive. I compensate by spending my holidays and sometimes many hours during the night in using waste paper and other material to make albums. My son helps in the cataloguing and in maintaining newspaper clippings which are of relevance to the stamps in my collection. Some people ask me, “What is the use of this activity?” “Joy of working” is my standard answer. Of late many teachers have been coming to see my hobbies in operation in the school. This is my greatest reward. My regret is that I have not been able to motivate many teachers who have been working with me to take up similar activities. I have also exhibited my collection of stamps on achievements in space at various science fairs. I have even displayed my collection of coins and stamps in an agricultural fair.

Libraries and education

Another aspect of education which motivates me is the poor condition of libraries. In 1963 I was transferred to Bandhni village. There was nothing like a library. I held discussions with *panchayat* leaders and worked out ways of establishing a good library. It took us ten years to set up a well-functioning library. At this stage we decided to mobilise a fund since the credibility of the library had been established. We formed a trust in 1974 and raised Rs. 70,000 from

within the village and from members of the village who had migrated. I was associated with this library for 26 years before the pressure of my other library-related activities forced me to give up the work. I also served as secretary of the Petlad Taluka Library. Some of the other libraries with which I am associated include the Petlad Children's Library, Library Association, District Library, Taluka Teachers' library.

Essays and songs

I have found that my regular participation in essay writing competitions for teachers has helped in my personal development. I was winner for six consecutive years at the district level and thrice at the state level. These essays have never been used by others. I wanted to publish this collection so that teachers and children could read them, but economic constraints have prevented me from doing so till now. I write free verse. A manuscript *Vedna na Van* (Forest of Suffering) is ready but has not found any publisher. I have also prepared a collection of children's songs (*Talo Tamko*). I have just convinced a publisher to accept a collection of prayer songs which is aimed at enabling children to learn correct pronunciation. My publication efforts are meant to be non-profit ventures. I have also attempted to reach out to other teachers. Between 1963 and 1975 I worked as secretary of our teacher study circle meetings. During these twelve years I was involved in informal training of teachers.

Promoting enrolment in a problem village

In 1981 I was posted in a village called Jedvapura. This was supposed to be a problem village. I surveyed the village and found out that only 48 percent of the children of school-going age were attending school. There were many social problems in the village. I was saddened by the low importance attached to the education of girls. I felt that there was no communication between the parents and the school. My fellow teachers and I worked out a plan for contacting every parent regularly with the purpose of creating an environment for education. The idea was to meet the parents regularly, at frequent intervals, so that our concern got communicated to them. This plan succeeded and during the next year the enrolment crossed 75 percent. After this initial breakthrough there were no further problems. Given the success in this village, and helped by the policy of establishing schools where there were children, seven new schools with Classes 1 and 2 were started at the same time in the surrounding villages. I saw this development positively and told my fellow teachers to keep in mind the proverb 'blind leaders can only lead their followers into the well'. We worked hard on the quality of education we provided. People of the surrounding area noticed our efforts and our enrolments increased. They also set up a school fund, each parent contributing according to his or her capacity. I used this fund for buying teaching material which was essential to attract children of deprived communities to school.

Are tender backs stronger ?

I feel angry with the way primary education is treated in our country. A few non-governmental agencies run well-endowed schools, but they are the exceptions. The majority of the public-

funded schools are neglected. This neglect, and low status, extend to the primary school teacher. I think this is a general failing in our society—the closer the worker is to the grassroots and the people, lower the status.

One cannot ignore the sorry state of most primary school buildings and the educational facilities they contain. Some schools contain television sets, but to what extent are they used for educational purposes? The question one hears most often is who is going to pay the electricity bills? The mid-day meal scheme is a good idea. But are our institutions able to run it honestly and efficiently? Our public funding is biased in favour of high schools and higher education. High schools are provided with benches for seating their students. I find it hard to believe that the tender backs of little children attending primary school are stronger.

End note

I have two more years before I retire. My 36 years of teaching have been very satisfying. Throughout I have been motivated by just one dictum: do full justice to your profession. Time has always been in short supply and doing the various things that I have done has demanded a great deal of attention to planning my time. I would like to do my doctoral studies, if it is possible, on my innovations. After retirement, I plan to visit a developed country with the financial help of some of my former students and well wishers, in order to study the primary schools there.

CASE 4

HASMUKH M. ACHARYA

"I have been encouraging other teachers to think about teaching aids which could enrich their experience"

My first two jobs were in private schools. I taught for three years in the secondary and primary sections of the schools. In 1964 I joined the district *panchayat* school system as a primary school teacher in Bhachau taluka of Kutch district. My contributions to education in one village, where I spent quite some time, are described below.

(1) **Mathematical skills for children of class three:** I found that children did not understand the 'units' and 'tens' in three or four digit numbers. Zero was a difficult concept. The children also found relating numbers to the way they were actually written difficult.

With these problems as challenges, I prepared charts and a working model of a 'Number Reader'. This device is a rectangular box. One side has five windows, each one representing a digit. Inside the box there are five flat aluminium cylinders which can be operated, one at a time, by means of handles. The curved surface of each cylinder has the numerals 1 to 9, and zero, in that order, painted on them. Only one numeral is visible through any window at a time. This part of the device is like an odometer used to count the distance travelled by a vehicle. On the top of the box, against each digit, there is a bent aluminium rod, with both ends fixed. Each rod contains nine beads which can be transferred from one arm of the rod to the other. The five sets of beads are of different colours.

I first operate the units counter, starting from one. As the number is called out, one bead is transferred. And so on. When all nine beads have been transferred, I explain the concept of zero and tens and start again with ten. Then I repeat the process for teaching the numbers eleven through nineteen, and so on. I taught some students through this method and found their performance better than that of the students taught by the regular method. This evaluation convinced me to continue with this method.

(2) **Complex numbers:** Many students found it difficult to understand the concepts of numerator and denominator in a fraction. Allied problems included inability to deal with inverse numbers, add fractions to whole numbers and place decimal points. To teach these concepts, I prepared a series of models like fruits, biscuits and paper articles. I evaluated this initiative also through a system of pre-testing, conducted after trying out the traditional method of teaching, but before the improved method, and post-testing. I found that the lowest category of marks which had some students in it in the pre-test, did not have any in the post-test.

(3) **Geometry and measurement:** The measuring aids like foot rules available with the children were often broken. It was difficult to expect them to replace a ruler when one end

broke. I did not pay much attention to this issue until I thought about the reasons for the variety of answers that the children gave me when I asked them to measure a line. I observed them carefully when they measured. I found that even children who had an unbroken ruler used to begin their measurement from the end of the ruler, that is, about two millimetres before the zero mark. Learning from these observations, I taught children how to measure correctly. I repeated this process to teach correct measuring of angles.

(4) **Other teaching aids:** I have also prepared many teaching aids like spring balances, kaleidoscopes, models of the human body, mathematical boards which run on electricity, cameras, barometers, periscopes, models illustrating energy pathways. I have encouraged many of my fellow teachers to make their own models and to take part in science fairs. I myself have won many district and state prizes for my teaching aids.

A peculiar difficulty in all these experiments was that very often two classes used to sit in the same room, and the teaching experiments were specific to only one class. I therefore used to divide the room with the help of gunny curtains. From the experiments I proceeded to the period system in the upper primary section.

I started involving the children in cultural activities and in making use of waste material which the children collected. For the latter purpose, I enlisted the help of village artisans like carpenters and blacksmiths. Under their guidance, I prepared 39 mathematical and educational aids and exhibited them in various science fairs.

Slowly, the parents started taking note of my experiments. Most of the families were engaged in agriculture or labour. Their contact with the school was limited to attendance at the annual day or any other celebration in the school. When the parents felt that their children were achieving something in the school they started taking an interest. They also started contributing to the school fund. There was an old building with the village *panchayat* which the village had been unwilling to hand over to the school. This building was transferred to the school, so that the number of classrooms increased. Many pieces of equipment like amplifier and musical instruments were purchased from the money donated by the parents. The school also got an electricity connection.

As part of my duties as head master, I have been encouraging other teachers to think about teaching aids which could enrich their experience. I feel there is an urgent need to network teachers so that they can learn from one another.

CASE 5

TARABEN B. UPADHYAYA

“A true teacher is conscious of the attention that he or she is paying to each and every child”

I was born in 1926 and grew up in the atmosphere of the freedom struggle. As a child of ten I used to visit the Gujarat Vidyapith to read the works of Netaji Bose, Sharadbabu and Tagore. I also used to attend meetings addressed by Pandit Nehru. I completed my schooling in 1941 in Ahmedabad, just after I had got married. Soon afterwards I became a primary teacher in IloI village of Himatnagar, Sabarkantha district. My initial aim was to bring out the good that is there in every child. In 1947 I went to Sadra, which was under princely rule. I did not like the work there and resigned.

Making mothers literate for enrolment of girls

I then joined as a teacher in Bavla in Ahmedabad district. My principal there, Ms. Jivkorben, inspired me with her willingness to support me and her readiness to teach me. At that time the enrolment of children from the scheduled castes was very poor. My husband and I used to visit the *Harijanvas* at night and contact the parents individually. I had to face social ostracism on account of this work but it did not bother me. Jivkorben was very supportive and that was enough for me. I felt that the illiteracy of the parents might be a reason for the poor demand for education. I decided to start with literacy classes for the mothers. However, the response of the women was not encouraging. This was in 1948. I then started an informal women’s group which had singing bhajans and informal discussions as the only activities. This worked and I managed to establish good rapport with the women. The village was dominated by a particular caste group which did not like my activities. They threatened my husband and myself. Then there was a stone-throwing incident. This was too much and I confronted the village leaders. The problem was resolved and we were allowed to work in peace. By the end of the first year seven girls had enrolled. The next year the number increased and then there was no looking back. I stayed in this village till I went for my teachers’ training course in 1956.

Even here, the students were not receiving their regular stipend. We fought and succeeded in setting things right. Soon after my training, there was a serious famine. Inspired by the work of Vinobha Bhave, we went around the unaffected villages and gave an earthen pot to each family. The family was supposed to put some grain into the pot everyday. One large pot was kept in our school. Children used to bring small quantities of grain for the pot. After a few weeks we had collected a sizeable quantity of grain and clothes for the affected people.

In 1959 I was transferred to Ravalpura in Sabarkantha district. The village was dominated by the scheduled castes and the trader caste. The enrolment was poor, and as I had done earlier, I started with the mothers. This time I took up adult education classes in a well-organised manner. I linked enrolment of girls in the primary school with this effort and was successful.

The adult education classes took in older girls also and as soon as they were literate I enrolled them in the primary school at the appropriate level. Many such girls went on to take up various jobs, including teaching. Even today some of them write to me regularly. Along with the educational activities, I started various cultural programmes through the school. I had been trained earlier in drama and dance forms and I used this training to good effect. I tried to involve the entire village in this effort and tried to convey the message that the school was a common institution to which all castes and strata had a right. When I felt this message was being understood, I started a fund-raising campaign for the school. The enrolment had increased and we needed more rooms. The community responded and the two-room school became a nine-room school.

Developing the school

In 1971 I was transferred to a small town, Modasa. The school was situated in a rubbish dump and was crumbling. It had classes one to four. Attendance was poor; it was unreasonable to expect children to be attracted to such a place. There were three other schools in different parts of the town. They were better off. I decided to do something about the physical environment of the school. I was told by many people that “nobody would listen to primary teachers”. I went to a leading medical practitioner of the town who could spare me 30 minutes of his time. I took him to the school, pointed out the rubbish and asked him how he could take care of children’s health on the one hand and tolerate the school on the other. He understood immediately and mobilised more than two lakhs of rupees from private donors and a cooperative bank. I got the place prepared properly and built a well-equipped six room school with a nice garden. I also mobilised resources on my own from various donors and added another six rooms.

Wherever I have worked I have prepared good school gardens. For the Modasa school I collected saplings from various places and involved the teachers in the management of the garden. Irrigation of the saplings was always a problem given the water shortage, and the teachers worked out a rotation system for bringing water to the school. The garden also gave me an opportunity to involve the leading citizens of the town in the school. I used to organise tree planting functions in which they were asked to plant the saplings. Many of them behaved as if “this is my institution”. The goodwill that was thus generated came in useful when the school needed resources.

I found that children were very interested in planting trees and caring for them. Many of them brought various kinds of shrubs and decorative plants from their localities.

Small business activities and educational funds

I also established a reserve fund, the income from which could be used for taking children out on excursions and picnics. Such a fund took care of the problem of asking parents to contribute every time. Also, some children were not in a position to take part in such activities on account of financial difficulties. I also taught the children how to make quality door mats. I divided the

students into working groups and each group took care of its own activities. The mats were sold through periodic exhibitions held in the school. Each group operated its own bank account and the revenue from the sales was deposited in the bank accounts. The net income was used for student welfare activities. I linked this activity to learning about basic accounts and banking procedures. I also initiated similar activities like producing wall hangings. While planning such activities, I always used to work backwards, starting from the benefits -- material and learning -- to be derived by the children. This way I could communicate to everyone else an understanding of the activity from its roots, so to say.

I also encouraged teachers to prepare many teaching aids themselves. Many models like the human body parts and skeletal system were prepared this way. We also designed moulds from which toys could be made by the students.

Even after retirement I have kept myself busy. I have been involved in initiating an informal organisation for retired people. Our members meet regularly and discuss various issues of importance to us. I think it is important to keep ourselves mentally alert. I am also involved in various social service activities.

I think women teachers face serious problems in working and taking care of their children. Support systems for such people need to be evolved. One lesson I have learned is that the teacher is a role model for children who are very impressionable. When I was a young teacher I once changed my hairstyle. The next day I found that all the girls had copied my hairstyle. From that day I was careful to observe my behaviour and see what effect it had on the children. I also learned that it is very easy for a teacher to neglect certain children, for instance physically disabled children. A true teacher is conscious of the attention that he or she is paying to each and every child. Fundamentally, education should be value-oriented and it should help students towards independence.

CASE 6

AJITSINH M. SOLANKI

“I derive inspiration from a wood carver whom I once met. . . Sometimes, rarely, he had to cut a live tree for his work . . . he apologised for having to take away the wood but promised to use it productively. He then gave an undertaking to the tree that he would plant 25 saplings to compensate for the sacrifice it was making. This was his way of living ethically”

When I was in school, my ambition was to attend college and then become a film artiste. However, my performance in the school examinations was not good. My family’s economic status was also difficult and I could not study further. One of my relatives, who was a deputy collector at that time, felt that I had the potential to become a good teacher. He arranged for my admission to the teacher training course. I underwent two years training in Bhavnagar. I consider this period very significant since it gave my life a definite direction. After training, Ms. Usha Patel, my teacher, made me promise to be a good teacher and to this day I have kept that promise in mind.

The Pipal experience

I first went to Pipal school in Valbhipur, in 1972. It was a one-teacher school. When Shri Manubhai Pancholi was the minister of education in Saurashtra he had introduced a recess of four hours during the day to enable children to do some house work. During those four hours, I used to visit neighbouring villages to discuss with other teachers the use of stories and poems as teaching aids. They ridiculed me and I was struck by the cynicism with which they looked upon their work. But even today I treat these teachers as my gurus since they did teach me something. Since support from my fellow teachers was not forthcoming, I decided to concentrate on improving the physical environment of the Pipal school. One wall of the school had cracked and was about to collapse. I requested the sarpanch to support me with funds. Unfortunately, the community to which I belong was perceived as not reliable when it came to money matters. The sarpanch refused. I then put in some money of my own and the contingency grant given to the teachers; and with my own labour filled up the cracks, whitewashed the school and pasted calendars on the walls. The sarpanch was surprised and granted me Rs. 200.

Lakhanka: Education and development

I was transferred to a nearby village, Lakhanka, in 1974. I spent a fruitful period of 15 years in this village. The Lakhanka school was also a one-teacher school. When I first saw the school building I was depressed. It was in very bad shape. I immediately decided to improve the physical environment of the school. I felt that children should feel enthusiastic about coming to school. They should feel happy about going to a pleasant place, a place which is perhaps even better than their houses.

I first went to Surat to meet some of my friends who were working as diamond cutters. I explained the problems of the school to them. They were suspicious about the use to which the money was going to be put. To overcome these suspicions I promised to return their money if, during their visit to the village during the Diwali vacation, they did not find anything concrete. I even offered to give a guarantee on stamp paper. They then helped me. The villagers were also suspicious of my initiative because they had had bad experiences with teachers in the past. When they saw me buying bricks and sand, they gave me Rs. 800 for roofing material. Once the immediate repairs were done I started thinking about how to improve the infrastructure of the school. If more children had to come to school, one room would not be sufficient. This is where cultural and religious traditions came in handy as tools for resource mobilisation.

Cultural traditions and fund raising

There is a tradition in our area that whenever a marriage party comes to the village the family members of the bride or bridegroom donate for a common cause like temple maintenance. I decided to use this tradition to raise funds for the school. Whenever a marriage party arrived in the village, I prepared tea for the entire party. After serving tea I spoke to them about primary education as a common cause, equivalent to praying to God. I then requested them to donate liberally for the school and for the children. Since the occasion was an auspicious one, the family members were most happy to contribute. This way I built up a school fund.

Religious traditions are also strong in our area. People love to listen to *Ram kathas*. I obtained a set of *katha* audio cassettes prepared by a well-known religious leader and organised a function in the school. People could attend the day-long function and listen to the stories from the epics, but they had to donate for education. I collected Rs. 8,000. In addition, a businessman liked the idea and contributed Rs. 10,000. I took this money to the Taluka Development Officer and asked him to match the amount so that the village could build additional rooms for its school. He did not have any money. I then approached the District Development Officer (DDO) who sanctioned an ad hoc grant. The government stipulated that a contract had to be awarded for the construction. I did not like this system since the scope for corruption is high. The village sarpanch, who in the meanwhile had seen my efforts to build up school-community relationships offered a way out. He was a licensed contractor. He would obtain the contract but put me in charge of the building work. This was an example of teacher-village cooperation for the good of the school. While the construction was going on the DDO wanted to visit the school. He did not come during the time he was supposed to visit and so I left the place. When he reached the place, the junior officials were angry that I was not present. But the DDO had trusted me and told his officials that my absence was not important, but the work was important. He was happy with the work and felt that the real credit should go not to the teacher, but to the village for building up such a healthy relationship with the teacher. The building was inaugurated by a religious leader. With the help of the Hari Om Ashram and the government I built an additional room in the school. In 1986, this school received the best school award.

Organisation of youth for the school

The village youth used to gather near the village temple which was dedicated to Lord Ram (Raghunandan). This inspired me to channel their energies into a formal youth club. I called this the Raghunandan Seva Parivar. My aim was to integrate the youth of all castes and religious factions. I consider this a great achievement. The members, about 80 of them, used to meet every fortnight. Each member contributed Rs. 2 every month to the school. Whenever the school needed small amounts of money, they worked at night, especially on Fridays since Saturday was a holiday. They then handed over the wages so earned to the school. The compound wall, water facilities etc. were built this way. The artisans of the village were also brought into the school work. For instance, the children of *Kunbars* (potters) did not participate in schooling initially. Once they started coming to school, they told their parents: "Our teacher does good work for us, can't we do something in return?" The artisans then undertook plastering work and brick-making.

Developmental activities

There were no toilets for women in the village. This was a challenge for the youth club. *Ram Navami* is an important festival which the youth celebrate by visiting their friends in other villages. One year, we decided to celebrate the festival differently. We asked the villagers to contribute their labour on that day and requested two masons to provide their skills free of cost. In one day we had built the toilets. The government supplied a diesel engine and pipe lines for the water supply. Soon the pipe line was extended to the entire village.

Tree planting is an area which is important for improving the environment of the school. I involved the village people in planting about 500 trees around the school. The children were given the responsibility of nurturing the trees. They brought water for the plants. Today the trees are a pleasant sight. The elders told me that there was a Hanuman temple near the village which used to be a protected patch of forest with religious significance. With the disappearance of the sadhus, the village had not maintained the forest and it had become wasteland. I decided to rejuvenate this patch. With the help of the youth we planted trees like babool, neem and other trees which are mildly salt tolerant and of economic value. Water was in short supply. I had read about the drip irrigation system. I approached a private agency which was in the drip irrigation business. They supplied the system at cost. Once a few initial problems were overcome, the system worked well. The trees are quite big now. The forest has become a picnic spot for the children of surrounding villages. It gives me great satisfaction to see the forest being used like this. I visit the forest every two months. Interestingly, the forest department wanted to take it over. I politely told them to consider it as their own *upvan* and let the present system continue.

The forest needs maintenance, and therefore, funds. I organised a *Ram katha* function and mobilised Rs. 20,000 -- not as donations but as loans from individuals of the village. The amount was invested and the interest is being used for maintenance work. The youth club manages the affairs and the harvesting of produce should enable the repayment of the loans. For instance,

one of the intended aims was to produce babool tooth sticks for the village. This has been realised.

We established a tradition in the village that on every *Ekadashi* day the village will get together and decide what cultural and developmental activities need to be taken up. Till today the sarpanch has been elected by consensus. Whenever any political party comes for electioneering, the sarpanch politely tells them that the village has the ability to judge the candidates and vote accordingly. All disputes are also settled internally. In my fifteen years there, we did not have a single court case. When the literacy drive was on I took it up seriously and ran five centres. For this effort, the school was presented a colour TV set by the government.

I consider these developmental activities, which I initiated outside school hours, very important in achieving my educational objectives. A teacher cannot remain aloof from the village community. Even if the village does not cooperate initially, it is up to the teacher to build healthy school-community relationships. This realisation has been the motivation for my involvement in village affairs. Educational performance will improve when the village gets involved in the school.

In the beginning in Lakhanka there were only 12 children. After five years all children of school-going age were attending school. I also encouraged the children who were below school-going age to accompany their older siblings to school. I used to observe these children and if I sensed someone had potential, I allowed them to sit inside the classroom and play.

Initially, the *vaghri* and *harijan* children did not participate in the school. I decided that all castes needed to receive schooling. I kept track of such children and presented pen and reading material sets to them in order to motivate them to attend school. The teacher as to take such initiatives to create a mood for schooling among sections of society which have traditionally been outside school.

Valbhipur: Manas Primary School

From Lakhanka I went to Valbhipur, my native place. I was located on the outskirts of the town inhabited mostly by the socially and economically backward castes. The school was in a rented room and had only 25 students. I conducted a survey of the locality and found about 150 children of school-going age who had never been to school. The school was an unattractive place, and to reach the other schools in the town, the children had to walk a long distance and, more importantly, cross a highway. I was determined to build a good school which would be appreciated by the children. I decided to construct on a larger scale than I had attempted till then since I found that it pays in the long run. I negotiated with the *panchayat* for a 2162 square yard plot that was lying unutilised, but had been earmarked for storage godowns. The *Panchayat* agreed, but laid down a condition that I build a school within two years. If I did not succeed, then the land would be used for other purposes.

I asked a local architect to work on a voluntary basis on the school project. The total cost of the school—building and furniture—was fixed at Rs. 475,000. I was confident of mobilising this amount since it was for the cause of children. I never feel ashamed about asking for donations for the school. I believe in the transparency of my operations. I also believe that every paisa of a donor should be utilised efficiently. This gives me and the school a moral standing which can be tapped in case needs arise in the future. I formed a trust with people of integrity, to coordinate the building activity. I approached the religious leader who had helped me earlier. He was very appreciative of my work. During a tour abroad, he dedicated some of his discourses to my school and sent me Rs. 100,000. A wealthy donor wanted to set up a child-care centre. I met him and explained my work. I collected another Rs. 100,000 from him. A non-resident Indian donated a substantial sum. A friend in distant Surat city donated money for the furniture and other fittings. I also mobilised fans, chairs from friends and donors. I kept all the donors informed of the progress of the school. I used to send photographs to the major donors.

The inauguration of the construction work of the school was carried out by my former friends of the youth club of Lakhanka, the Raghunandan Seva Parivar. The school was ready in early 1991, well before the deadline set by the *Panchayat*. The trust formally handed over the school to the government in the presence of the District Collector. In a significant move, the trust was dissolved at the same meeting, since it had served its purpose. During the meeting I also demanded two teachers for the school. I was granted this wish and was also allowed to select the teachers whom I knew were good. The school was named Manas school, after the *Ramcharit Manas*.

Over the last three years, I have enrolled about 150 children who had never seen a school. At present there are 396 children studying in classes 1 to 4, an improvement from the 25 children attending in 1989. In the Manas school I introduced a system of evaluation sheets. Each child has a card which is filled every month. The information recorded includes alphabet skills, reading and writing skills, attendance. On the basis of these sheets I group children according to their performance so that I can assign the best teacher to the weakest group.

My inspiration and beliefs

The inspiration for my efforts came from the bad conditions of the primary schools in the areas where I have worked. Children should feel welcomed in the schools. Whenever I travelled, I always visited the primary schools in order to learn from them. Early in my career I visited a school in Malpara in Bhavnagar district. The answers given by the class 1 children surprised and impressed me. I found out that the reason for their good performance was a language primer developed by a teacher of the school, Shri Prataprai Trivedi. That visit was an eye opener for me. I learned that developing an affectionate relationship with children, cultivating patience and developing a reflective capability are important. During my career I have taught classes 1 to 4, but I have always had a special regard for class 1 children since they are at an important stage of their lives. In my school, children can come at any time. One should not impose discipline in time matters. I have not had any problems with the inspectors with such flexible timings.

The quality of education—the close relationship with children and the physical environment of the school, attract and retain children. I was always flexible in the case of the girls of the labouring classes, because they had to combine work at home with their study. I used to allow them to attend in the afternoon, or for a part of the school time. This was bound to affect their learning; therefore, I made special efforts to teach them outside school hours.

Textbooks, writing materials and breakfast are very important items contributing to the children's motivation. These are always in short supply and I have mobilised these items from donors.

I believe in liberating the potential of the children through efforts to make them participate in craft work, drawing, charts and puppets. I developed systems for group work and identified bright children who could teach weak students. I have developed stories for children. Here my training with CCRT in puppetry helped. I have prepared stories on eating properly and road discipline by using animals as characters. This was motivated by a road accident in which a girl was killed while crossing the highway.

About seven schools have been inspired by my efforts to emphasise the physical environment. The charts which I had prepared have been copied by some teachers. Many teachers visit my school. The educational inspectors of Banaskantha district visited my school and were impressed. One of my teacher colleagues has prepared a story on environment. I try to be in touch with teachers who have done outstanding work. I know some of the good teachers in my area but we do not have a common platform where we can meet and share our views.

I am very satisfied with my 22 years in teaching. I believe that an ethical life has its rewards. I derive inspiration from a wood carver whom I once met. He was an outstanding artist. Sometimes, rarely, he had to cut a live tree for his work. He told me that whenever he went to do this, he first paid his respects to the tree, then he apologised for having to take away the wood but promised to use it productively. He then gave an undertaking to the tree that he would plant 25 saplings to compensate for the sacrifice it was making. This was his way of living ethically. As a teacher I try to treat children with love and provide them a pleasant physical environment which they can enjoy.

CASE 7

SHAMBHAVI K. JOSHI

“I am of the personal opinion that a teacher should not point out individual children who are weak in their studies”

I studied in the Idar Primary School up to class seven. The secondary school was co-educational. Many parents did not, therefore, continue with the education of their girls beyond class seven. My elder sister was a primary school teacher and she motivated me to study beyond the primary level. She was a good teacher and was my role model. She developed in me a liking for learning new things and the habit of reading literature.

When I started teaching I found some teachers studying for a degree while continuing with their jobs. My circumstances were also such that I needed to work. So, following their example, I decided to study as an external student. I also observed many women teachers who had to manage their careers and also their children. They did not have much time for anything else. I decided to do something different. The competitions arranged for teachers gave me an opening. I took part in elocution and essay competitions and was successful. My articles also got published and this motivated me. I continued with my studies and acquired the B. Ed. and M.A. degrees. These studies have been useful since as a practitioner I could relate them to the conditions of my students.

Lessons from my mentors

My first posting was in Jadhar village. The principal of the school there was my first mentor. The two important lessons I learned at that time—and which have been my guiding principles ever since—were the importance of treating children with affection and adopting a caring attitude. The child comes from a home environment to which it is accustomed. The school environment is new and threatening. If there is no affection forthcoming from the teachers, fear is the result. Also, many times children make mistakes and it is hard to be patient. I always pray that even by mistake I do not raise my hand to threaten a child. I have discussed the problem of child psychology with many colleagues, but I feel all teachers should first study and worry about their own attitudes.

Helping children take pride in their appearance

In order to make school an attractive place, I decided to help children take pride in their appearance. I bought combs, mirrors and napkins and started bathing the children in the school. I also kept a needle and thread so that the children could do minor repairs to their clothing themselves. The children were very enthusiastic and used to admire themselves in the mirrors. The money that I put in was a small amount, but the gains were the joy of the children and the regularity of attendance. The parents also started taking an interest in this activity and appreciated my efforts. Initially the number of girl students in the school was very low. I

surveyed the households and prepared a list of girls who should have been attending school. I met the parents and over a series of meetings put pressure on them to send their girls to school.

Balmandir for toddlers

When I was working in Bhumel village I observed that many of the school-going children used to bring their younger siblings to the school. I realised that an alternative for the young children was needed since the school-going children were usually worried about their brothers and sisters. I talked to the parents about this and they felt very bad that I was sending “toddlers out of the school”. I proposed that we could set up an alternative institution for the purpose. I saw that the milk cooperative had a building which was opened only in the mornings and evenings. The committee agreed to lend the building during the day time. I also roped in two literate women of the village and brought in a girl from a neighbouring village who could take care of the kids. I invested a small sum initially and then mobilised government funds for the activity. Eventually the initiative became a Balmandir.

The Bhumel village school was a two-teacher school, and I was the first ever woman to teach in the village. The parents thought they could take me for granted. They would come at any moment of the day, stand at the door of the classroom and call their children out for work. I visited all the parents and explained that the practice had to stop. For a month things were all right. Then a parent tried to take away his child during school hours. I refused to let the child go. I told the parent that between eleven in the morning and five in the evening the child was my property, and just as he needed the child for work, I also needed the child for my work, which was teaching. After an argument, the parent gave in. I called a meeting of the parents in the school and explained to them the incident and why it was important to let the child be in school during the day. After that I did not have any problems.

Donations to the temple and to the school

At that time the physical infrastructure of the school was very poor. Village people attach more importance to the temple than to the school. Once the villagers decided to renovate the temple and collected funds for the purpose. I met the elders of the village and told them that they did not recognise living gods -- their children -- and that they were not doing anything for the temple of the goddess of learning -- the school. From my side I presented a clock to the school. The people then started activities from their side. As a result the school was whitewashed, a compound wall built and watering arrangements were made. Various individuals also contributed money for windows, doors and a cupboard. In return I donated money for educational charts. As time passed regular contributions from parents started coming in for prizes and educational material. When the parents saw that their contributions had not been wasted, they were happy to contribute whenever the need arose.

Government assistance, slates, pencils and books, is available to the backward caste and Adivasi students. Other children, who may also be in dire economic need, are not eligible and this

creates divisions sometimes. I am trying to raise a fund so that all children, irrespective of caste status can get books and pens.

New ideas from my studies

I have tried to introduce some new ideas in my teaching practice which my educational studies introduced to me. A few instances follow. I used to play with the children the games they liked most in order to attract them to the school atmosphere. I also used to sit at their level and talk to them about what they liked best at school. I used to keep toffees and biscuits for distribution as snacks. Initially I had to spend from my pocket. Later on the parents started contributing money for the purpose. This way I could figure out what were the games or activities liked most by the children. I then organised the school activities around such feedback. Children very often feel afraid to approach their teacher. When the teacher gets involved in such activities, the barriers may break down.

I also started a system of group work. I am of the personal opinion that a teacher should not point out individual children who are weak in their studies. However, there is always a group of children who are not performing as well as the others. When the group of 'weak' students is quite large, individual children will not feel that they are no good. I enlisted the help of better-performing students to teach the other children after school hours. I supplemented this activity by conducting classes at my home in the evenings for about an hour. When the students and parents realised that I was doing such things without getting paid anything extra they responded very well. I have also adopted the 'question-answer' technique as one of my main methods since it promotes curiosity among students. My B.Ed. studies helped me study this method in great detail. I have also used the classes under socially-useful productive work to combine teaching with extracurricular activities. For example, making earthen beads can be used to teach counting. By making collections of portraits of national leaders, history can be learned.

In my first posting I also realised the importance of having a good principal to build up an institution. I was aware of the period system of teaching and convinced him to adopt it in his school. He also encouraged me to overcome my weakness in mathematics. I used to attend his mathematics classes, sitting along with the children. I realised that instead of moaning about my drawbacks or hiding them, I could become a student myself. I attended the classes for one full year and later on started taking classes on my own.

I believe that starting the school's day correctly is important. A short prayer, performed with enthusiasm, sets the tone for the rest of the day. I have also used such meetings to encourage students to address their fellow students on life histories of saints, leaders and scientists. The ability to communicate and to think before communicating is there in every child. I give the selected student the topic and general information a day in advance. He or she is then supposed to work on the topic at home and communicate what he has learned to the school the next day.

Ultimately, releasing the potential of the child is the task of education. A primary teacher who shows affection and a caring attitude towards children is well placed to design opportunities for the children to utilise their full potential.

CASE 8

BAVABHAI G. SONDHARVA

“As a teacher the only question I ask myself is a very simple one: How can I make my students’ life better?”

My parents were seasonal labourers who eked out a precarious existence. Both of them were illiterate and had known only exploitation. In the year 1952 there was a special enrolment campaign for bringing scheduled caste children into school. My father may have been illiterate, but he was wise. He did not want me to suffer the fate of most of my community members and sent me to school. I joined the school and almost dropped out soon after. My parents did not allow me to do so. The initial years were hard, especially since there were six members in our family. When I reached class 8, I was married. I completed my secondary schooling in 1963 and had to work for some time. In 1966 I joined the Sarvodaya Ashram at Shapur for my teachers’ training course. It was here that I was exposed to social work, especially to the efforts of Mahatma Gandhi. In 1969 I was appointed as a teacher.

Local biodiversity and science fairs

Soon I was transferred to a remote school in the Gir forest. This school was handled by another teacher and myself. It had standards 1 to 5. The total number of children was only 54. All of them were from extremely poor families, mainly of the *Koli* caste. Initially I used stories, songs and pictures to make children attend school. Then I heard of a science fair that was going to be organised at the district level. I thought hard as to how a small school like mine could do something different and unique in order to gain some recognition. I thought this kind of recognition would attract children to the school. I had observed the people collecting fuelwood from the forests and discarding the thorns. It struck me that the local people would definitely be knowledgeable about the variety of spines that grew in that locality. I asked the children to gather all kinds of spines and thorns with the help of their parents. We organised the collection systematically and presented an interesting exhibition at the fair. It was well received and I was requested to repeat the performance at the state level. This initiative motivated the children; it also provoked the parents into taking an interest in the school since it had received recognition from outside.

Drama and education of girls

I also initiated the practice of using skits and drama to promote the cause of education of girls. These efforts were successful since they matched with the cultural experiences of the village people. The people went one step further -- they performed the drama in public and mobilised money for this cause.

Learn and earn initiatives

In 1974 I was transferred to my native place, Makhiyala. This school is a very old school established in 1886. I felt that though the school was so old, it did not have a cultural life of its own. I started a scheme of 'learn and earn' for the students. Saplings and flowers were raised in the school compound itself. These were sold by the students who earned something and in the process generated some funds for the school. Castor was another crop we tried out in the school compound. We tried out a nursery experiment in the school compound for two years. The experiment went on for two years and the sale of saplings generated more than Rs. 3000. The money earned from all these activities was used to buy furniture, fans, cupboards and educational aids. We also made toys in the school from low-cost materials and sold them. Once I became principal of the school my administrative workload increased. However, I saw to it that we participated in every science fair. As a result of such initiatives the interest of the children in school went up. The children also created an awareness about schooling in their parents. For example, when some parents asked their children to look after their labour work the children expressed anxiety about missing school. This made the parents realise what was going on in the school. They reacted positively and even started contributing resources for the school activities.

Developing the stakes of the village in the school

The year 1986 was the centenary year of the school. We organised a one-day function to which former students, the villagers and departmental officials were invited. The school provided lunch for all the children on that day. There were many cultural programmes as well. This function put the school and village relationship on a firm footing. The people saw that the teachers had the interest of the children in mind. As a goodwill gesture they immediately levelled the undulating school compound and supplied sand for spreading on the open areas. The family of a teacher who had died just then constructed a water tank in the school in his memory. The *sarpanch* constructed a platform in the school compound. After a hundred years, the village-school relationship suddenly became very functional. This healthy partnership has continued. The village now has an active stake in the school development activities. Such a stake can help the village *panchayat* move beyond its current role in supporting the administration of primary education into improving the quality of education.

I have also extended my work, subject to constraints of time, to social welfare services. At present I am educating illiterates through the volunteers of the literacy mission. We move around in the villages and use prayers and folk songs to create a positive environment for literacy. My school has hosted various camps organised by other organisations. I also initiated *Sanchayika*, a scheme to motivate children to save. The money saved is spent only on books and uniforms.

We had planted 150 trees in our school compound out of which only about 80 survived. However, the act of planting served to demonstrate to the children that they could plant trees in their fields and around their wells. In 1984 my daughter passed away at a young age. In the

waste land that serves as our burial ground I planted four trees at the corners of her grave. I levelled the land around this spot, planted some more trees and made a small green patch. The village people observed me and copied my actions. The village *panchayat* also took note and constructed bathrooms for people who take part in funeral processions.

I have formed an informal organisation of my own community members in order to share the expenses we incur during social events. I collected five rupees from each family every month and once a sizeable amount was ready I bought a mandap, utensils, musical instruments etc. These are used by all the families on all occasions -- auspicious or inauspicious.

Motivation

As a teacher the only question I ask myself is a very simple one: "How can I make my students' life better?" Sometimes the answers I provide may not be acceptable to all. Two incidents should clarify this point. I had compiled a prayer book, borrowing from many different religions and sources. The essence of the book was good conduct. I used my own money to print 1000 copies and started distributing it to various schools. Some people objected. I had to explain the purpose behind the publication. Now the publication is in great demand and many private schools have ordered copies for their students. Recently I initiated a community cleaning campaign in which the children had to help. Some parents objected and did not want their wards to help in cleaning. I met with these parents and convinced them that there was nothing derogatory in the cleaning work.

I feel that primary education is the base for the future career of children. In other words the primary schools decide the fate of the students. When those children who proceed to various occupations or higher education come and share their feelings, love and best wishes with us I feel that I have done my duty. Many of my former students are still in touch with me and have promised to help the school whenever they are called upon to do so. Personally, I am convinced that education of girls is what is going to be of vital social significance. I am satisfied with my work in this area. Almost all the girls in our village have a high school education and about 15 percent go to college.

I feel that creativity is a necessary quality in teachers. It enables a teacher to provide a complete education and overcome the standardisation of the textbooks. Village schools are also far behind urban schools in terms of the environment in which they operate, the infrastructure available and parental involvement in educating children. Teachers have to be enthusiastic, creative and persuasive. They will have to depend on activities like music, sports, picnics, drawings etc. to make education challenging and relevant in the rural areas that I have worked in. However, teachers work according to their own understanding of teaching. Some are interested in creative work; others are interested in traditional classroom pedagogy. Teachers are not gaining much out of the present system of in-service training. More thought needs to be given to this aspect. Since our school is a pay-centre school the schools associated with us have adopted many of the innovations introduced by us.

As a principal I always believed that one should create an environment in which teachers can express their thoughts without any hesitation. In return I have received good support from staff. I gave up my post to work as an ordinary teacher and to concentrate on the educational activities I would like to take up in the future. When I received the state best teacher award I decided not to take any part of the money for myself. The amount was small but I donated part of it to a few local organisations working for social change. I formed a trust in memory of my daughter. I am planning to raise more resources for an *ashramshala* for the deprived children of our society.

The code of conduct that I have adopted is to find joy in giving. In front of my house there is a temple of Shri Ramdev Pir. Many poor people from other villages visit this temple. My doors are always open to them -- for a snack and tea.

CASE 9

BHAGWATI M. JOSHI

“My approach to education focuses on the dreams of the child”

My parents spent their whole lives in primary education. When I was a child I used to go with my father to his classes and help him. During this time I imbibed certain principles like punctuality, no personal work during duty time, and doing full justice to work with children. I have always considered myself a student. If I can learn something from anyone, I will make the effort to do so. Though I started teaching in 1967, I continued to study. I did my masters in Gujarati. I became interested in the poetry of the *Ravibhan sampradaya*. Being of a spiritual nature myself, I felt that a study of this poetry would help me personally as well as professionally. I therefore did my doctoral studies on the lives (*jeevan*) and creations (*kavan*) of eight poets. I also studied these aspects in the context of the religious atmosphere of the medieval ages. The programme of study has helped me in teaching the Gujarati language with more ease, even at the first standard level. My colleagues have appreciated my work and I have been motivated by their willingness to learn from me.

My approach to education focuses on the dreams of the child. The child is a tender creeper which needs caring and nurturing. Understanding the child is important so that the teacher can help the child develop. However, the child learns by copying, and a child's development reflects the patterns of the elders. It is, therefore, necessary that the teachers are seen as moral beings worth following. There is no point in blaming the child. The parents are equally responsible for the child's development. When there are good models at school and at home the child is not confused. When the home model and the school model conflict, the child picks up the home influences easily and the teacher is blamed.

I believe in sitting with the children and talking to them so that I can get their own views of their psychological, economic, physical and family backgrounds. This helps me in moulding the teaching according to the children's needs and interests. This is especially important since the area where I work is a backward area and the parents are not in a position to pay proper attention to their children. Even in matters of enrolment, I have to visit the homes of parents regularly.

Whenever I came across irregular children I used to visit them with chocolates. Gradually I won their confidence and took them back into school. Sometimes girls would not come to school for a long time because of personal problems. I used to be patient with them, wait for them to return, and then make up what they had lost, through extra study. I recall one incident in which a bright girl had to drop out because her father thought that the education would mean expenses. I spoke to him about the scheme of free education for girls and took the girl back to school. This girl went on to complete her schooling.

We often help students organise entertainment and cultural programmes in the school. We invite higher officials and leading citizens of our village to such functions. The occasions also serve as fund raising opportunities. The money so collected goes towards improvement of the physical facilities of our school. We also keep small funds for repairing furniture and similar equipment. We have also purchased a clock, many educational aids, fans and other items for the school.

After a day's work if a teacher feels that he or she has really done something good for the children that day, that is reward enough. When a teacher is recognised for the work put in, it can be an additional reward. In one of the woman teacher camps, I presented a talk on 'Illiteracy and the role of women teachers' which was much appreciated. I also spoke about six villages in the taluka which were still illiterate. The government took notice and a literacy evaluation committee visited the villages where I had worked. I have also written some poems on good teachers. These have not been published.

I have been a primary teacher for more than 25 years. I have seen a lot of deterioration in the education sector, and this sometimes creates in me a feeling of frustration. There is a lot of talk about reforming the primary education sector. But the general situation is such that even good teachers find it difficult to maintain their motivation in the face of a persistent lack of facilities. Ultimately, however, the teacher has to depend on chalk and blackboard, and for the time being we have to work within the constraints. For instance, the government stopped a small grant of Rs. 20 which was being given for the maintenance of the school building. At a meeting of the teachers we raised some funds and hired staff to clean the school and to make drinking water arrangements.

I have trained my staff members to be child centred. Even if I am not present, the school's work goes on. The feeling that I try to develop is that 'we should live and work together like members of one family'.

CASE 10

RAMANLAL B. SONI

*“The world is rapidly changing and teachers should be ready to learn all the time.
That is professionalism”*

Early years: From cynicism to optimism

I was married at a very young age. My wife became a school teacher in 1959. I decided to follow her example. This was very unconventional in those days. I became a teacher in 1960. My family's poor economic status also influenced my decision to find employment as a school teacher. I belong to an artisan caste and my father was a goldsmith. There wasn't much work. He used to give himself hair cuts to save on the expenses. To remind myself of the struggle of those bad days, even today, I cut my own hair. My early days as a teacher were very humiliating. Many of my friends told me that I had 'caught the wrong bus'. I knew that I had wanted to join the armed forces or become a doctor, but had taken up this job under economic compulsions. I felt that I had made a mistake. The problem that was constantly on my mind was this: life is like a mathematical problem; any mistake at any step and the answer could go wrong. In mathematics one gets the opportunity to correct that step. In life one does not get a second chance. The derogatory way in which people used to call me 'master' added to my discomfort. In such an environment of humiliation I decided to give up. I consider my father my first guru. I went to him and blamed him for making me a teacher. He listened calmly and asked me a question, "Are you interested in a religious pilgrimage without going to temples and without doing special favours, yoga, fasting?" I said yes. He then told me, "God, in the form of children appears before you everyday. Chat with them. But first you need to develop the required *drishti* (way of looking at things). This will enable you to help others." At that moment all my embarrassment at being a primary teacher left me. I realised that if one is embarrassed about one's profession, there is no joy in working. I also came across a famous saying of Iqbal: if one has the three swords of firm decision making, capacity for tireless effort and love for all, that person can win any battle in life. I realised I had to become an optimist. I had been listening to cynics. I decided to change my 'antennae'.

Class one children have been the most important source of motivation for me. I taught class 1 for the first 15 years of my career. Many teachers consider Class 1 less important. I thought differently. When the time for allotment of classes came, I used to tell my principal that I would be ready to teach the class rejected by the others.

Teaching numbers 1 to 100

While teaching young children I found they made simple mistakes in writing double-digit numbers. Very often the order of the numbers was reversed. For instance, when asked to write 26, the children wrote 62. The practice of following the spoken word also led to difficulties in understanding the rules for calling out and writing two-digit numbers ending in nine. For

instance, the words for the number 29 mean 30 less one. This problem is peculiar to languages like Hindi and Gujarati. The English system of pronouncing numbers is a lot easier. Initially, I had a lot of difficulty in understanding these problems of children. I sought the help of an official in 1964 but he ridiculed me. This made me more determined to do something on my own. Around this time I also read a newspaper report that a child had died after his father gave him a severe beating. Later on I came to know that the father was trying to teach the child how to deal with numbers. The incident shocked me. As a teacher, I felt responsible. A chance meeting with a Telugu primary teacher at this time gave me the breakthrough I was looking for. I tried to learn Telugu numbers from him and he attempted to learn Gujarati numbers from me. He found the task difficult, whereas I found mine easy. Then I started comparing the ways in which numbers were called out in English and in Indian languages like Tamil, Telugu, Kannada and Malayalam. After reflecting on the mistakes committed by the children I identified the source of the problem in the attempt of the children to imitate the spoken form of the number. For instance the number 26, in Gujarati, was called out six-twenty (*chavvis*), implying six and twenty. Since the six was spoken first, the children wrote the six first and then added the two, to represent the twenty.

Once I obtained the insights noted above, I changed my pedagogy of teaching children numbers. First I taught them the tens -- 10, 20, 30, and so on, up to a hundred. Then I started teaching the units series. I also developed a system of calling out numbers in Gujarati which followed the pattern of the English and the South Indian languages. For instance, 26 would be pronounced twenty and six. By this method I could teach young children to write and read numbers, in words and figures, in just a 15-day period.

I then decided to improve my qualifications by studying on my own. I enrolled for a bachelor's degree in education. Before being admitted, I was asked by the interviewer, Dr. Dawood Ganchi, a well-known educationist, why I wanted a degree which was not necessary for a primary teacher. He suggested that my work would be better appreciated at the secondary school level. I explained that I wanted to remain a primary school teacher and that the number of children and the problems in primary schools were larger. Later on, he became a good friend and well wisher. I discussed with him my number experiments. He was the first person to appreciate my ideas and suggested that I should evaluate the idea. In 1980, I selected a large sample of primary and secondary school students. A set of 10 numbers, in words, and another set, in figures, were presented to the students. They had to translate the words into figures and the figures into words in five minutes. The results were very poor. I then taught them through my method of teaching numbers for one month. I repeated the test on the same students. Almost all the students could complete the test without any mistakes. For this research I got a National Council of Educational Research and Training (NCERT) award. I elaborated this work and was awarded the CASTME (Commonwealth Association of Science, Technology and Mathematics Educators) award in 1982. I was a poor student till I finished my seventh standard. After I got the award I went to pay my respects to my primary school teacher. He was very happy. I still remember his words of advice to me when I became a teacher: never judge a child; do not attempt to predict that this particular child will be dull or weak in the future.

I was invited to London to accept the CASTME award. I was faced with three problems. Firstly, I did not know English. Secondly, I had to contribute some money towards my travel and stay. Thirdly, I was not sure whether I would be able to get vegetarian food there. I did not want to go and sent a telex to the organisers. Some friends came to know of my decision. Dr. Ganchi insisted that I go to London and convinced me to withdraw the money that I was saving for my son's wedding. Some of my colleagues told me that primary teachers in general were a maligned lot and here was an opportunity to set right the picture. A businessman in Bombay who had some links with our village heard about my award. He immediately arranged for my travel to Bombay. He gave me warm clothing since it was winter. He also telephoned a Gujarati friend of his in London. This friend informed the organisers that I was in fact coming and came to pick me up at the airport. I was in a state of fear in the new surroundings, then I saw the friend holding a placard with my name written on it in Gujarati. In relief I garlanded the man with the flowers I had been presented in Bombay. I told him that the first person I meet in a new land is like a god to me. After that there were no problems. During the award ceremony the organisers announced my father's name by mistake. I felt happy because it was an appropriate mistake; my first guru had received the award. The most important lesson he taught me was my dominant thought during the ceremony: neither denigrate your profession nor blame your tools. As an artisan he always prayed to the tools that sustained him.

Developing reading skills

Watching movies was one of my hobbies. I was surprised to know that some people could read the titles that were flashed on the screen. I found that the difficulties the children experienced in reading could be related to their limited span of vision. I therefore developed a method for training the eye muscles of the children to develop a broader span of vision. I started experiments with class 3 children of my school. I selected students who performed poorly in an initial reading skills test. I prepared a set of flash cards with one, two, three or four letter, words and sentences, and were arranged according to increasing complexity. I seated the children in a triangular formation. I flashed the cards from one side to the other; the children had to read them. I realised at that time that Gujarati is a graphical language and to read one has to move the eyes upwards and downwards constantly. An evaluation after six months showed that the children could read more rapidly than those who did not have this exposure. Two years later, I enrolled for my masters in education with the help of Dr. Ganchi. I read about developing reading skills and elaborated my flash card experiments for my thesis. I completed my degree in 1987.

Songs on the environment

I have written about 150 songs, set to popular tunes, on the body, natural elements, social relationships, rural artisans and workers and functioning of everyday appliances like the primus stove and bicycle pump. These songs have not been published till now, but about 200 schools have asked for copies. I feel that children learn readily if subjects are taught in their own 'language' -- the language of song and music. Also I feel that the principles underlying the functioning of common appliances like stoves, pumps, pressure cooker, syringe, need to be

explained in an entertaining way. I had not understood the scientific principles and functioning of the bicycle pump till I reached class 9. I have extended the song writing to preparing scripts for television.

Education through drama

Children remember things which they see in action very well. Influenced by this idea, and also by a desire to make learning joyful, I created many dramas based on the *bhavai* style, in language which the children could understand. Some of the topics on which I have written plays are vitamins, types of plant stems and their functions, health and hygiene, pollution of water and air, and noise pollution. I mobilised resources for musical instruments, amplifiers and filmstrip projector needed for the purpose. In addition I have also mobilised money from donors for infrastructure like toilets.

The novelty of learning through plays appeals to children. The play *Chhati Ankhen Andhapa* (The World of the Illiterate is Dark) especially motivated the children. Many of my plays have been performed on radio or on stage.

School-village activities

Our village is famous for transport business. There are many drivers and conductors. Accidents may occur any time. With the help of the village *panchayat*, the school prepared a directory of the villagers with their blood groups. Everyone was educated on how to react in an emergency and whom to contact for blood. This was one way I thought the school could give something back to the community. This initiative has brought together the village, the primary school and the high school. I also have special knowledge of indigenous medicines which I gained from my father. Many people come to me for medicines. I also teach yoga and am associated with a nearby leprosy ashram. After retirement I will be working in this ashram.

Final comments

Outstanding teachers should be utilised as trainers in the district and state level training institutes. I do not think such teachers will expect much in return. Only their travel and food expenses need to be taken care of. If I am requested to help other teachers, I am ready to do so. My advice to my younger colleagues is respect your profession and maintain your dignity. Let me give a personal example. The mid-day meal scheme was started with good intentions. But the way it is being treated angers me. Free food does not mean that the quality should be bad, or the surroundings unclean and unhygienic, or that malpractice should be allowed. I would not like to be associated with such a scheme, because I feel that children are being abused. However, I have made efforts on my own to maintain the dignity of the meal programme through initiatives like supplying good plates.

I consider dedication to the profession the most important quality that a teacher should develop. The world is rapidly changing and teachers should be ready to learn all the time. That

is professionalism. I tell my colleagues that the English word master can be split up in two ways in the Gujarati language: *ma* (mother) and *sthar* (status), that is a teacher is one who loves and cares for children just as a mother looks after her children. The second way is *mas* (month) and *thar* (swim), swimming throughout the month in something we do not know much about or do not want to know about. The choice is ours.

CASE 11

KALPANABEN J. ACHARYA

“Some of my ideas did not work out and the students used to feel sad about the failures. However, the parents stepped in during those periods and pointed out the successful work already done”

My father and elder sister were school teachers. I stayed with my sister till I reached the fifth standard. I then attended a boys' school for two years. The teachers here were the first influences on my later professional career. There was one teacher, Shri Ambubhai Patel who taught Gujarati through drama. He also used to take us out on picnics and teach us about the plants we found on the way. When I finished my primary schooling, this teacher wrote to my uncle that I should be sent for further schooling. My uncle was a social worker in a nearby town. I stayed with him and completed my secondary schooling in 1958. During this time I also developed my drawing skills and started writing poems.

Diverting children's energy into constructive activity

I started teaching in 1958 and two years later enrolled for my teachers' training course. On my return, I went to Gorva, a Rajput-dominated village. The children were very unruly and difficult to handle. I thought of channelling their unproductive activity into something constructive. We started a weaving venture to produce mats and floor spreads. The students liked this activity and the teachers also found it interesting. We sold the produce on festival days like Gandhi Jayanti. The income generated was set aside for improving school facilities. After some time the Gorva school was bifurcated and I was put in charge of the girls school. Here I started developing various educational aids and models.

Educational models and aids

In 1970 I was transferred to Manjalpur. The school had two teachers who had won best teacher awards. They supported me. I repeated my weaving venture here and expanded the range of activities to include articles from waste paper, cotton and jute fibres under an 'earn and learn' scheme. A more ambitious scheme which we started was finishing rough diamonds. We also involved a local carpenter in our activities. With his help we made various models for teaching science, different articles from bamboo, a model of a steam engine (to which one of our teachers, Shri Puroshattam Parmar made a major contribution) and a paper pulp model of a cow. We also made a model of the Narmada scheme in 1976. In 1977 we constructed a vending machine which dispensed a glucose biscuit on receiving a 10p coin. The other models include Jal-dandi, Akash-darshan, Solar and lunar eclipse. In making all these activities successful, the teachers and students had a major role to play. In 1984 we developed a series of projection slides for teaching mathematics. In 1975 I took the initiative to form a parents association. This body has been involved in various school development activities.

In late 1989 I was transferred to the Babajipura school where I continued my teaching and development activities. At that time the District Education Committee came up with a scheme to introduce teachers to small industries. We selected detergent powder and started a small unit which is run by the students. The brand name chosen was 'Kumar'. The powder is in demand and is bought by students, teachers, parents and officials. I have also involved the students in activities like tree plantation, preparation of school garden and participation in science fairs and children's fairs. In 1991 we presented our 'Solar pond' at a science fair. This model illustrated the importance of solar energy and the various uses to which it could be put. We also presented various models like soil-less agriculture, motor run by nitrogen gas (highlighting the need to control pollution and improve the environment), and the legendary story of *matsya vedh* in which Arjuna shoots a moving fish when he is allowed to see only its reflection. Another model which was much appreciated was the 'world clock'. This model was designed to indicate the time in various countries at any given moment. The child had to just manipulate a disc which had the names of different countries on it. My reasons for undertaking such experiments were to foster curiosity in the students and to motivate them to develop an experimental or learning-by-doing approach. I believe such an approach will help the students to learn to stand on their own feet and create a place for themselves in society. I also subscribe to various magazines like Wavelength, Science Review and Maths Review. I summarise the information given in these magazines and share it with the students.

Initially I faced problems of time and money. Most of my spare time went into these activities and very often managing my family and work together became difficult. But my colleagues always helped. The education inspectors and the members of the town primary education committee often arranged for financial help. Their encouragement helped in maintaining my morale. Some of my ideas did not work out and the students used to feel sad about the failures. However, the parents stepped in during those periods and pointed out the successful work already done. Especially on parents' day, many of the parents used to honour and encourage us in public.

Periodically I used to monitor whether the involvement of the students in developing models and doing things with their own hands was contributing to their learning. Initially I used to be happy with just the effort they put in and their enthusiasm. Later on I realised that students were asking questions related to the theory behind many of the activities. This made me look at learning in a new light and I was able to find out whether the students understood the different aspects of what they were taught. My co-teachers have also been inspired by these activities to read the literature available on the various experiments and models. However, I have often found it difficult to know what is going on where. Perhaps periodic training sessions for teachers, in which successes and not failures are highlighted, and connecting teachers through some other mechanism may help in improving the quality of teaching. I have retained the habit of writing short poems. Wherever I go I take a pencil and a diary. As soon as some new thought occurs to me or when I hear a striking sentence I jot it down. From these jottings I compose poems. This activity helps me personally. After retirement I wish to devote myself to educating the children of deprived sections.

CASE 12

ZOHRA D. DHOLIA

“Teachers should also be open to changing their teaching styles. At present children are not in a position to learn everything during the time spent in school”

My mother was my main source of inspiration. She encouraged me to study knowing that the educational achievements of my Khalifa community were poor. My father had studied up to the third standard and he also encouraged me. I was weak in mathematics and leaned towards the arts. From a young age I like handicrafts and won many prizes for my craft work. I was invited to the then Soviet Union to exhibit my products, but I was unable to accept the invitation because of economic constraints. I retained my interest in studying and completed my Masters in Education in 1982 and my doctorate in 1990. My interest in folk culture led me to research the songs of Kutch and Rajasthan. I travelled to many interior villages and went to those women of the scheduled castes and fishing communities, illiterate but repositories of folk songs, who helped me understand how these songs had been handed down over generations. I also managed to record more than 1100 songs. For this purpose I had to spend my own money and had to face the ridicule of fellow teachers who felt I was wasting my time and money.

Research as the basis of educational practice: Open schools

I believe that good educational practice has to be founded on relevant research. For instance, wastage was a major problem in our area. I decided to research this phenomenon from a psychological angle. Children who attend one school are from a highly differentiated society. The domestic, social and economic environments are diverse and affect the educational performance of the children. In one experiment, I tested my class of forty students and concluded that 23 of them were ordinary students. Twelve students could be considered average. The rest were good students. I then studied the 23 students and found that their domestic and economic conditions were oppressive and that these were affecting their educational performance. It was difficult to change these environments but I was able to create different conditions in the school. I started a three-month programme of open classrooms for these children, in which the children were free to explore drawing and handicrafts or other areas of interest, initially. They were then introduced to the formal subjects of the syllabus. On retesting after three months, I found that their performance had improved by about 40 percent. More importantly, drop out could be avoided.

The average students were from middle class families who did not have any domestic problems. However, they had the habit of telling lies even in ordinary matters; they used to play truant and were irregular in attendance. There was a kind of fear in the minds of these students. I contacted their parents and tried to make them understand the problems of the students. After continued efforts with the parents, the attitudes of the children improved remarkably. They became regular in their attendance and a test showed that the gap between the average and the good students had narrowed. The students observed me making these

efforts and responded by showing a lot of interest in the school. The most important result was that I was able to arrest the problem of wastage which had been very obvious earlier.

Teachers should also be open to changing their teaching styles. At present children are not in a position to learn everything during the time spent in school. For instance, to teach children about stars, planets, and the sky, I have to take the students out into the open at night and teach them.

Literature, art and music in education

I have used my singing and handicraft skills to teach children. I encourage them to take part in youth festivals, school competitions and singing contests. I have also prepared many wall charts which depict natural scenes, by using actual material like rocks and sand. I have many such wall hangings to raise money for my school.

Retaining girls in school

Many parents do not let their girls study beyond the fifth and sixth standards because they feel that the girls are approaching marriageable age. Other parents want their girls to stay at home for domestic work. The result is that the development of these girls gets stunted. There are no easy solutions to such social forces. One can only try to educate the parents. Very often, I found the responses of the male members of the family encouraging. It was more difficult to convince the mothers. The male members had been exposed to the outside world and had seen the role that education plays in shaping women. I undertake to do the administrative work like form filling if the girls continue with their education.

Understanding the economic role of children

Sometimes good students are forced, on account of poor economic conditions at home, to work as newspaper boys, hotel boys or shop assistants. I believe in giving special leave to such students. Often I permit them to attend to their shops even when classes are on. I have found that the students appreciate such gestures and respond with regular homework and good academic performance. Such a liberal policy helps in retaining children in school, without affecting their learning. Very often, I have had to explain to students how to start their own businesses. They are curious about such matters and I can see that they are worried, even at such a young age, about their future prospects.

In developing countries there are facilities for imparting education through 'mobile education institutions'. Educational video cassettes, slides, and similar aids are being used nowadays for education. This manner of taking education to children can be combined with a residential system of Ashram shala education to achieve universal education. Social and economic conditions are not static. They are bound to change. The physical infrastructure available to families will improve. Teachers need to think about how to meet these changes. A more contemporary example is the rapid development of the electronic media. Exposure to television

is a means through which children learn. How to tap the medium for educational purposes needs thinking about. For example, the life and works of national leaders may be collected, put on video cassettes and a library built up by a cluster of schools. These are ideas worth pursuing.

CASE 13

NATWARBHAI J. VAGHELA

*"I believe in the religion of humanity; if you do good the good returns to you . . .
Whatever one finds interesting and useful during one's educational practice
should be shared with others"*

My first posting was in a small town, Khambhat. Many people and works influenced my educational practice during my formative years. I would like to mention the most important of these. My first principal, Ms. Kamlaben Brahmbhatt, a very sincere and loving teacher, observed me for some time and remarked that the teacher had already been born in me and that I only had to awaken him. Hers was an important influence which settled me on my career path. Maulvi Gulamnabi Rizvi taught me that educational practice also involved concern about social and economic problems. Shri R.S. Dave, an outstanding educationist, Bhagavatacharya Premshanker Jani who left his home and raised resources for 83 schools through his *kathas*, and the religious leaders Haripuri Maharaj and Dongreji Maharaj were inspiring influences. Finally, Dr. Ambedkar's writings motivated me to combat social evils like untouchability through my plays.

Audio-visual aids

My main contribution has been in designing my own audio-visual teaching methods. Initially, I found the students were less interested in maths and science. They were afraid of examinations. I decided to change the concept of 'chalk and talk' and decided to start using audio-visual methods. I noticed that the children spent their pocket money on film strips from cinema reels, which they viewed in their spare time along with the other children who could not buy them. This inspired me to make slides using plate glass. I made my own projector using a cubical box, two convex lenses and a 100W bulb. I projected the images onto a screen. Later I recorded, on audio cassettes, relevant commentaries for the slides.

Initially, I had some difficulty in getting square glass slides; my time-schedule was also tight. I also experienced some problems in drawing on the glass. I was well supported by Mr. Gordhanbhai Patel, Mr. Kushalbhai Makwana and Mrs. Martha Rathod, all ex-head teachers, and by various ex-students of mine. Some money for my experiments came from Mithral village leaders, district education inspectors Fatimaben Vanera and Arjunsinh Parmar, and my colleagues Samuel Christian and Harman Patel. I converted certain slides I used frequently into permanent slides. Then I classified the slides and coded them. Initially I used a screen. Later I used only a white-washed wall.

Students were very interested and started coming regularly to school. This created respect for the school in their parents, who were then ready even to support the school financially. The home work became regular and children started narrating their school work to their parents. Some of the parents visited the school to view the experiment themselves. They showed keen interest and helped as and when necessary.

I decided to research these methods first and compare them with the traditional methods of teaching. I divided the students into two equal groups. One group was taught by the traditional methods and the other with the new audio-visual method. The latter group showed better performance in examinations, 85 per cent of the children passing in contrast to the usual 45 to 50 per cent. Attendance increased from an average of 63 per cent to 95 per cent. I found this group had acquired more curiosity. Later I employed the new method for the whole group. The children then started assisting me in my teaching. They were happy that they were getting good education and I was happy because I was providing good education. Children nowadays stay at home only under unavoidable circumstances.

The poor physical condition of the district *panchayat* schools is well known; my experiment became its victim. In 1992 the roof supports collapsed after heavy rain and the roofing sheets were blown away. The projector was destroyed, but I salvaged the slides.

I had exhibited my method in science fairs organised by the District teachers federation in Kheda in 1986-87. I also wrote an essay on it which won the first prize and was later published in an educational magazine. Many teachers discussed with me my innovation. Many schools wrote to me their experiences with the method. I then presented the method at a state-level fair in Mehsana. Some of the teachers who picked up this method at the fair later wrote to me their experiences. This was very encouraging. My participation in such fairs and competitions was facilitated by an excellent District Primary Education Officer, Mr. Abhesingh Parmar. Without the support of such people in the administration our school would have found it difficult to achieve the recognition that it enjoys today.

Our school concentrated on three areas in these fairs: energy savings, educational technology and essays by teachers. Energy conservation is an area of concern for our school. I decided to do something with the traditional wood-burning *chulahs* that most people in our village were using. I found that a lot of heat was being wasted. So I modified the *chulahs* by making two outlets, one on either side of the *chulha*, so that two additional burners were created. Items like pulses which needed more heat could then be placed on the main burner and rice and vegetables could be cooked on the ancillary burners. I realised there was further scope for modification and added another burner at the back for boiling water. I added thick iron doors to the ancillary burners to shut them down when they were not in use. I also added a grille to retain the charcoal but not the ash. The Indian Oil Corporation which has its pipeline passing near the village appreciated this effort and started taking an interest in our school. They have donated money for the school infrastructure and we are working out a plan for long-term collaboration.

Cultural media as educational tools

My interest in cultural media as tools for education goes back to my initial teaching days. Ms Kamlaben Brahmabhatt and I had done many group programmes. We worked together on Govindram Vyas's play 'Rakheval'. It well received and we were recognised in public for the educational use to which we put the play. During my later years I initiated training programmes in which the participants were oriented towards mono-acting, folk dancing, story telling, debating, essay writing and folk dresses. In order to develop verbal abilities and remove stage fear from children, I have organised *Rasotsava*, a cultural activity in which students take part and drama competitions. I have written many plays.

I have developed many 'teaching dramas'. Some of these are *The Battle of Plassey* and *Bhakta Dhruva* (history), *Abhadchhet na pap* ('The Sin of Untouchability', a social drama) and *Sattar pancha pachanu* and *Karo kankuna* ('Let us begin something good', a literacy drama). With the help of my colleagues I organise traditional *dayro*, a folk form of story telling through songs. These activities have enabled me to integrate my personal skills and interest in cultural activities with my teaching. I think it is important for teachers to have some such hobbies or interests which are amenable to educational use.

Encouraging teacher colleagues

One of my firm beliefs is that it is the duty of good teachers to spot innovative teachers and encourage them. I am interested in education through self-designed and self-prepared teaching aids. I looked for teachers with ideas in this field. Till now I have identified and trained 13 teachers. I add my ideas to their plans and also raise resources for their activities. These teachers have prepared their own educational aids. Some of them are outstanding and we plan to exhibit these ideas in teachers' meetings. Of course, to put in sustained work with such teachers, I should be able to get them posted in nearby villages. This has not been possible always. The group of young teachers I am working with meet at my house on Sundays and other holidays for discussion. It should be noted that we carry out these activities at our own cost. We see this as part of our professional development. I have always operated under scarce resource conditions and will continue to do so. Shortage of implements -- especially wood-working and metal-working tools, shortage of space for a workshop and a permanent exhibition centre are important constraints. The distance of the urban areas from where raw material comes adds to the costs. I wanted to establish a study centre for subjects like botany, but the absence of nearby horticultural or agricultural centres has been a problem. However, such constraints will always be there and one has to work within the resources available.

I think the services of such good teachers are not being fully utilised. Some ways of enabling them to help other teachers have to be worked out. This will motivate the good teachers and inspire the not so good teachers. My mentoring initiative has been very satisfying for me. It has challenged me to keep pace with the better elements of the younger generation.

In spite of the good work put in by many teachers I find that the institutional arrangements for primary education are weakening. Support in updating teaching material is not forthcoming. There is a lot of rhetoric about teaching aids and various levels of learning. Authorities are not ready for firm action to maintain quality of education. These trends make me fear for the future of primary education. Individuals like me are trying their best at their own levels. But something more needs to be done. What maintains my sense of optimism are two beliefs: I believe in the religion of humanity; if you do good the good returns to you. Secondly, whatever one finds interesting and useful during one's educational practice should be shared with others.

CASE 14

SUSHILABEN K. VYAS

"I do not believe in imposing any legislation on children who are attending school for the first time"

Early influences

My father was a primary school teacher. and he encouraged me to study. As soon as I finished my secondary schooling, I came to know about a government drive to recruit women primary teachers. I appeared for the interview and was selected. About 400 women teachers were recruited. I was the only one who had completed secondary school. I started my teaching career in a school in Becharaji. I got married in 1960. My husband was a graduate and he sent me for my teachers' training course. He also motivated me to pay attention to various extracurricular activities in the school.

My father received the national best-teacher award in 1964. At that time I went with him for the award ceremony and thought to myself that it would be nice if I could also get an award. He was very active in taking up teachers' issues and was also a member of the executive body of the Gujarat Library Association. His motto was 'have faith in others'. He was my first mentor. When I became a teacher for the first time he started some kind of an informal training programme for me. He added to my work load quite mercilessly and within six months I was able to do administrative work like preparing monthly registers and salary bills of staff. I now realise the value of such rigorous initial training. For me this experience was valuable since as a woman I often had difficulty in making male officials listen to me.

For a brief period I was in Harij before returning to Becharaji. The school had both boys and girls. Initially there were four teachers, two of us were women. My husband was very interested in social work and started doing various things for the village. He was also elected village sarpanch. He has been an important influence in my educational work.

Enrolment of girls: initial research

I felt that the co-educational status of the school was hindering the participation of girls in education. I decided to study the problems of enrolment of girls. I carried out detailed individual interviews of ten girls from each caste group. This gave me an appreciation of the life of the labouring classes. The people did not have any physical facilities for study. The parents were not educated and did not want to send their children. to school. I therefore started an awareness programme among them, especially among the women. I focused on the parents of the socially and educationally backward castes. My argument was that education is a means to avoid exploitation. It may not guarantee jobs, but it can teach girls how to read and do accounts so that nobody can cheat them. After intensive meetings with the parents I decided to launch a separate school for girls.

Establishing a school for girls

I demanded a special school from the District *Panchayat* Committee. When I did not get a good response I started to mobilise the community. We formed a local committee of five people to coordinate the establishment of a new school for girls. I requested the parents to contribute to the school. Some donated building construction materials, many paid for the transport of materials. At last I was able to construct a school without taking any money from the government. At that point I realised that it was not necessary to go the district to beg from the government. During the last 35 years I have never visited the district headquarters for official purposes. As my work became better known the visits of officials were enough to maintain my relationship with the district *panchayat* and the government.

Mobilising resources for the school

All the resources that I have mobilised for the school were from private donors only. I never lost any opportunity to tap resources from the better-off parents. Once a parent came to school and complained that the classrooms were hot. He was concerned that his daughter might find the discomfort unbearable. I told him that he had to think of all the girls as his daughters and that he should buy some fans for the school. He immediately did so.

Whenever I hear that somebody was going to a big city like Ahmedabad I ask that person to pick out something from a list of things that the school needs, that he or she would like to donate to the school. These are small items that the parents find hard to reject. Usually they are some educational toys or printed charts available in the cities. I have always found that people are happy to do something for the school. We register such donations and the donors' names in our dead stock register.

Once a young man of the village who had settled down abroad came to see me. He wanted to do something in memory of his parents. I put forward the requirements of the school. He immediately donated money for five classrooms. The district *panchayat* came to know of this and matched the grant with money for four rooms. We constituted a five-member committee to deal with such donations for my school. Apart from myself, there were three respected people of the village and the temple priest on this committee. We decided that all donations would be duly acknowledged, but the names to be displayed in public would be those of the women of the donors' families. My son was one of the initial set of donors.

Quite some time ago, I met an old woman from Bombay in the Becharaji temple. She told me that she wanted to build a water room at a particular site. I replied that my school was also in need of a water room. She pondered this request and told me, "I will allow chance to decide the location of the water room. I will prepare two pieces of paper, one with the name of the school and one with the original site. You pick one. If your school turns up, you can build the water room, but you must do it in three days." I agreed. Fortunately, I picked the paper with the school's name. I immediately called a meeting of all the *panchayat* members. They took up

the task as an emergency and completed it. The old woman has since visited the school many times. Every time she brings something for the children.

I have always preferred to deal with donations in kind. Sometimes people may harbour suspicions regarding the use of money. Of course, for large amounts of donations, the five-member committee has been the administrative authority. Very often, we have started some essential work, even in the absence of a donor. Fortunately for us, donations have been forthcoming. I believe that if one mobilises resources with total transparency and integrity, the job is not difficult.

Special identity for the girls

When I became principal of my school, I wanted to build a clear identity for the girls of the school. I discussed with many parents the idea of having a uniform for the girls. The parents liked the idea, but some of them felt that their economic status would make it difficult for them. I met some local traders and mobilised resources for uniforms of students from poor families. This has become a tradition in our school. My concern for educating girls extended to involvement in women's issues. I am convenor of the *Mahila Suraksha Samitis* in 20 nearby villages.

I have also tried to guide young teachers who very often do not understand the minds of small children. A child coming to class 1 is facing a new and threatening environment. Such a child should be treated gently and affectionately. I do not believe in imposing any legislation on children who are attending school for the first time.

Other efforts

The system of automatic promotion was started with the positive aim of preventing the very young children from feeling they have failed. Later on, we find about ten students in classes 3 or 4 weak. We pay special attention to such students after informing their parents. If the performance of the children is still poor we call the parents and explain to them that the child needs more time before promotion to the next class. Such instances are rare.

As my relationship with the parents of the village became stronger the enrolment of girls started increasing. Initially the girls used to come late. I did not insist on timings, but spoke to them about the reasons for the delay. I believe that a teacher should show a lot of sympathy when dealing with children from very difficult economic backgrounds.

We occasionally organise various cultural programmes in our school to which reputed artistes are invited. Such occasions are also used to add to the school fund. The school also takes part in all village festivals.

Almost all the girls of my village study up to the higher secondary level now. I keep in touch with them even after they pass out of primary school. Many of them want a college education. I

visit the colleges myself and spend my money on the admission procedures. I even arrange for further help. I also maintain a list of my contacts who are in a position to employ girls I recommend. These girls again are from economically difficult backgrounds and the ones who do not want to go to college. I believe that my role in the lives of the girls whom I raised when they were very young extends up to the time that they are settled in life. Many of my older students remain in touch with me and this is a source of immense satisfaction for me.

I have not been able to interact with good teachers to the extent I would have liked. Such teachers should be identified and allowed to visit different schools for talks or workshops. This should be done regularly. Such an initiative can help new recruits. Good women teachers can be a source of support to other women teachers who very often have to face comments on their character.

I often dream of building, after my retirement, a self-sufficient complex for divorcees, destitute women, and for those who have suffered from rape. I would also like to take care of first-generation learners and single illiterate women.

CASE 15

BHANUMATI B. UPADHYAYA

“I have been idealistic and this has helped in going after difficult goals. Especially, women teachers have to stand like a wall, protecting the school and taking care of the students”

I was the seventh and youngest child in my family and the fifth daughter. In those days it was believed that a daughter is a burden to the family. The midwife who had come at the time of my birth told my mother that there was now a fifth rock in my family. My father overheard the comment and replied, “I have now got a jewel in my home.” My parents started calling me a jewel and I grew up with the feeling that I was special. The freedom movement was on when I was growing up and I used to read newspaper accounts of the agitation and efforts of the freedom fighters with great interest. My childish mind used to constantly worry about when slavery would go. I recall those days often because they motivated me to take up teaching and to try to do something good for society.

I studied in Ahmedabad and Malpur, a princely state in those times. I like science and languages and passed my vernacular examination easily. I wanted to travel around the country but in spite of my enthusiasm I was unable to do so. In 1957 I joined my teachers’ training course. I was 19 years old when I started teaching. After four months in my first village I moved to the Malpur village school. Shortly thereafter I got married. The principal of this school was supportive and asked me to teach the first and second standards. I decided to study for my degree and enrolled in a nearby college. Within three years of joining as a teacher I became a graduate.

Enrolling girls: dealing with parents

The chairman of the district education board at that time was a well known freedom fighter. He happened to notice my work and suggested that I should be posted in a problematic village so that such villages might get the best people. This kind of thinking was contrary to the common practice of sending the worst people to places which needed good interventions the most. He got me posted to a small village which had one room for a school. The school catered to five surrounding villages in addition. I started conducting classes under the trees. The villagers were mostly farmers and used to leave very early for their work. The young members of the family took care of the even younger members. Very often it was the girl child who took care of the young children. The enrolment of girls was very poor, and even those who enrolled usually left after the second or third standard. I decided to visit all the farms of the village so that I could catch the parents individually. I explained to them the importance of educating their girls. The parents had one stock counter question: “Who will take care of the domestic work?” My stock reply was to ask them, “How do you think you will communicate with your girls once they get married and go away?” The people felt I was talking their language and liked my persistence. Some of them started sending the girls on condition that the girls would come back in the afternoon. I agreed. I started a new first standard for the girls and after a few weeks had about 60 of

the 200 girls in school. Slowly the school grew from the three standards it had when I joined to a full primary school of seven classes. I considered this school my ashram. This sense of ownership also helped me to improve the infrastructure of the school. I mobilised resources for the school by staging plays. With these resources I installed a water supply and improved the physical environs of the school. These efforts were appreciated by the district education authorities.

I then returned to Malpur village. This village was dominated by the Patidar community. Since Malpur was a princely state in pre-independence days, the descendants of the royal family had some property in the village. I approached the family and obtained a building for the school. My teacher colleagues and myself mobilised funds from the local community and the taluka *panchayat* for building an additional room in the school.

Girls of the scheduled caste Vankar and Chamar communities were completely outside the education system. I started dealing with these communities on a regular basis. During my visits to their houses, I used to discuss issues related to cleanliness of the locality, inculcating good habits and promoting education of girls. The women used to tell me that if the girls were to get educated they would run away. I retorted that even if they ran away they would at least write letters to indicate, not where they were, but that they were alive. The women enjoyed this spirit, but I also realised that such a retort gave them a new perspective on the issue. They were more free to talk about the positive side of educating girls.

Use of 'rakhi' to enrol girls

However, enrolment was not picking up as well as I wanted it to. Then the festival of *Rakshabandhan* gave me an idea. On one particular *Rakshabandhan* day I went to the Chamar locality with about 200 rakhi threads. I tied these threads around the wrists of all the male members and we celebrated the festival. After the festivities were over, in accordance with the custom, the men asked what gift they could give me. I told them, "I am your sister now, I do not want money. I do not want food either. Please give me your daughters for my school." The men could not refuse and promised to cooperate. The next day there were 15 girls from that locality in the school. Slowly all the girls started attending school.

Enabling children develop pride in their appearance

The school had a good source of water. I provided bathing facilities for the children and started combing their hair. They started taking pride in their appearance and felt that the school was an attractive place. In addition I made the children work in groups since some children had obviously started with an advantage. I made these children teach those who were weak in their studies. I also started coaching classes for children of classes three and four who were weak as a result of automatic promotion in their first two standards.

Social service

I decided to involve myself in social service activities along with my teaching activities. I took special interest in organising relief work, inculcating the saving habit in people, providing guidance to women in matters of child care and disease prevention and spreading the message of good conduct among the women of remote areas of the taluka. I also involved myself in educating adult women. Many women, including those in their forties, participated enthusiastically in the effort. I have been working in an educational trust for about 25 years now. My other achievements include organising a *mahila mandal* and getting a water shed constructed for animals and birds.

I believe in the qualities of patience, discipline, and sympathy for students and their parents. I have been idealistic and this has helped in going after difficult goals. Especially, women teachers have to stand like a wall, protecting the school and taking care of the students. My interest in literature and the writings of Kaka Kalelkar, Gandhiji, Vinoba Bhave and R. V. Desai have been my inspiration. The people whom I have helped in the past, are repaying me by showing me respect. This gives me great satisfaction.

CASE 16

KANUBHAI M. SOLANKI

“My work is my main motivation”

I was born into a poor family in a small village of Gandevi taluka of Valsad district. My father died soon after I was born. I was brought up in my uncle’s house in Kadipur. My mother was firm that I should grow up to be an educated man. I belong to the Rohit caste, a scheduled caste, in which educational levels are very low. Some of my school teachers encouraged me to study. I also performed well in the various cultural contests that the school held. I started teaching in 1958 in a village near my village of Kadipur. I wanted to study further, but family responsibilities precluded this option. In 1966, I undertook my teachers’ training course.

Village-school committee

In 1979 the District Education Committee requested me to take up the Kadipur school. This school was in difficulties. The teachers were divided into quarrelling factions. The principal had failed to resolve conflicts, with the result the village was unhappy with the school. The villagers asked the district authorities to transfer me to the village. Hence the request, which I accepted. I felt that time would bring about peace and harmony among the teachers. What was essential was to focus their attention on related educational activities, and also to bring the parents and the village into the school as stakeholders. Within three days of my appointment I called a meeting of village leaders and others in the school. The district education officer had just circulated a note on forming parents’ associations in the villages. I brought this to the notice of the people and requested them to help the school. I involved the *panchayat* members, the sarpanch and other educated members of the village in this effort.

I started with an informal parents’ committee which had a treasurer, a secretary and other executive committee members -- all parents. Formalising this into a village committee and making it an essential part of schooling in the village has been my most important contribution. One of the first tasks of the committee was to raise resources for the school from within the village. We fixed one day as donation day. On that day we mobilised about Rs. 10,000. This money was spent on improving the infrastructure of the school. The committee has since been involved in white-washing the school, attending to repairs, and even constructing additional classrooms. It has also taken up many cultural and extra-curricular activities as part of its contribution to the school.

For instance, it has coordinated health camps. The then district education officer was impressed with the committee and the school and wanted to test our organisational abilities. So he asked us to organise state level health camps in the school. We carried out the task successfully, and our school’s stock rose. Our school has also hosted various taluka-level activities like *Tarun Mahotsav* and other cultural contests. The committee has also initiated a *balmandir*. It also manages a fund for the school’s electricity bills.

With such active involvement of the village in the school, the internal problems of the staff were resolved in a few years. Many of our teachers realised the importance of such a functional village committee in increasing their motivation. At the moment, the village committee consists of 25 members, including a retired post master as President, a farmer as Vice-President, and myself as Secretary. It meets about five times a year. In addition, it meets if there is an emergency. It may be a good idea to have regular competitions to identify good parents' associations or village committees. Such structures may be functioning in other villages, but we do not know where they are.

Mobilising resources from non-residents

Many members of Kadipur village have settled down in Europe and America. Whenever they visit the village we organise a public meeting with them and request them to contribute to the school. We have also corresponded with the NRIs of the village with the purpose of raising resources for the school. From such donations we have ensured that the economically-weak children get slates, pencils and other educational material. We follow two principles. Before any request for donations goes out it is discussed in the committee and passed as a formal resolution. Secondly, all transactions are carried out in a transparent manner through a bank account which the village school committee maintains.

We have also tried small local experiments to raise money for the school. For instance, in 1984, with the help of the Forest Department, I raised a nursery of eucalyptus and casuarina trees in the school compound. I made this into a 'learn and earn' scheme for the children, so that they could work on the nursery and earn some pocket money. The profit from this venture was used to buy a microphone system for the school. I also believe that any cash awards I receive as a result of my work in the school, should go to the school. For instance, when I received a best teacher cash prize I used the money to make display cases for the school. The resources raised from non-residents have been instrumental in enabling us to build additional classrooms, a laboratory and to acquire audio-visual equipment. The video/ audio facilities are especially important since they are powerful educational tools. Other primary schools should strive to establish such facilities. I am also planning to install a submersible pump in the school so that the drinking water facility is completed. We also spend small amounts for taking all our school children on annual excursions.

School experiments

I do not consider my innovations as special experiments. They are small efforts for increasing efficiency of education within the framework of educational reform. I hope these examples can motivate other schools.

Handwriting improvement: Good handwriting is one aspect of good education. Handwriting also reflects our personality. Therefore, I took up this innovation. I first gathered teachers with good handwriting skills. I made them demonstrate the process of writing on the blackboard. I

used modules of five lines at a time. The children copied the process on their slates. Then they repeated the practice on ruled notebooks. We also organised contests and sent the best students to take part in hand writing competitions conducted in various parts of the state.

Mathematics project: This experiment was undertaken with two groups of students -- weak students of class 3 to 7 and students of classes 1 and 2. A group of clever upper primary students was given the job of teaching classes 1 and 2 numbers and simple operations with numbers. This move was necessary to support the scheme of automatic promotion at these levels. Such schemes should be introduced in every school so that the students can be oriented towards numbers. In another experiment, children of classes 3 to 7 were also taken up for extra mathematics instruction.

Spelling Project: Correct spelling is the basis of developing skill in language. We developed an experiment in which children were taught a graded set of spellings -- from simple to complex words. First a vocabulary of simple words was developed and taught. The children were then tested, before they moved on to the next higher level. The children who performed well were praised during the prayer meeting.

Socially useful productive work: This project was designed to develop the interest of children in making useful articles out of materials like broken bangles, tamarind and *ber* seed, empty match-boxes, empty bags of pan masala. Such activities develop in children an urge to create art out of waste. We have also organised contests so that children could exhibit their articles. The government could provide small grants for such activities which provide an outlet for the creativity of children.

Coaching for classes 1 to 3: Every teacher keeps a record of children who are not performing well. We run special coaching classes for such students. A woman teacher who performed very well in this activity was rewarded by the village committee. We also take the help of good students to teach these students.

Many of these small innovations did succeed in increasing educational performance. However, there were many problems in the initial stages. I did not know where to go for support for my activities. Very often the children were very enthusiastic and their expectations increased. When I could not meet these, there was a setback. Fortunately for me, the village committee helped regularly.

Social activities

I have identified individual students who need economic assistance to continue their studies. Sometimes individual donors come forward to support such students. For instance, a bright *halpati* girl was about to drop out because she had to work to supplement the family income. A donor provided some money from which I met her expenses for three years. I contacted the high school which offered her food and stay in return for some domestic work. This girl is now a

teacher and supports our school. There are similar cases of deprived children who have been helped and who are well-wishers of the school today.

I was born into a scheduled caste, but I have succeeded in getting the support of all castes. I consider this a major achievement. Till the beginning of the 1980s, caste discrimination was a common occurrence. I thought about the problem and decided to use the religious practice of *Satyanarayan Katha* to do something about bringing different groups together. Legend has it that a shepherd once organised such a *katha*. When the *prasad* was being distributed a trader refused to accept it, saying that it was made by someone from a 'low' caste. The gods did not like this and he was ruined through a curse. The legend was popular, but no one in the village had tested its strength. I organised a *katha* in the *harijan* vas and invited the entire village to the function. I distributed *prasad* to everyone, including those who did not attend. The village people, of all castes, were under the influence of the legend. They, however, appreciated my action in a positive spirit. This incident proved to be a breakthrough in inter-caste relationships in the village. It also made my task of attracting children from the 'lower' castes easier, since the school was then seen as an institution 'for all'.

I am also involved in strengthening the institutions run by my community. I have mobilised money for building a community hall. I am the Secretary of my community association. This association undertakes relief activities during natural calamities. It also rewards good students of the community. My work is my main motivation. I also derive inspiration from the teachings of my guru, Sane Maharaj.

CASE 17

PRATIMABEN H. VYAS

“When I was in the ninth standard an illiterate woman used to make me write letters to her parents complaining about the torture she had to suffer from her parents in law. . . I realised that literacy had the potential to give some sort of relief”

I got married in 1975, soon after my teachers’ training. I did not work for a few years. Then my husband lost his job and the burden of the family fell on me. I became a teacher in 1980 and started by teaching the sixth standard in Kikad village of Bhavnagar district. Initially I felt that my training was not helping me. I decided to learn how to teach in a better fashion. I looked at the home experiences of the children and made a list of the activities which can be used as examples when teaching from the text book. For instance, the activities in the kitchen -- brinjals expanding when heated, the *dal* spoon becoming hot, milk boiling over, tea powder granules moving up and down when tea is being prepared -- lent themselves easily as illustrations of topics like heat transfer, heat exchange and conduction. I found such examples resonated with the experiences of the children.

Dealing with abusive children

However, children are also exposed to experiences which I think are undesirable. Many teachers may not like to talk about this, but I think the child’s experiences result in a mixture of good and bad. For instance, in my first school, the upper primary boys enjoyed using filthy language and abusing their teachers. As a young woman teacher, I had to listen to such verbal abuse. The boys also filled the walls of the school toilet with filthy language. These were practical problems which many teachers were afraid to deal with. I studied the culture in which such students grew up. Most of the students were from very difficult socio-economic backgrounds. I found that their behaviour in school was just a reproduction of their home behaviour. Respect for authority figures like teachers and respect for the women in the family were not part of their outlook. Many of the fathers also encouraged their children in such behaviour. I decided that teachers, by condoning or by admonishing such behaviour were only adding to the enjoyment of the children. One day, when a boy shouted out an abuse, I quietly told him, “I return the abuse with my compliments. Please take it back.” The boy and his companions were shocked. Their behaviour changed for the better. At least, the abusing stopped.

I got the toilet renovated with mud which I brought in from outside. I also built a mud wall around the toilet. My co-teachers saw me taking the initiative and their diffidence disappeared. They brought mud and cow dung and constructed a fencing wall for the school. This was the best we could do with only our courage and labour as resources. I then arranged a cultural programme in the school and mobilised donations from the trader community of the village. I worked here for just over a year before I was transferred.

I have been teaching in my present school for a few years now. Initially I found that the parents of the village were not at all interested in the activities of the school. The children here were like the ones I had faced in my first village. They had the habit of abusing their teachers. One day a boy tore up my attendance register. I did not get angry but, with sympathy, told him that it was not 'my' attendance register he was tearing up -- it was his own and his friends' names. The boy was quiet for a few days and then prepared a new attendance register out of the old one. This child is now a regular student in Baroda.

Self help initiatives to improve the school

There were no facilities for water or for cooking the mid day meals. I negotiated with the village *panchayat* for three months but with no result. With the help of my women colleagues and the students, I dug a channel for bringing water. A parent of the village saw this and mobilised funds for a pipe and a tap. Another person donated a water tank and the school had a regular supply of water.

The building was also in a dilapidated condition. When I saw that the village *panchayat* was least interested in making the school an institution the village could be proud of, I mobilised the students to collect mud and cow dung. The girl students responded immediately and we started plastering the walls of the building. Some of the parents did not like this. They felt that their children should not be doing such work, which was actually the village *panchayat's*. I explained to them that the children were working voluntarily and that they themselves had not been able to make the *panchayat* do anything.

Educating girls of tradition-bound communities

The village is dominated by the members of the Rajput community. The education levels among the women of this community are very low, but some girls were attending school. When I wanted to stage a drama for mobilising donations for the school, I selected a girl from this community as one of the actors. The principal of the school initially opposed this step since he felt it might create unpleasantness in the village. I felt that we often imagined, out of our own fears, that things would go wrong. I accepted responsibility for anything which might go wrong. I spoke to the parents and trained the girl. Her performance was appreciated and we collected a large sum. We have also attempted to make our transactions transparent in order to gain the confidence of the community. Once we had taken the students out on a picnic. Some money was left over. We kept some of it for a water tap connection and returned the rest to the students. This gesture was appreciated by the students and their parents.

I believe that coming late to class is not as important as coming regularly to school. Many children do their domestic work before reaching school and I ignore late attendance when I know that the child does such work. Even in cases where a child comes late on account of fear of the school, I do not hold the child responsible. Once a first standard girl was brought to school by her elder sister after a lot of persuasion and beating. I told the child that she need not

sit in the classroom. She could leave her bag with me, and whenever she felt like going home had to just take the bag and leave. The girl left soon, but came back and within three months, became one of the most interested and regular students.

I have tried to add to the list of examples that I had prepared when I started to teach. Whenever I meet other teachers I come to know of other examples. I have also attended a few workshops for teachers and have picked up some abbreviations and formulae which can serve as memory aids to the students. I also read whatever books are available on teaching methodologies. When I was teaching the first standard I always taught the alphabet through birds and animals which are familiar to the children. For instance, *chakli* is a sparrow. After drawing a picture of a *chakli* I used to relate the first syllable, 'cha', to the alphabet 'cha'. I found such associations useful in helping the children learn faster. I have also used the same principle to teach the harder alphabets of Hindi in the upper primary classes.

I have always interested myself in issues concerning women. When I was in the ninth standard an illiterate woman used to make me write letters to her parents complaining about the torture she had to suffer from her parents in law. I saw how she was suffering and I realised that literacy had the potential to give some sort of relief. Since then I have been helping illiterate girls learn to write. I still have many years of my career left and I hope to do my work sincerely, treating my school as I would my own home.

CASE 18

SHANKARBHAI R. PATEL

“As a teacher staying in a village, one cannot remain aloof from the concerns of the village. Involvement in developmental activities in fact may establish the credibility of the teacher and help him in achieving his educational goals”

I was born in a poor family and when I was six months old my father passed away. My mother took great pains to see that I developed properly. I grew up in an environment of scarcity of resources. This has motivated me to provide plenty of opportunities for poor students so that they can study. My Guru Shri V. V. Jha has been my mentor and main source of inspiration. I have learned from him to persevere in any activity that I take up.

Attracting children through sports and cultural activities

I started my career in 1957 at Khakhariya Tappa, a village dominated by the socio-economically backward community of Thakardas. The school had classes one to four but enrolment was very poor. I listed many eligible students who were not coming to school. I decided to attract them through sports and drama. I started with folk plays like *Dhartina chhoru* and *Rakheval*. This worked and the number of students who stayed on in school increased. The school was gradually extended up to class seven and the enrolment went up to 92 percent. What was gratifying was to see people of neighbouring villages coming to see the school. Then I moved to a couple of villages where I repeated my sports and cultural successes. After my teachers' training course I went to Mokhasan village and then to a girls' school in Sardhav village. Here I started by involving myself in the youth activities of the village. This established my credibility with the students.

Initially I came across the well known problems associated with education -- poor enrolment of girls, high levels of dropping out. I decided to work through the parents while continuing with the interventions which had helped me till then -- sports and cultural activities. I first tried to identify which child was interested in which game. I then grouped the children game-wise. Different teachers took up the responsibility for different games. I had to organise some equipment which I did with my own money and the contributions of friends. When we started winning district and state level sports competitions, the interest of the village and of the children went up dramatically. I extended my involvement in sports to the district level and formed a district sports association in 1976. I also wrote a book on the various games which can be organised by the teachers. This book has been distributed to many schools.

Involvement of parents

I started contacting the parents on a regular basis so that they could get more involved in the school. I felt that the parents also needed some kind of monitoring aid. I designed a form which

gave details of the child and its performance. The forms are filled by the teachers. The details monitored include attendance, academic performance, health (with the help of the village's doctor). Each child's form is discussed with her parents.

We also started the practice of having regular meetings of all parents in the school. These are organised every few months, at least twice a year. One meeting is specially for the mothers. The parents are informed ten days prior to the meeting through a letter which has a reply slip attached to it. The parents can reply with suggestions for school improvement or their concerns. On the meeting day cultural programmes by children, prize distribution and discussion of school problems and their solution are scheduled. There is a separate session for questions from the parents on any school-related matters. On the same day we also plan the strategies for follow up of the neo-literate adults.

Establishing a school trust

I established a trust for the school which runs the following schemes: book assistance scheme for economically poor students, uniforms scheme, awards scheme for outstanding students who perform well in science fairs, essay contests, drawing competitions etc. and a general education fund for the school. We started with an initial donation of Rs. 10,000 from a private donor. The book assistance scheme is supported mostly by donations in kind. A three-member sub-committee, the principal and two teachers, looks after this scheme. For special learning material like drawing books and map books the bookseller gives us a discount of 20 percent and the scheme provides 30 percent, so that the children can get such expensive material at half the retail prices.

A parent from the village donated a fund in memory of his daughter who had died in an accident. Prizes are given from this fund to the first three students of each class. Another fund awards a best child prize. A committee of four teachers evaluates the academic and non-academic performance of the students and selects a candidate for the prize. The prizes are distributed during the annual day of the school.

The other sources of funds include:

1. Gifts or voluntary donations from prosperous parents.
2. Donations given to the school during marriages and other social occasions.
3. Contributions from private donors and industrialists.
4. Resource mobilisation through various projects submitted to specific donors.

The general education fund is used for improving the physical facilities of school, repairing, maintenance and purchase of educational aids and equipment, extracurricular activities, school decorations and cleaning, library books, laboratory, financial aid to poor students and contingency expenses of the school.

Such registered trusts are rare in the *panchayat* school system. The village *panchayat* and district education committee have passed resolutions recognising the trust in order to add credibility to my activities. I have received support in this venture from a retired Agricultural officer. The fund is administered by the principal with the help of a village committee and is audited regularly. The idea of an educational trust has been adopted by a few other schools of the district which studied our experience.

Our area is relatively prosperous. But I believe that even in backward areas one can find scope for resource mobilisation through putting fallow land to use. In our school we have taken up about two acres of land and raised a lemon orchard. The annual net profit of Rs 10,000 goes into various student welfare activities.

School Adoption scheme: This is a five-year plan for all-round improvement of the school which I prepared in consultation with a noted industrialist who originally hailed from this village. The plan includes (a) physical infrastructure (b) adequate educational aids (c) extra-curricular activities (d) improving the school environment.

Rural development activities

As a teacher staying in a village, one cannot remain aloof from the concerns of the village. Involvement in developmental activities in fact may establish the credibility of the teacher and help him in achieving his educational goals. Along with certain leading citizens, I launched the *Sardhav Gramvikas Mandal*. This organisation has been involved in various welfare and development activities connected with the village. Blood donation, free surgery for economically poor people, tricycles for the handicapped are some of the activities. Under an Indo-Canadian youth exchange programme sponsored by the NCERT two students stayed with me for some time. With their cooperation we built a hut on a barren patch of land, as an annexe to the school. The entire project was taken up as a voluntary *shram dan* effort of the village.

I was invited by the district authorities to take part in organising the literacy campaign in 1990. We decided to use folk media to spread the message of literacy. I trained some of the upper primary girls and we covered many villages. We primarily used the *dayra* form, a combination of stories and folk songs. This effort was much appreciated and I was honoured. This recognition helped me to come into contact with many teachers of our district. After this exposure I prepared a district education improvement plan which is being discussed by the district authorities. The main features of this plan are (a) using good teachers to guide and monitor surrounding schools, (b) community participation in school development through parents meetings and (c) flexibility in administrative structure. I have also suggested that the period system may be adopted at the upper primary level.

Some of the girls from our school have become engineers and doctors. Many others have bachelor's degrees. Almost all have reached high school. This achievement gives me great satisfaction. School education and rural development are the twin farms from which I have

reaped good harvests. The blessings and good wishes of the children have rewarded me adequately, and I will continue to work for as long as I can.

CASE 19

DAOOD I. MACWAN

“I believe that a teacher who always looks towards children as sources of learning has a better understanding of educational problems”

My father was a dedicated school teacher and also a religious leader. I have seen him going around and collecting children from the deprived sections of society in order to educate them. The classes were held in any open space available, very often the verandah of our house. I was inspired by his efforts and decided to become a teacher myself.

Motivating principles

I have often been inspired by my students. I believe that a teacher who always looks towards children as sources of learning has a better understanding of educational problems. Teachers should always be prepared to sit along with students. A second principle I follow is that teachers should always see themselves as part of a teaching community. If there is more than one teacher in a school, then a team forms in that school. Such team work implies that teachers learn from one another. To that extent, it is very difficult for me to take the credit for the ideas that I have implemented. A third principle worth following is that there is no point in going through life with chalk and duster alone; a teacher should try to change society for the better.

The various experiments I have tried out can be summarised as follows:

1. *Activities for promoting national unity*

(a) Indian society is diverse, but today fragmentation appears to be a danger. So there is need to inculcate in children those values which promote unity and also those which counter superstitions, violence and fatalism. We try to do this through short talks and presentations on relevant topics, delivered by our teachers and students during our prayer meetings. At the end of the year, these speeches are compiled theme-wise and made available to the students. Some of the topics are: eye donation, patriotic songs, national symbols, narrations about Gandhiji, Bhagat Singh etc.

(b) Celebration of various festivals like Raksha Bandhan, Diwali, Christmas, Id, and getting together on birth and death anniversaries of national leaders. Children from different castes and communities work together on the decorations. The importance of the events is explained to them.

(c) Regional costumes: dresses of various regions and folk costumes are prepared and exhibited.

(d) Freedom movement: Activities under this head include meetings with freedom fighters, visits to the nearest freedom memorial, dramas conveying the message of freedom e.g. 'Fearless Azad'.

2. Essay writing contests, debates, rangoli, painting, stories through drawings, mono-acting. The subjects reflect national integration: for instance 'India is my country'.

3. Two projects called *Bharat Darshan* (for class 7) and *Gujarat Darshan* have been organised for many years now. These projects were designed as school-based experiments with the following aims:

- Study of the cultural diversity of India.
- Finding out about various monuments in different states of India.
- Preparation and examination of maps.
- Developing the written and verbal presentation skills of the students.
- Understanding folk life in various states, exposure to our temples, gardens, natural resources, birds, animals, monuments, sea resources, martyrs and saints of various states.

Accordingly, the students were divided into groups and encouraged to work out the best way of achieving these aims. A list of tasks was then prepared and one teacher was assigned to each group as a support mechanism. The outputs included floor-level maps of the states on the school grounds, pictures of monuments, temples, gardens and people of different states, charts on the relevant topics prepared from the text books in use and presentations by the students.

Similar activity-based and project-oriented learning has been undertaken for the last seven years in various classes. Some of the project titles include:

- Purification of the environment by plants (class 7)
- Rivers of Gujarat (class 6)
- Crops of Gujarat (class 6)
- Life history of Jesus Christ (class 5)
- Various uses of plants (classes 2, 3)

4. **Enrolment**

In the early 1970s enrolment was a problem. To get an accurate picture of the problem of non-enrolment we surveyed the children of the 5 to 11 year age-group. We then traced, from our school records, the drop outs who would be in the age group of 11 to 14. We took these two groups as our target. We initiated regular visits to the parents, enlisted the help of locally influential people and also started a system of meetings of parents in the school. These meetings were chaired by invited visitors -- the officers of the education department, college professors, district *panchayat* leaders or senior teachers of the district. The meetings focused on educational topics like enrolment of girls, evaluation of children in the school, government

schemes like scholarships. The meetings were also a forum for reporting on the progress of the school.

5. In order to increase retention we undertook the following steps:

(a) A pleasant environment always attracts children. We therefore set up a fund for whitewashing and painting the school building every five years. We introduced rangoli and other decorative presentations as a routine activity. With the help of the students, we put up maps and pictures. We also have about 200 trees and many potted plants in the school.

(b) Annual exhibitions: These exhibitions serve to display on-going school activities and also provide a means for exhibiting the achievements of children.

(c) Participation of the children in the administration of the school through school *panchayat*: the students participate in this activity enthusiastically. The 'panchayat' operates through various committees. The head of each committee submits a monthly work report on school-related activities needing attention.

(d) In addition various extra-curricular activities are carried out. These include village tree plantation, shram yagna, kite flying competitions etc. In SUPW classes we make mats out of gunny bags. These are cut into the appropriate sizes, painted and then bordered with wooden strips. We have two libraries in the school, one for children and one for the teachers. The latter contains reference books which the teachers can borrow.

6. We have also started a fund raising scheme called *Amritkumbha*. We collect donations from well off people and invest the money in fixed deposits. The interest is used to buy learning material for poor but bright students.

We also recycle old text books. Old texts donated by students and private institutions are bound and passed on to needy students. We also send extra copies to four small schools.

Inspiration and evaluation

These activities were inspired primarily by my reflections on our social situation after so many years of independence and by reading of our national education policy documents, both the Kothari Commission's recommendations on creating good citizens and the New Education Policy.

I did have some difficulties in orienting teachers and students towards the vision of activity and project-based learning. Some of the other activities which we undertook became routine and formal very soon and the spirit was lost. At such times we had to drop these. The teachers have to constantly see whether what they are trying out is helping children learn.

In our school we use attendance and the performance of the students in examinations as indicators of the effectiveness of our efforts. Of course, it is not always possible to link such results with any specific innovation.

I became head master in 1977. I spend a lot of time trying to get to know the interests and attitudes of my co-teachers in order to allocate their responsibilities. I place great emphasis on working together. I also meet my teachers regularly and individually and try to help them in many of their family matters just as an elder relative would. I am involved in various other social organisations like mahila mandals and youth clubs.

Working with children has been an exciting experience. Whenever people visit me I discuss with them how they educate their children, to the irritation of my family members. I believe in behaving with children just as a gardener deals with flowers. From my experience, I consider the following essential for building good child-teacher relationships: the teacher should treat every child as a whole but unique being; he or she should not earn the disrespect of the child; the teacher should simultaneously monitor the physical and intellectual development of the child, and should create opportunities for the children to grow healthily and with joy. To use another metaphor, teachers are sculptors who find joy in finishing the sculpture -- the child. This product has to be a good citizen. To that extent teachers have a great responsibility towards future generations.

CASE 20

MANJULABEN R. UPADHYAYA

“Some of the principles which I adhere to . . . are taking pride in my work, sympathy for children and commitment to the education of girls”

I lost my father at a young age and my mother worked very hard to bring me up. From this time I have been interested in women’s issues and this has been the source of my concern for education of girls. I am working in Bhuj town at present. Earlier I was working in the rural areas of Kutch district. During my teaching career I have focused on the following education-related aspects:

- Enrolment of girl children through:
 - celebration of national festivals
 - socially useful work
- Preparation of educational programmes for radio and TV
- Publication of articles

Enrolment of girls

The predominant community in this region is Kanbi. Many people from this community have settled abroad. The main need of this community was, therefore, English language skills. In addition, the number of girls attending school was very low. I gathered the non-enrolled girls together to celebrate national events like Independence day. Slowly the girls started getting interested in school. I also invited parents and used the opportunity to report on the education received by the children.

I realised that even when girls came to school they were very often pulled out after class 4. The argument of the parents was that girls could not travel to an upper primary school in another village. My counter argument was that they did not mind sending their girls to other villages for work. Then why should they object to sending the girls out for education?

I realised that the opportunities for employment in handicrafts were preventing girls from enrolling in school as well as from regular attendance. I therefore organised the school timings in such a way that the girls had time to do their handicrafts also. Embroidery, sewing, making wall pieces, wool and pearl work etc. were some of the activities these girls undertook during school hours under the umbrella of SUPW. They sold the products during the vacations. This arrangement also reduced the direct costs of education. The parents were not in a position to object to my efforts, since the girls did produce something while studying. I monitored the levels of parental confidence in schooling. As the parents got used to the idea I made the girls study more at home through a system of directed home work. I enabled many girls to reach high school and this outcome makes me happy.

Preparation of educational programmes

I have prepared educational programmes using puppets. The main focus has been on scientific thinking, unity and national integration. Puppet shows also attract children to school. I also encourage children to make toys out of waste and award prizes to children who make the best use of waste.

Publications

I have written on Efficiency of Primary Education (1969), Solar energy (1980), and on Primary Education: Status and Directions (1983). In addition I have written many short pieces on education.

In trying any experiments there are bound to be hurdles. Initially, my colleagues and superiors considered these experiments a waste of time and attempts to interfere with the curriculum. I tried to show them that these activities were related to education. A teacher's role is not limited to just classroom pedagogy. Gradually they became convinced and started supporting me.

In district *panchayat* schools facilities are poor. Adequate teaching aids are necessary. Due to economic hurdles I have not been able to make good quality puppets. Audio-visual cassettes need money and equipment. Science teaching also needs a small laboratory.

My mother was an important influence during my formative years. She was inclined towards education. Another source of inspiration was the series of pre-primary training camps of the *Nai Talim* Federation. Reading educational literature exposed me to what was going on outside my circle. Some of the principles which I adhere to in my work as a primary school teacher are taking pride in my work, sympathy for children and commitment to the education of girls.

CASE 21

MANJIBHAI B. PRAJAPATI

"I believe that how to make pupils learn is more important than how to teach them"

I hail from an artisan community which is skilled in pottery. When I was young, I wanted to become a high school teacher. However, after my secondary schooling I had to take up a primary teachers' training course since I needed a job quickly. After the training course I did not get a job immediately. For six months I taught voluntarily in my village. Then the district education officer noticed my work during an inspection visit. Since there was a vacancy at that time, he recommended my case.

How to make pupils learn is more important

I believe that how to make pupils learn is more important than how to teach them. This has been the principle on which I have built my teaching. Children are oriented towards play. When they are playing, they achieve a sense of independence which is not there when they are engaged in activities directed by adults. Secondly, when in the 'play mood', children express their feelings in an uninhibited manner. Thirdly, when children play with toys which interest them, they engage their entire selves in the activity. The concentration and the coordination of mind and limb lead to overall development. However, when I started teaching, I felt that the children I was dealing with did not have enough opportunities to engage in play. Also, I realised that they did not have equipment which could direct playing and having fun towards learning.

I had heard that in developed countries learning through educational toys was accepted as routine. But, given the conditions in our village schools, it is impossible to supply every school with all kinds of gadgets. I believe that it is the duty of the village school teacher to come up with alternatives, by experimenting, and carrying out research under the guidance of trained persons. Cost is of course a major consideration in preparing educational aids.

Educational toys

These reflections made me take up designing educational toys as the most important aspect of my teaching work. All my toys are based on locally available material. Mud, paper, cardboard, empty match boxes, fused electric bulbs and tube lights, empty medicine bottles, soap wrappers, marbles, tamarind seeds, cloth, newspapers, waste wood, empty tins etc. are some of the materials I have used. I use a lot of mud in my toys and, learning from my traditional knowledge, I mix the excreta of donkeys and powdered fenugreek with the mud to prevent cracks from developing.

There is a proverb in Gujarati which goes like this: where the sun does not reach, the poet reaches, and where the poet cannot reach, experience reaches. Following this proverb, I have

attempted to attend as many fairs and exhibitions as possible with a view to gaining experience in making educational aids. I also decided to study and I obtained a bachelor's degree in education. When I returned from my study programme, I went to Kathada village. There were eighty students in the school, six classes and four rooms. The principal, Shri Yakub Vadgama, has been a source of inspiration for me.

My first teaching aid was a set of glass slides on the human body and an indigenous projector which I made in 1979. The projector used a 100W lamp and a lens system. The slides were ten inches square. For drawing on the slides I developed coloured inks in a gum base. The idea of projecting an image was not new but I had to work out the idea into a concrete output. I developed this idea into a moving series of images, by using a rexine cloth roll. This instrument was displayed in a fair in New Delhi in 1980. I took some students with me, taught them Hindi in one week and made them explain the working to the visitors. The trip was financed by the NCERT.

Borrowing from the principle of the epidiascope I developed a simple projector which cost less than Rs. 100 in the early 1980s. This instrument was used in the class for projecting maps from atlases and diagrams from text books. A ten inch square picture, when projected, resulted in a three foot square image.

Around the same time I developed a double-walled pot which cost around Rs. 40. The inner pot had three compartments -- for milk, fruits and vegetables. There was an inlet tap and an outlet for circulating water between the two 'pots'. The evaporation from the outer surface enabled the device to act as a rural refrigerator. I used this model in my class to teach the concepts of evaporation, cooling and the relationship between bacterial growth and temperature. I also prepared an energy-saving stove. The stove was designed in such a way that the heat not used directly by the cookers could be used to convert water into steam which was then used to cook material kept in an ancillary burner.

I have prepared many educational toys which I have exhibited in various exhibitions and education fairs. Many of the visitors wanted me to give them a book or manual on my toys. I then prepared a booklet explaining how to make and use about 25 educational toys. Whenever teachers request me to help them, I send them a copy of this booklet. If possible I also send a model of the toy. In spite of my best efforts, I have not been able to get the booklet published. I also believe that children can be taught to make such toys. My interpretation of SUPW is that the students of the fifth to seventh standards should be enabled to prepare working models of various toys for the children of the lower primary section from locally available waste material.

The Regional Office of the NCERT has been a major source of inspiration for me. I have been taking part in their toy competitions since 1980. My fellow teachers have always supported me without worrying about the time spent. I have attended many training sessions conducted by agencies like the NCERT and have, in turn, acted as resource person in teacher training activities. These opportunities have helped me to refine my toys.

Some of the other educational games and toys I have prepared include:

1. 'Mathematical Snake' (alternative animals include tiger, elephant): This is toy which uses marbles and helps the child learn to count, identify the numerals from one to hundred and to make simple additions and subtraction.
2. 'Bathing Elephant': This toy has a bottle and plastic pipe for circulating water. The water comes out of the trunk as a shower through empty plastic ball pen refills kept in the trunk. The children enjoy seeing the elephant taking a shower bath and also learn concepts related to water levels. Other toys which teach these and related concepts like siphoning, vacuum, are the Balloon Elephant and the Water Drinking Elephant.
3. The 'Child with a tuft' and the 'Water King' are toys which illustrate the principles of elasticity, water pressure and atmospheric pressure.
4. 'The Jumping Horse' and related toys illustrate the principle of gravity.
5. 'Dogs and Cats' and '*Ram, Ravan and Sita*' are toys based on the principles of magnetism.
6. The 'Environmental Train' is a goods train, the toy compartments of which are to be loaded with specified grains, pulses and other material. The same train is used to teach different denominations of currency.

I have also built many other toys like the 'Magic Light Box' and the 'Digestive System' which are being used for educational purposes. Learning from my success, some of my teacher colleagues, from my own school and from neighbouring villages, have invented their own toys. Many of them have already won prizes at state-level competitions.

Financing my activities

Initially I did not face any problem in financing my work from my income. Later on, when I needed extra amounts I thought that if the pujari could beg for help in godly matters without any sense of shame, I should not hesitate to beg for the betterment of the school. The parents responded with small donations, of Rs. 15 upwards, to a fund I set up. The youth also brought contributions they collected on social occasions like marriages. All donations are acknowledged with a receipt and the fund is operated in a transparent manner.

Parents love to see their children learning in school. I believe that parents should be exposed to the methods through which children learn. For instance, I have invited them to attend exhibitions arranged as part of public festivals, in which my educational gadgets are displayed. Such exposure motivates the parents to take more interest in the education of their children and in the school.

Being active is the essence of a good teacher; being active while constantly thinking of improvement is at the heart of good education. I tell my colleagues asking 'how to teach' is less important than the question of how to make pupils learn. The process of answering this question usually broadens the understanding that teachers have of the processes of education and learning.

CASE 22

KESHAVLAL A. PUROHIT

"I feel that new teacher recruits should be groomed by senior and experienced teachers through a process of mentoring in their initial years of service for a few months"

My father was a primary school teacher and influenced me to take up school teaching as a career. I started teaching, on an informal basis, in a remote village of Vav taluka, Banaskantha district as soon as I finished my primary education in 1945. Four months later, I was appointed as an assistant teacher in a four-teacher school. I started with the first standard. I recall an incident which happened in 1946 and which was a great lesson to me. I had just started my teaching career and we had an inspection. The inspector, Mr. Haribhai Parmar, asked me to list the talukas of Banaskantha district without looking at the map which hung in my classroom. With great difficulty I was able to complete the task. I felt ashamed and realised that competence is an important attribute of a teacher.

Teaching class one

While I was teaching in class one, I used to begin my class by asking the students to sit in a circle. I then joined them. Then I started calling out 'let us raise our right hands', 'let us raise our left hands' and so on. After creating a joyful atmosphere, I started with four easy words with which the students were familiar. From these words I went into the constituent alphabets. At a more advanced stage, I sorted out words which the students were finding difficult to understand. I then made short sentences which contained these words. The sentences were oriented towards topics which were of interest to the students. I then made them write out the sentences, and once they started writing without mistakes, I went back to the words. On the whole, I found that 18 out of 20 children managed to learn such words easily with this method. Similarly, for explaining mathematics, I prepared a set of 50 examples for each kind of problem. The difficulties which I felt children were facing motivated me to come up with such initiatives. I did not consider these as 'experiments'. From my experience, I can say that class one teachers should be competent in drawing, story telling and singing songs.

Then I went for my teachers' training course. I also wanted to complete my matriculation. In those days there was a provision for doing both at the same time, provided Hindi was the main subject. I did so and, on completion of my training, was appointed head master of a pay centre school. Though I had to undertake many administrative duties, I continued with my earlier pedagogical initiatives.

Class seven was the 'final' stage for most students. There was a final examination for taking which the students had to travel a long distance to the nearest town. The school's performance in these examinations was poor and I decided that remedial teaching was the answer. I started night classes for class seven students. They were supposed to stay in the school or at my home.

They were allowed to go home only for their meals and toilet. The classes were free and the students responded well. Within two years, our school achieved 100 percent results in the final examination.

When I was transferred to a village called Bharadva, I found that the school did not have a building, but had an open space where classes were being conducted. With the help of the village community, I constructed a *katcha* building. The villagers contributed the manual labour and materials for the construction of the school.

A few years later, I was transferred to another school. This village had a population of about 1500, mostly labourers. The school building was in very poor shape and my first priority was to repair it. I mobilised the village leaders for the purpose and contacted all the families. Almost everyone responded. Those who were not in a position to donate money, brought material and equipment. Others provided free labour.

Culturally-important days for school-parent interaction

I also initiated a mechanism for regular school and parent contact. The days of *ekadashi* and *poonam* are considered holy. I decided to build on such religious significance and invited the parents to gather in the school compound on these days. I also involved village leaders in this task. During such meetings, I also mobilised small donations for the school fund.

In 1961 I moved to a large 20-teacher school. Here I started involving myself in science fairs and cultural activities. In 1963 we organised a play in order to raise funds. I trained local traders and village leaders to play the different parts. We printed tickets and sold them to natives of Tharad living in distant towns like Ahmedabad and Bombay. With the profit of Rs. 17,000, and matching grants from the government we constructed three large classrooms. I also mobilised Rs. 5,000 from a private donor for a water room. Similarly, I obtained contributions from certain well off people for educational equipment and a library.

I also started, with support from other teachers, a hand-written newsletter called *Prerna*. This newsletter carried articles prepared by the teachers and written by the children. Some teachers contributed drawings and sketches. We were unable to sustain the activity for more than a few years.

I participated in several essay competitions organised by the NCERT. One of my articles on educational reform won me a first prize in 1975-76. Around this time I appeared for the educational inspector examination but failed to clear it. My friends were surprised at this result. I was also puzzled, but felt that there were better things in store for me. Soon after, I became the second teacher of the district to win the national best teacher award. Later on, I became an education inspector. When I was an inspector, I encouraged students to take part in various competitions, science fairs. I also told them stories with a view to developing moral values.

I like to tell teachers that teaching is a religion and not a profession. I feel that new teacher recruits should be groomed by senior and experienced teachers through a process of mentoring in their initial years of service for a few months. More attention needs to be paid to teaching the first standard. If the root is decayed, how can a tree bear rich fruit? Every teacher, regardless of which standard he or she is teaching, should develop a reflective and research-oriented attitude.

Many of my former pupils come to meet me. This is the most valuable reward for me. I think the love and respect that the pupils retain for a teacher is indicative of his success.

CASE 23

SAVITABEN S. PARMAR

“Willingness to learn from any source, including children, and the will to try out new things are the qualities any programme of teacher development should seek to inculcate in teachers”

My father wanted me to become a teacher and often told me that the thrill of working directly with children was far greater than the drudgery of a clerk pushing inanimate papers. My parents were very religious and they inculcated in me the value of doing any work with sincerity. After schooling in Ahmedabad I did my teachers' training course in Godhra with the full support of my family. There we were taught spinning, weaving, how to read bad handwriting, growing vegetables, identification of flowers, animal care and many other things which have helped me a lot. Another custom which was interesting was that each student had to think up a new thought for each day. This thought had to be recited before dinner. These formative years were important because they set the tone for a long career during which I had to learn to face many constraints with optimism. All the schools where I served were Corporation schools or schools near the city of Ahmedabad. These schools catered mainly to the socio-economically backward sections of society.

The first lesson that I learned early in my teaching career was that children are often more intelligent, curious and knowledgeable than adults. A class one student asked me why usually large black ants were attracted to jaggery and small red ants to sugar. I did not know the answer but my knowledge and education definitely improved.

Coaching third standard students

The students who are not regular in standards one and two find it difficult to cope in the third standard. I identified such weak students from the third and fourth standards and taught them for two months the syllabus of standards one and two, starting from the basic alphabets of the language. I found that since the children were older and had already had some exposure, they picked up very fast and by the third month were on par with the others in their classes.

Creating interest in children

I think that creating interest in the subjects being taught is essential to make learning joyful. Therefore, I made models and illustrations to teach Geography. While teaching science, I used to take the children out to show them plants, creepers, trees, leaves, crab holes, different layers of soil and similar things. In order to teach plant growth, I made the students sow seeds and note their progress. I also made students act out certain characters in history.

Ice cream spoons as question papers

I had collected plenty of wooden ice cream spoons with which children were familiar. I wrote different mathematical problems on the spoons, one per spoon. I used the spoons in two ways: (a) as examination papers, when each student was given a few spoons to solve. Five good performers were selected to check the answers of the rest of the class. The best five were then selected for the next round of checking and so on; (b) as punishment. For this purpose I made four boxes and wrote the addition, subtraction, division and multiplication symbols on them, and put in the spoons with the appropriate problems. The child had to bring the selected box, pick out a spoon and solve the problem.

I also used pieces of cardboard similarly to teach language. On small squares I wrote letters, words and even short sentences. They were at different levels of complexity. The simplest letters and words had only to be identified by the child. The more complex cards had certain problems built in, for example blanks, or the wrong spelling. The children had to solve the questions. Here also I encouraged students to perform well and get a chance to check the answers of others.

Resource mobilisation for a laboratory and other infrastructure

I believe that children should be allowed to experiment and learn by doing things on their own. While privately-funded schools have the facilities to provide many learning opportunities for their students, public schools have to struggle to establish facilities that may at least resemble the things one knows are available in good schools. Many schools in my area did not have a laboratory. We decided to set up a central laboratory which could be shared with other schools. With the cooperation of the school board, I set up a laboratory in the school where I was working. This laboratory started by catering to around 1200 students from different corporation schools. Teachers started taking an interest in the practical experiments and prepared charts and other material to make the laboratory work more useful. This laboratory has been working well for many years now.

I have never faced any serious financial problems in my schools. Many of the educational gadgets were bought out of the contributions of parents. A parent used to provide free milk to the students of the school on the death anniversary of his son. I suggested that a tricycle would be a more permanent joy to the nursery children. I collected many other items for the nursery sections of my schools by approaching private donors for help. Once, with the help of the local corporator, I mobilised community donations of Rs. 15,000 in order to buy fans for all the classrooms. On another occasion I offered the retiring Principal of our school an amount of Rs. 3,000 that had been collected at that time. He accepted the gift, but added Rs. 500 and returned Rs. 3,500 to the school. In another school where I worked I collected money and installed an intercom system in all the classrooms.

Homework for teachers

One cannot make a teacher perform experiments. The willingness to perform experiments, to innovate and learn is the quality that has to be created in a teacher. The principal has a major role to play in developing such a quality in teachers, without letting constraints like shortages building facilities, finance and poor instruments get in the way. From my experience I can state that a successful principal is one who works in the school by treating it as his or her own property. In addition, I took care to see that the school's activities were organised clearly, so that there was no doubt in the minds of the teachers as to what was expected of them.

When I became principal, I started the practice of giving teachers homework. One teacher was assigned one topic during the last week of the month. However, what happened was something I did not expect. The teachers decided to cooperate among themselves. They started to sit together to discuss the topic. The teacher who had been assigned the homework consolidated the comments and worked out ways of improving the teaching of that topic. This practice was found very useful by the teachers and motivated them. I was happy that my proposal had been received this way. I have also trained many teachers by discussing their work with them and assigning them homework.

I was especially careful in selecting the teachers for the first standard, since this is a crucial period in the formation of the child. I always selected teachers who were modest about themselves and showed the qualities of caring and loving which are essential attributes of a first standard teacher.

I used to maintain a diary regularly. In this I used to note down things that I had observed about the school. For instance, when I was principal, I used to visit one class every day, so that I used to visit each classroom at least twice a month. I observed the class, the students, and the teachers and noted my comments in my diary. I then took up these points with the teachers during my meetings with them. The teachers took these visits positively and felt that someone cared about their work.

Attracting children to school

The cooperation of parents is very important in ensuring that children learn. My father used to work hard and come home around ten o'clock at night. After that he used to look through our homework. This kind of parental supervision had helped me, and I tried to increase the involvement of the parents in the education of their children. However, many of the parents in the schools where I taught belonged to the labouring classes and were busy making two ends meet. It seemed cruel to expect them to provide homework support to the children. I persuaded the literate parents to do something, and for those children whose parents were illiterate I paid more attention in the school itself.

In order to maintain the cleanliness of the school I introduced a system by which the different classes took turns to clean the school, including the toilets, and provide water for the children. I

kept the brooms needed for sweeping in my office. Many parents did not like this activity, but when they saw me doing the sweeping myself they could not object. Dignity of labour is something our society has not developed. Some of the teachers also started selling small packets of snacks in the school in order to discourage children from patronising the hawkers outside the school. I also introduced the scheme of book banks at the schools where I have worked. I used to collect the books from the students of seventh standard; students of fifth and sixth standards then repaired the books as an extra curricular activity. The revitalised books were then distributed to the needy students.

We encouraged the students to make small toys out of cardboard and old greeting cards. The teachers also came up with new ideas. During a visit to a fair we came across some people making face masks. I bought the blocks they were using and started making mud and paper pulp masks in the school. The masks were painted and decorated and students loved to involve themselves in the process. These activities may sound trivial but in schools catering mostly to children from deprived socio-economic backgrounds, they served to attract children to school.

Social problems and the teacher

I worked in girls' schools for a major part of my career. I took a personal interest in the development of many of my students. Many of them came to me with their problems even after they had left school and I responded to them. One of my students was thrown out by her husband. I gave her shelter. She has been with me now for 14 years. Others have used my house as temporary shelter. Some of the girls whose fees I had paid are now teachers and they keep in touch with me. These are the small kindnesses a teacher can do to mitigate social suffering.

On one occasion I decided to depict the evil of *sati* in an exhibition. We designed a model which depicted a 'burning' body. We constructed a pyre of thin logs of wood and placed a model of a woman on it -- complete with all the trappings of a *sati* pyre. Shiny strips of red, blue and yellow paper were fixed to the wood. At the bottom a small fan and red bulbs were kept. When these came on the strips fluttered just like flames. We supplemented this model with a write up on problems of women. A magazine picked up our contribution.

Conclusion

I have tried to change the poor image of a Corporation school that is prevalent among the general public. But there are many constraints which such schools suffer from. I have organised many workshops for such schools and have seen that my schools participated in as many scientific and children's fairs as possible. Such schools need a lot more attention if they have to stand out.

In my career, I have striven to work without fear and with sincerity. If there was no one to do some work which had to be done, I would immediately take it up. This won me the respect of my teacher colleagues. Willingness to learn from any source, including children, and the will to

try out new things are the qualities any programme of teacher development should seek to inculcate in teachers.

CASE 24

SARDARSINGH F. PATEL

“Nothing is difficult for a child. Whatever is difficult is difficult only for the teacher”

Early influences

My parents were labourers who earned their livelihood by filling bullock carts with mud. My father had studied up to the second standard. Our village was in a forest area and in the early 1950s some schools were run by the forest labour cooperative societies. The classes were held in small huts.

Most parents were not really interested in educating their children. My father was an exception. My first teacher was Shri Budhalal C. Rana. He had a special aptitude for attracting children to school. Since the area was a tribal area, the children were more interested in activities like playing the flute or shooting arrows. He encouraged such activities. He also used to move in the area with children like me and point us out as examples. My original name was Ishwarbhai. But there were two or three Ishwarbhais in the class and Shri Rana changed my name to Sardarsingh.

During my early schooling years I used to carry to school a mud pot, known as *bot*, filled with drinking water. My classmates used to bully me by drinking up my water. However, I did not leave my studies. Many of my classmates dropped out but I reached the fifth standard and joined an *ashram shala* run by the Bhil Seva Mandal. I studied here up to the seventh standard. During the year 1959, Shri Vinobha Bhave visited our school. I was in the sixth standard at that time. His words regarding changing the lives of farmers made a deep impression on me.

At that time the nearest high school was at Devgadh Baria, and one had to walk there. Initially, I was refused admission and I was in tears. However, the school opened another class and took me in. I was very enthusiastic. My father took care of my expenses even though he was engaged only in cutting logs of wood and collecting leaves of *Mahuda* and *Dholi*. This motivated me to do well in my studies and repay him with a comfortable future. My teachers were outsiders but were so good that they could speak in the local accents. I can never forget the contribution that these people have made to my development.

From my appearance it was obvious that I belonged to the tribal area. Most of the other students belonged to urban areas. When I secured good marks in the initial examinations, one teacher commented that I had cheated. I requested him to conduct a fresh examination and challenged him that I would secure more marks in the repeat examination. During the next examination, I stood first in the class.

During the three years of my secondary schooling I was allowed to stay in the coal godown of the school. The warden, who at one time had been India's commerce minister, supported me. From him I learned discipline and regular habits. In those days when a student reached the eleventh standard he was allowed to take up a subject with which he was familiar. My father wanted me to learn English and I had been studying the language. I was discouraged by my teachers, but I requested them to test me in the language. I passed and was allowed to take up English. I completed my secondary schooling in 1964.

A new college was started in the town of Chhota Udaipur in 1964. I joined the college for my pre-university science course. My father could not support me financially. I coached students in a tribal hostel and in return was allowed to stay in the hostel for five months. My uncle also helped me out. In 1966 I got a job in the Gopaldas Guruji ashram in Baria and became a teacher in that institution the same year. I started my career as a school teacher in Kelkuva village.

Kelkuva is in a hilly area. On the first day of my career, I could not find the school. With difficulty I located the school but found that it had been locked up for a long time. I met the village *sarpanch* who turned out to be very interested in education. I gathered three students on the first day. Two weeks later the school was inspected by Shri Saiyedbhai, who was known to be a strict man. I honestly explained to him the situation of the school. He was very understanding and encouraged me.

Enrolling girls

Before I joined there had been only seven students on the rolls. I started contacting the people of the area. The attendance went up to 35. Not a single girl student had ever attended school before I joined. To redress this situation I felt that I had to contact the mothers first. One day I found a mother scolding her daughter. I decided that that girl would become my first student. After repeated visits to the house I succeeded in enrolling the girl. By the end of the first year I was successful in getting five girl students admitted into the school.

I decided to encourage the tribal songs and games of the area. I set aside one hour every day after the regular school was over for such activities. I organised snacks for the children and all of use used to share the food and play the flute or indulge in local sports like bows and arrows. Slowly this activity attracted children to the school. As a result, the school which had till then had only classes one to three had to be extended up to class five. I also asked for a second teacher. Thus, after four years of working alone, I had a companion.

Social service

Around this time I started getting involved in social service activities. A few instances follow. The cotton-growing tribals were being forced to sell their produce through a dishonest shopkeeper. I arranged for an alternative government-controlled marketing channel. The returns from the cotton increased. Also, whenever there was some work to be done with the

forest department, the people used to approach me and I would respond. A group of 32 tribals had been cutting teak wood without getting paid for a long time. I took up their case and enabled them to receive compensation. I also organised a volunteer force to maintain peace during an annual tribal fair held in the village. The practice up to that time had been to call the police and take care of their expenses. The police were angry with me for changing things. As a result of these activities, I came to be seen by the people as a *gram sevak*. The credibility that I earned this way helped me in my educational work.

Influence of training course

In 1968, with financial help from some people, I did my teachers' training course at Vedchi. Here I met Shri Chimanbhai Bhatt, who believed in simplicity and devotion. He has been my main inspiration and guiding force. During my studies, there were floods in the river Tapi. For one month all educational activities were stopped and we were engaged in flood relief work. My real education took place during the two years I was at Vedchi. I came to realise the difference between telling someone 'do this work' and telling the same person 'let us do this work'.

For some time I handled the accounts of a production activity on campus. Once there was a difference of only one paisa. I made an unsuccessful effort to trace the mistake and told Shri Bhatt that we could write off the difference. He asked me whether I could purchase a train ticket by paying five paise less. I then checked the accounts again in his presence and found the mistake. I learned the value of paying attention to detail. On another occasion I went on four days' leave but returned after five days. My punishment was to clean the ground, but Shri Bhatt, who had given me the punishment, joined me in the activity, possibly punishing himself. Such incidents made a deep impression on me and made me realise what value education was all about.

Handling mischievous children

I was transferred to Satkunda village in 1971, where the boys were supposed to be mischievous. I brought forward the beginning of the school day by half an hour and used this time to talk with the students of the school. I then started a tree planting drive. I divided the children into groups named after national figures like Vivekanand and Netaji Bose. The groups planted useful trees like baobab and neem. Today when the same mischievous students visit the school, they take pride in the trees. The trees also provide an annual income to the school.

Experiments for science fairs and other interventions

Around this time I started taking an interest in the science fairs organised by the government. I decided to develop small experiments which did not involve outlay of money. For instance, in one experiment on the atmosphere I used waste glass bottles. In another experiment on magnetism, I borrowed magnets from the high school and persuaded a carpenter to do the necessary woodwork. I was awarded a prize for the experiment on the atmosphere and the

experiment on magnetism was displayed in many schools. I also started taking part in other competitions like essay writing. My fellow teachers were very supportive whenever I took up such activities.

I was transferred to the Dabhva school in 1976. This was a Sarvodaya school. From the beginning the village community was very supportive and I have remained in this school for 19 years. Over this period I have managed to make enrolment in school a habit. Initially, the percentage of girl students was about 25 percent. Now it is 50 percent. Some students were in financial difficulties. There was a taluka-level merit scholarship scheme at that time. With the help of a few colleagues I started a coaching camp to enable such students to take the examination. I extend this coaching to a general open tuition class in the evening for interested students. Many of these students have become graduates and post-graduates.

I believe in incorporating many practical examples into my teaching so that students may better relate to subject matter. Whenever a new topic was taught, I used to give a piece of paper to each student. They had to write on the paper whatever they knew. All the papers were then evaluated by three or four good students whom I selected. The children were comfortable with this system. I also used to write short plays which were based on the lessons in the text books. These plays were performed by the children. I have also written plays on the theme of literacy.

It is essential to have decent school buildings. In one village where I was posted for a very short time, the roof of the school was about to collapse. With the help of the village community we brought some wood from the forest and repaired the roof. The school buildings in Dabhva and Satkunda villages were also maintained this way, with community support. I always gave preference to people who were ready to do some work or give some material for the school, rather than cash.

Simple principles for teachers

One of my teachers, Shri Lalabhai, followed four simple principles which I adopted: (1) the teacher should prepare for every lesson, (2) he should monitor the interest levels of the students, (3) he should see whether the students are trying to understand and learn, (4) if the student does not understand then the teacher should make renewed efforts. These principles sound simple, but following them is not so easy. I have taught mostly the sixth and seventh standards. Over the past few years, however, I have been involved in administrative work also. I have also been training a few teachers whom I found to be enthusiastic. Nothing is difficult for a child. Whatever is difficult is difficult only for the teacher.

CASE 25

NARBHERAM G. TRIVEDI

“I was known as a strict disciplinarian who made my assistant teachers work hard. But I trained them just like I trained myself”

My entire family is engaged in the field of education. My father was a school teacher and one of his firm beliefs was that a child should study only one year in any particular class. All his students used to get promoted. He influenced my decision to become a teacher. After four or five years of very routine teaching I was exposed to the working of the Charotar Education Society. I decided to do something good in my work and made a fresh beginning. The school I was working in at that time had only a few classes of the lower primary. I decided to make the school a full-fledged primary school and worked accordingly. The village was in a dry area and people led a difficult life. They often came to me with their problems and I used to help. I also started involving myself in the social activities of the village. During 1964-65 there was a major famine. The situation moved me and I plunged into relief work. Our work was appreciated by Shri Ravishankar Dada and we were felicitated in a public function in Ahmedabad.

The enrolment of the students was poor in the beginning. With the help of my co-teachers, I called a meeting of the village in the school, explained the importance of education, and made each teacher responsible for a certain number of families. The enrolment went up and in a short while we were able to achieve enrolment of about 65 percent of the children of school-going age.

Preparing students for examinations

My main contribution has been in the area of preparing students for examinations. The examination system depends on answering question papers and starts in the upper primary classes. For almost all students, facing examinations is a frightening experience initially. I came across many students who could not even understand the questions. Sometimes they just copied the questions as their answers. To overcome these problems I tried out an experiment. I instituted a system of weekly tests every Saturday. The subject was announced on Monday for the test on the following Saturday. This system was limited to students of classes 4 to 7. The teacher came prepared with the question paper on Saturday. He should have covered the curriculum announced for the week. The answer sheets were evaluated on Sunday and returned on Monday. The papers were also solved in class on Monday. Then individual deficiencies were pointed out and advice given. This helped the students in preparation for exams. After a few years, some teachers increased the duration of the test during the second half of the year to three periods.

The students were mostly first-generation learners. They caught on immediately and were very enthusiastic. The parents, however, did not realise the implications of the innovation initially. Later on they appreciated the work and many of them started visiting the school every Monday

to see how their children had performed. Students were aware that the weekly tests were important; so they attended. The high attendance and low drop-outs were satisfactory indicators.

I was known as a strict disciplinarian who made my assistant teachers work hard. But I trained them just like I trained myself. I got full cooperation from them. These teachers also gained in the long run an understanding of what constitutes a true evaluation of teachers and students.

Resource mobilisation

Resources were always in short supply. However, the teachers themselves mobilised money for buying writing material and books for poor students, sending children to various competitions. A few private donors contributed money for teaching aids.

As the school expanded there was a need for money. I approached a good friend of mine who had promised to help me. However, he did not respond. Once I went to Bombay. A person I knew introduced me to some leading jewellers who were ready to contribute some money. I met a few of them and left behind some literature on the school and the village. This happened to reach my friend who had not responded. He felt ashamed and came down to my village from Bombay. He mobilised about Rs. 100,000 for the school and we built five rooms, a reading room, and an office room. The amount mobilised was a large sum in the 1960s and the government appreciated my enterprising efforts.

I introduced a savings scheme by which children saved money for going out on excursions. I then started a children's store which sold learning material and items of daily use. The store was administered by the students with the guidance of the teachers. The reputation of this store spread and students from the neighbouring villages used to visit it. The profit from the store was set aside for educational tours. We also introduced a shala *panchayat* in which students were introduced to the various aspects of running a school. If any decision affecting the student community had to be taken the issue was discussed by the students and their views presented during the school's prayer session. After that I introduced a scheme for uniforms for the students of the fifth to seventh standards. Donors were available either from the village itself or from nearby villages.

I then decided to build a new school. With small amounts mobilised from various sources I built one room. I inaugurated this school in the presence of certain government officials and certain wealthy people. The latter offered money for the school on the spot and since the government officers were also there I got the sanction for another school. I also wanted to build a high school but my promotion to education inspector prevented me from taking up this work. This is one dream which did not materialise.

Role as inspector

When I became an inspector, I moved around and saw a picture very different from the one in the schools where I had worked. However, I tried to develop the teachers' capabilities. On my inspection tours I tried to see what efforts the teachers had put in. I would not rely on the children's responses as far as possible. I also held meetings with the villagers and in many cases was successful in mobilising resources from the community. I always maintained strict impartiality and so did not have meals with the teachers or stay with them.

I retired after twelve years as inspector. Even today many of my former pupils come to see me and I feel happy when I see how they have grown. I my greatest asset today is the impartial and honest behaviour of my past. Many people respect me for that and I feel proud.

CASE 26

ASHWIN M. PATEL

“It is important that teachers feel that they are part of an institution”

I come from a farming family. Our economic status was not very good and my father wanted me to study well and get a job. I finished my teachers’ training course in 1975. As soon as I had joined this course I felt very uncomfortable with hostel life and dropped out. My father persuaded me to re-enrol. I did not get a job for two years and so I helped my father in his agricultural work.

Starting a new school

In 1978 I was given an appointment and sent to a small tribal village of about 250 people. My task was to start a new school. I was new and did not know what to do. I walked three kilometres to the pay centre school. The teacher there told me what to do. The village where I was posted did not have any shops or electricity. The people took me to a neighbouring village where I could get a place to stay. I took two days’ leave, went to my native village, and returned with my grandmother. She encouraged me to stick to the job and do my duty.

The entire village community was illiterate. Initially I did not make much headway. Soon there was a vacation. I went home and returned with a few tobacco leaves that my family had grown. Some of the village people took the leaves from me and felt very happy. One of them immediately offered his verandah for a school. I gathered ten children and started the first standard. Then I visited every house in the village and tried to promote the need for education. Slowly the number went up to 35. Some of the students were about 15 years old! At the end of three years, we had three standards.

The community used to gather in the late evenings for bhajans. I started attending these gatherings. Very often work was not available in the village and some families used to be hit very hard. From my own funds I started helping them with the idea of providing them relief. I also worked out a system for helping people in cases of medical emergencies. The situation of the people made me respond in this manner but the outcome was that my efforts to increase the value of education succeeded. Many of the children of the first batches have already crossed the twelfth standard. Some of them have gone in for industrial training.

Establishing a village education committee

I was transferred to my native village in 1983. The situation here was very different. My colleagues were good and experienced teachers and were very supportive from the beginning. Soon after I had joined we organised a cultural programme on Republic Day. All the parents of the village were invited to attend the function. During this function I announced that the parents should visit the school, see what the teachers were doing, find out what the children

were learning, and make suggestions. A village education committee was established and the parents contributed finances in order to get the committee started. We started with cultural activities and elocution competitions in which students took part. The committee manages a cultural fund of about Rs. 8,000. However, on every Republic Day, the parents contribute additional funds which take care of the running expenses. At present there are 15 members on this committee, all of them serving in an honorary capacity. Whenever any member wants to drop out on account of other commitments, there are others willing to fill the gap. The members take turns to visit the school once in ten days. The member who visits the school can make suggestions to the teachers on the spot. In addition, school affairs can be discussed during the regular meetings of the committee. The school teachers also have the power to call a meeting if there are urgent issues to be discussed. We have decided that non-educational affairs will not be brought into the village education committee. The discussions on improving quality of education have been useful. For instance, we decided to utilise the services of an outstanding retired teacher. He now conducts coaching classes in the school for weak students of the first to fourth standards. We have also seen the results -- for instance, out of 44 students of one batch, 41 showed remarkable improvement in reading and writing. The same teacher provides guidance to the school's teachers whenever the syllabus changes. Enrolment and drop out are no longer problems. All children of school-going age come to the school. About half the girls who pass out of primary school go on to do their graduation.

Granite slates for children

Breakage of slates was a problem. I thought that granite slates, provided by the school, could reduce the burden on the children. I also felt that double lines on the slate would help the students improve their handwriting. We established a separate fund for the provision of educational material like slates from the money donated by the parents. We then got the slates made. Each slate has a roll number. The students use their slates during the day and return them at the end of school hours.

Resources for the school

A few people from our village have settled abroad. Sometimes we mobilise donations from them. Two classrooms and a water-room were built this way. One day, I was teaching the fourth standard in the open since all the other rooms were occupied. A non-resident who happened to see this asked me what could be done. I gave him a budget for one room and told him that half of this amount could come from the government. He immediately made arrangements for the other half. Similarly, when another person had visited us in winter, he saw the children sitting on the floor. He asked us what he could do and we requested him to donate a rug. He, however, got benches and tables made for us. We try to keep our maintenance costs low. We keep a set of necessary tools and one of our teachers does all the repair and maintenance work.

There are other small funds operated by the parents themselves. These funds award prizes to children performing well, or provide for facilities like light fittings and fans. A colour T.V. set was

given to the school by the district education committee. A parent provided a wooden cupboard to store it. The same parent provides for the white-washing of the school. Our school is bound to expand and for meeting future needs we have set up a fund. This fund has so far collected about Rs. 100,000. The list of contributors is kept in a public place.

Other interventions

We decided to experiment with the period system in 1988. Many of the teachers felt that they could perform better if they were allowed to handle subjects in which they were interested. We started with standards five to seven. The children and the teachers found this system better. Our annual examination results also improved. We then extended this system to class four. Other schools have started taking an interest in our experiment and come to visit us.

This experience revealed that we were not giving importance to 'minor' subjects like socially useful productive work, drawing and music, exercises and games. Recently we started a system of monthly planning through which such subjects and activities get our attention. For instance, physical exercises are now handled by the students of standards six and seven. The teachers play the accompaniments like drums and other musical instruments.

The system of *Shala Panchayat* has been in existence in our school for about 16 years. The system tries to teach children the ideals of democracy and also provides for involvement of students in school affairs. When the elections to the *panchayat* are to be held, a notice is displayed one week in advance, calling for nominations. Two students each from the sixth and seventh standards are elected as members.

When I joined the school its grounds were bare. I decided to establish a garden and discussed the idea with my colleagues. They supported it. We purchased seedlings of various trees from a nursery and established some tree cover for the school.

A retired teacher from a neighbouring village, who was a member of the Satya Sai Seva Samiti, a religious organisation, came to our school and requested us to let him develop humanitarian values in the children. After some discussion, we let him work with the children. He divided the children into small discussion groups and provided them guidance on good conduct and behaviour. The students enjoyed this and wanted the programme to become a long-term one. The Samiti supports the cultural activities of the school. The students of about ten to twelve nearby schools are also invited to participate in sports and other competitions held along with the cultural activities. Prizes are awarded to the best students. Free meals are also provided to the 2500 to 3000 children who gather in the school that day.

Though our school has received a best school award we have been wary of working for awards. We have participated in many science fairs but political considerations enter when it comes to rewarding the best.

Need for networking teachers

There are many good teachers who are working on their own, in spite of many constraints. The experiences of such teachers need to be tapped. However, the teachers should not be suspicious of the motives of any person who takes an initiative in this matter. For instance, one teacher took the trouble to plan a workshop for about 150 selected teachers. Only 50 turned up. One reason why many others could not come was that the travel expenses, which had to be borne by the teachers themselves, were too high. However, the participants discussed ways of improving mathematics and science teaching. Some of the experienced teachers also offered to take up informal training of other teachers. Such initiatives need to be supported if something concrete is to be done about the quality of primary education.

It is important that teachers feel that they are part of an institution. Our principal has seen to it that we work together. Any new idea which a teacher comes up with is first shared with the others, and the originator of the idea is free to enlist the cooperation of any other teacher, without asking for the principal's sanction. Four of the eight teachers in our school belong to the village where the school is situated. However, the other teachers are also in constant touch with the village community. This is important because the responsibility for education has to be shared by the school and the village. The students who have studied in our school visit us often and express appreciation of the care they have received here. Such appreciation is our greatest reward.

CASE 27

MOTIBHAI B. NAYAK

“I believe that the innovativeness of the teacher is revealed in the methods used to give the necessary direction to the dormant energy which is there in all children. I have used the twin concepts of Lok Vakyas (folk beliefs) and Lok Kala (folk culture) to tap the cultural heritage present among us”

I was born into a Bhojak or Bhavaiya family. The Bhavaiyas have been the carriers of the oral tradition of folk drama and songs. My parents were not well off and hence there was pressure on me to work. However, I managed to study up to the secondary school. I applied for a teacher's job. The interviewer asked me what I could tell her about Indian culture. My reply was to sing a traditional song about the Indian woman. This perhaps helped me get the job. I was untrained at that time. Later on I underwent my teachers' training course. I also passed the Hindi Shikshak Sanad examination through the Gujarat State Examination Board.

Use of folk theatre to raise funds

The initial motivation to do something for the school arose out of the condition of the school building. It had temporary roofing and leaked very badly. There was only one classroom and the conditions were very cramped. We were four teachers. We pondered on the problems and decided to use my background in folk theatre to raise money for the school. We organised a folk drama *Mabhomni Hakal ane Adhura lagna*. It was well received by the village people and generated a lot of goodwill towards the school. Our initial collections for the school amounted to about Rs. 10,000. Our collections from the performances alone have resulted in the four-room school that we have today. I wrote many more plays in order to widen our repertoire. Our activities came to the notice of other teachers and officials, who appreciated our efforts. We were invited by institutions in other villages to perform our plays there.

Folk drama for education

The next logical step was to use folk drama for educational purposes. The principal of our school, Shri Dayajibhai M. Patel was an important source of inspiration and support. Staff members of a nearby teachers' training institution, B.D. Shah College of Education, also supported my activities.

The village of Khambisar is dominated by the Patidar, Thakarda (a so-called backward caste) and *Harijan* (scheduled caste) communities. The general demand for education was low. Especially, there were many superstitions about educating girls. Many of the children were engaged in farm and other labour, and had no opportunity to think about their own cultural heritage. Most of the parents were also tied down by the need to make two ends meet. In this situation, the attention that schooling got from the parents was poor.

Enrolment of girls through drama

In 1972 the enrolment of girls belonging to the scheduled castes was almost zero. I approached the taluka *Panchayat* with a plan for using folk drama and songs to increase enrolment. I then enlisted the help of Shri Punjabhai Vankar, a member of the local social justice committee of the *Panchayat*. Together we visited all the houses of the community. Then we gathered the children and involved them in rehearsing short plays. Finally we mounted entertainment programmes -- the plays and other items like songs and dances -- which focused on education of girls. We followed this up with visits to the parents. We identified outstanding children and sent them to perform at Taluka and District level meetings. An interesting link we introduced was between the education of girls and social evils like dowry. This was well received. The results were good. Within three years we achieved close to 100 percent enrolment of all girls of school-going age.

I incurred the displeasure of the non-scheduled caste groups because of my cultural activities in the *Harijan* locality. This experience made me think and I extended the use of folk drama to focus on the evils of the caste system. I have achieved some success in promoting understanding and reducing inter-caste conflicts.

Involvement with youth

As my work with the primary school children became known, the older youth in the village wanted to get involved. I made them work with the students. Gradually a core group interested in cultural activities developed. I sent them to many competitions at the district level. They performed with a fair degree of success. Initially the students did not receive any encouragement from their parents. The latter felt that education through folk theatre did not have any meaning. Many of the parents felt that I was forcing the students to participate in activities which I considered very important. Some of them also opposed the idea of allowing girls to participate in the programme. However, participation was voluntary and the children were excited to see the world from a new angle. They were the ones who convinced their parents.

Evaluation of my efforts

I had noted that the success of my efforts could be measured by three indicators: (a) attendance at school, (b) the participation of girls in schooling, and (c) for me the most important indicator, a reduction in the sense of despondency and shame the children felt. I had observed that children were not joyful and seemed to be disheartened. To bring back life into the young community was a major goal for me.

Absenteeism among students became almost non-existent. The number of girl students increased. The general level of educational activity in the school increased and was appreciated by the community. The good performances of the students and the teachers at district-level

competitions resulted in a sense of pride among the villagers. In fact, the school came to be seen as the main focus of any cultural activities in the village. The work was appreciated by the education department. A couple of sensitive officials arranged for some monetary rewards for outstanding students. I was given a silver medal and a certificate.

I took care to see that the activities of the children were visible to the parents. For instance, various competitions like handwriting contests, essay writing, elocution and debates were always held in the open where the parents could move around and interact. It had to be clear that judging the students was done in a transparent manner. Gradually, the students started taking the initiative to organise good educational and cultural programmes on the school's annual day.

Sensitivity to children's backgrounds

Primary school teachers should be sensitive to the socio-economic background of their students. I think this helps in developing awareness campaigns, which is one of the important outputs of a teacher. Two examples should clarify this point. In the early days of my career in some villages I observed that in the Prajapati community whenever someone in the family died, the children were removed from school for 12 days. That was the social custom. I felt that the practice affected education. I had a series of meetings with the community and the practice was given up. Also, early in my career, I noticed that student absenteeism was high during the monsoon. The children were engaged during this season in collecting food stuff and in agricultural activities. I spent time with the parents and discussed with them alternative arrangements for the children. They saw that I was genuinely concerned about the welfare of their children and many of them agreed to bring in outside labour. I was not entirely successful in relieving the children of their labour duties, but I have noticed over the years that whenever I have expressed concern about the children's future, the parents have listened.

Lok Vakya and Lok Kala as educational methods

Coming now to the process of classroom education, I believe that the innovativeness of the teacher is revealed in the methods used to give the necessary direction to the dormant energy which is there in all children. I have used the twin concepts of *Lok Vakya* (folk beliefs) and *Lok Kala* (folk culture) to tap the cultural heritage present among us.

My teaching draws on examples from folk beliefs. I use public fairs, rituals of marriage and death, social customs and various other practices as illustrations. Of course, one has to be critical in the use of these. I encourage visits to various areas and communities. Folk musical instruments may also be converted into teaching aids. I am interested especially in the various old folk instruments of our *adivasi* population. Examples include the *Ravan-hattha*, *Jodiya-pava* and *Nana-thol*. I place them in their historical context and describe their evolution. I also speculate on their associations with specific occasions. At a more technical level I try to explain the scientific principles underlying their use. I have found this of immense educational value in

teaching history and science. One of my personal interests has been attempting to integrate folk culture with modern science.

I teach Gujarati (especially the poems), Geography and History mainly through drama. I convert the lesson into a series of dialogues and folk songs. Many times the students enact the lessons. To teach the geography of Gujarat I have prepared a 'dialogue' between two puppets, Ranglo and Rangli. They chat with each other, with a lot of humour thrown in, about Gujarat. I do the talking -- using the dialects of the various regions. It is learning through fun. However, I have had to visit the various regions, collect information not given in the texts, and learn various dialects including tribal languages. I can make this activity more interesting, but financial constraints prevent me from doing so.

Networking efforts

I have also involved myself and the school in activities not directly connected with primary education.

- My cultural activities have forced me to spend a lot of time with other schools and educational institutions in the district, training their teachers or judging cultural contests.
- At Khambisar, we established a centre for teaching Hindi.
- This school was the first in the district to organise an interesting exhibition on Gandhiji's life.
- I was fortunate to be exposed to the puppetry training offered by the Centre for Cultural Resources and Training, New Delhi. This helped me refine the puppetry skills I possessed. I spend a lot of time now training teachers, mostly secondary school teachers, in making finger-puppets, script writing and dialogue delivery. Very often, I am invited for such work, but do not get leave. At such times, I attend at my own cost. I am also training some of my students in this activity.
- I was also involved in producing some cultural programmes for the adult literacy campaign.
- I am also interested in medicinal plants. An ayurvedic tooth powder I prepared from Vajra, acacia and the bark of pomegranate was appreciated at a science fair.
- In a nearby village there is a rehabilitation centre which I often visit to present programmes. Recently I performed plays on infectious diseases like tuberculosis.

The district-level management systems should evolve ways of using the skills of outstanding primary teachers. Opportunities for sharing and presenting my work are limited. Even when they emerge administrative problems like leave crop up. Sometimes, the education committee at the district level behaves as if it is doing us a great favour. This attitude of not recognising honest work is a drawback in our society. This is why I am sceptical about *Panchayat* administration of primary education. However, to be fair, I have had problems from the administration also. I recall one officer who shouted at me for doing work related to an NCERT project. He did not know what NCERT was. I have always taken such problems in my stride and gone ahead, believing that 'elephants do not care about barking dogs'.

My Guru Sri Bapaji has been a constant source of inspiration to me and I believe he is guiding me. I want to research folk culture in greater depth. I have learnt to play many little-known traditional musical instruments. How to build on this interest is a puzzle for me. I believe that building bridges with other countries is important. Their cultures are very different and there may be a lot to learn from each other. I intend to visit other cultures in order to present our traditions and learn something in return.

CASE 28

SHANKARBHAI RAVAL

“ . . . one should not drink people’s tea and then do their work; rather, one should offer tea to the people and do their work”

My father was an inspector in the Forest Department. He was the one who insisted that I become a teacher. I was interested in the life histories of our leaders and other prominent people. Once it struck me that these people who were doing so much for the country were basically ordinary human beings. This realisation motivated me to strive to do good. I am basically an ordinary person and have treated primary education as a mission in my life. When I came to Jalotra village, I found the village dominated by the so-called backward castes. One very common belief among all the castes was that girls should not be allowed to study beyond the third or fourth standard. I decided to start with one community, the Patels. This community was a role model and I felt that if I could achieve something here it would be easier for me to tackle the other castes. I enlisted the help of the caste leaders. I first convinced them of the need to educate girls and then started an awareness campaign with their help. The results were encouraging. The other communities observed my work with the Patel community and decided to follow on their own. The progress over the years has been very satisfying. For instance, today, most of the women of this village have reached graduation level. My own daughter is a post-graduate.

Education for all in the 1960s

Early on, I realised that education cannot remain the preserve of particular communities. Education for all is now gaining publicity as a slogan. But during the early sixties, when Gujarat state had just been formed, some teachers like me decided to make ‘education for all’ a reality in our villages. I decided to enlist the village *panchayat’s* cooperation. We divided the village into different zones, and distributed the responsibility for these zones among the teachers. The teachers were expected to maintain regular contact with the parents and create a demand for schooling. By 1964, all children of school-going age were in school. For this achievement, I was awarded a prize by the then state education minister. We also resolved to maintain universal enrolment. We started a system of registration of parents and children with the teachers concerned. At the end of every week, the teacher discussed with the parents matters regarding attendance. The records of such discussions were reviewed by the principal. From these records, we were able to gauge when certain students were going to drop out on account of weak economic conditions. Whenever possible, such students were provided with the necessary financial assistance from the resources mobilised for this purpose. Such monitoring resulted in average attendance percentages of 95 to 98. Students who had the best attendance records were awarded prizes during the annual functions of the school.

Teaching the alphabet through words

I used to read whatever educational literature was available to me in Gujarati. I realised that it is not necessary that the child should be taught the basic alphabet first. The child already comes with a few words with which it is familiar. I have found that teaching the child first to write a familiar word and then extend the learning to the entire alphabet is more fruitful.

Once the basic familiarity with the alphabets was established, I used to show the children a series of flash cards with the alphabet, numerals and words. To increase the interest of the students I devised a simple mechanical reading aid. Basically, it was a glass-fronted box with two levers at the top and bottom. A long strip of white cloth, with words and short sentences arranged in proper sequence, was wound around the levers. By rotating one lever the cloth could be made to scroll behind the glass window, and children could anticipate what the next word would be. With arithmetic, this device was particularly effective. I have used this device only with students of the first and second standards.

When the system of final examinations at the end of class seven was introduced, we felt that many of the students needed special coaching. Two teachers agreed to join me in this experiment. We used to conduct classes in the evenings using petromax lamps. We also enlisted the help of some of our good students. Since this coaching was provided to the students free of cost, the village community was very appreciative.

Children's activities

I also felt that the economic status of the school needed to be improved through an appropriate activity which would also teach the children cooperation and some management skills. So I started a cooperative store in the school, the *Apno vastu bhandar*. The office bearers were selected from among the students of the fifth to seventh standard. One of the teachers took up the responsibility of guiding the children. This store has been functioning well for over twenty five years now. The store provided the children with necessary educational aids like slates, pens, pencils at competitive rates. The accounts were audited at the end of every academic year.

I also established a School *Panchayat* made up of one representative from each class. The representatives were elected by their respective classes. The *panchayat* took part in various school meetings and very often contributed in the planning and implementation of school-related activities.

I also instituted a system of quarterly examinations to monitor the progress of the students. By the end of the second quarter, we could identify the students who were not performing well. These students were then called for morning classes, and their performance monitored further. For the evaluation of the answers, I devised my own system. This system was first put into operation in 1967. I prepared blank answer sheets with the name of the school printed on them. After the examinations were over, the papers were checked by the teachers who taught

the subjects, and by an external examiner. To help these examiners I used to prepare model answers.

School development fund

I introduced a scheme called *Shala Vikas Nidhi* or School Development Fund. I had two aims in mind: to mobilise money for physical infrastructure needed by the school and, secondly, to provide the finances to enable the children to travel and learn from excursions. The fund received donations in cash or kind from the village community regularly. Also, parents used to donate whenever they had any functions in their houses. We also decided to use part of the money for afforestation of a plot of government land which was adjacent to the school. With the approval of the village *panchayat* and government, we planted neem and eucalyptus trees. The leaves of the neem trees were regularly auctioned. The *Kotwal* of the village would announce to the village the dates of the auction. Camel owners would line up to buy the leaves. Just before the auction, a *panch* of village elders would decide on the minimum price. The auction then started and the highest bidder won. The dry branches were also sold this way. Money so earned was credited to the school development fund. The donations and the money earned from the various activities enabled the school to increase the number of classrooms from three in 1960, to fifteen in 1994. Village people were also encouraged to contribute items like ceiling fans. The donors' names were put on the items they donated or on a plaque in the school. One donor dug a borewell in the school and solved the water problem.

I decided that donations should be mobilised from the village only, so that future generations of the village could appreciate the efforts of their forefathers. A second principle I followed was that all transactions should be totally transparent. Every donor was given a receipt and the accounts were open to everyone interested in the school.

In 1965, I decided to borrow the ideas of school uniform and school emblem which were common in private schools. I felt these created an identity which students would be proud of. Many students were from economically poor backgrounds and I provided them uniforms through the school fund. I also started a book bank for children who could not afford to buy new textbooks. It should be remembered that in those days the government did not supply free textbooks. We used to recycle the books from one year to the next. One teacher was assigned the task of managing the textbook supply. This scheme was discontinued when the government started supplying textbooks free of cost.

A children's library was also opened in the school in the early 1970s so that students could read books and magazines not directly related to the syllabus. This library has grown over the years and has given me great satisfaction.

Involving parents

Around this time I also felt that parents should look forward to school functions like the independence and republic day celebrations. I announced that I would distribute five kilos of *patasa*, a local sweet to all the parents. Some of the parents decided that the teacher should not be doing such things, and took upon themselves the responsibility of arranging for the sweets. We also started organising cultural activities on these days in the primary and the secondary schools. The practice of distributing sweets has become such an established and appreciated fixture that today, about 60 kilos of *patasa* are distributed on national festivals. The practice has also led to the formation of a group of fifteen 'life members' who are very interested in the progress of the school. This group has developed a moral authority to work for the good of the school.

The school also developed the practice of collecting articles which were found in the school compound and returning them to the owners. Unclaimed articles were sold by auction and the collections credited to the school fund.

Need for updating teachers

I am of the opinion that teachers should undergo some kind of testing every three years or so. Their career progress should depend on the results of such testing. In our society there is a practice of offering tea to visitors and guests, including teachers. There is also a saying that one should not drink people's tea and then do their work; rather, one should offer tea to the people and do their work. The message is that one should do people's work out of a sense of obligation or charity. I always tell my teachers to keep this saying in mind. If teachers work out of love and a sense of duty, people will develop faith in them.

During my long teaching career I have been inspired by many people and organisations. Three primary school teachers who are no more, Sarvashri Tuljashankar Joshi, Nagarlal Joshi and Jethaji Parmar, were the main sources of inspiration for me. Others like Shri Suryakant Parikh of Palanpur Vidya Mandir, Shri R Patel, a retired educational inspector have been constant sources of support and guidance. The Seva Dal has disciplined my life. I have developed certain habits which help me maintain a regular life. For instance, for the last thirty years I have been eating only once a day. I also like to be punctual. I believe in maintaining an even tide in life. A balance in all our activities is essential. Neither a full tide, nor an ebb, is good. This is my philosophy of teaching and I try to educate people in this direction.

CASE 29

THAKARSHI P. KUNBAR

“I believe that the teacher should aim to develop the inner creative strength of the child. Whenever I visit any village I first go to the village school and meet the teachers, so as to show them respect”

I started working in Ratanpur, Dhranghadra taluka, a small village of 350 people. When I joined there were about ten children in all in the primary school. The entire village had two literate people, the sarpanch who had studied up to the second standard and the village carpenter who had reached the fourth standard. I started with adult education classes. We used to meet in the village common square. I mobilised a radio from the information department of the state government. The sarpanch advised the people to contribute funds to improve the school building. He collected a sum of Rs. 5,000 and added a new room to the existing room. I laid out a garden around the school. At night I used the room to get people together to listen to my stories from the Ramayana and Mahabharata. The stories were well known but the people loved to listen to me. Slowly, primary education in the village improved and after six years of effort I had a decent school of five standards going. Once, an educational inspector came on a visit. He saw my work and decided to transfer me to a big school.

Developing a school

In 1964 I came to Malwan village. I also agreed to act as post master of the village. On my first visit to the school I saw many children sitting outside the school -- there was no space inside. The then educational inspector was a very active man and he got three rooms constructed in a couple of years. The number of teachers also went up to seven from the initial three. A few years later I came to know that the school had been established in 1870, since the District Education Inspector talked to us about the centenary celebrations. The function was a grand success. Many folk artistes took part. A children's fair was also organized and the income from this activity was used to set up a fund for poor students. Many old students, who had been contacted, contributed finances. We also decided to extend the primary school up to the high school stage since there was a demand. I took up the issue and we constituted an education society to run the school. After a few years of planning, the construction started and the high school became functional in 1980. We were not so successful in setting up a separate school for girls. The village felt that given the increasing demand for education of girls a school for girls might work. We also collected donations from the village and started a school in 1991. Around 200 girls were admitted into the school. However, due to lack of government grants, the school had to be shut down and the students went back to the main school.

Birthday greetings

Many of the students were from families engaged in production of salt. It was difficult for the parents to pay proper attention to the children. All the families were from the most deprived sections of society. With the permission of the Gram *panchayat*, I started a birthday greeting venture. The idea emerged during my discussions with the Principal of a local college. I printed greeting cards. I prepared a date-wise list of the birthdays. I then sent greeting cards in accordance with the dates on this list. I personally delivered the greetings to the parents of the upper primary children. Parents living outside the village got the cards through the post. The birthday became an important occasion for the parents. Some of the parents did not keep track of the birthdays of their children. For them it was a great experience. The birthday students were also greeted in the prayer hall. The first 500 cards were gifted by the village *panchayat*. Later on, well-off parents supplied the cards to the school. This practice continues and has served to maintain the good relations between parents and the school. Many parents started donating small sums to the school on the birthdays of their children.

Mobilising children to enrol and teach children

The list was then extended to include children who were approaching school-going age. The records were available with the village *panchayat*. The cards were sent to the parents and served to warn them about the approaching time for enrolment. With the help of my teachers, I used to visit the families before the time came for enrolling the child. After this preparation I handed over the responsibility for enrolling new children to the upper primary students. On the morning of the child's first day, these students went to his or her house and brought the child in a procession, chanting 'Ram Ram'. All the people in the village came to know of the admission and they used to watch as if there was a festival procession.

I felt that the early years of schooling were important. Many parents took these years lightly because of the automatic promotion scheme. I identified children of the first and second standards who were lagging behind the rest and spent half an hour in the evenings with them. I also picked out good students of the seventh standard who were in financial difficulties and coached them at night so that they could try for the secondary schooling scholarships. My co-teachers were very helpful in this venture. I also made some of these students, and also children who had just passed out of school, teach those in the lower primary classes.

Educational aids and models

Being from an artisan community, I possess the skills to work with mud. Our school has often participated in science fairs with my mud models of tractor, bullock cart, kitchen appliances, small agricultural implements etc. I have also prepared models with other material. For instance, I made a fan from a discarded motorcycle piston. This fan runs on kerosene. I used flower pots to teach geometrical shapes. An added advantage was that I could teach about plants at the same time.

I also designed a toy crane to add fun to learning simple mathematical operations. The crane was made of wood. It was a working model. The hook could be moved through a spring-operated device and had a magnet fixed to it. I painted numbers (to represent answers) onto small iron discs. When setting the children a problem, the teacher had to just put the correct answer disc into a bucket of water. Then the crane would be operated, the head would bend forward and the hook would go into the water. Out came the correct answer attached to the magnet in the hook. The children enjoyed playing with this toy. I would like to believe it took the boredom out of learning to some extent.

Mobilising resources

In the early 1980s, with the help of the Forest Department, we started a three-year nursery project in the school as an income-generating venture. With the profit of Rs. 16,000 we bought fans and a television set for the school. We extended this activity to tree planting. The students and teachers planted babul trees around the village pond, and in open land near the temple. The people appreciated this gesture and have been maintaining the trees.

We had mobilised donations from the people by pointing out that they were spending quite a lot on religious activities. A little more on education would not do any harm. Similarly, we also collected donations on social occasions like marriages. Money mobilised this way has made it possible for us to have additional infrastructure like a microphone set and a music system. I also mobilised money for village affairs. For instance, I constructed a large platform for social and cultural functions.

Sometimes articles used to be left behind by visitors or children. I kept an 'Honesty Box' outside each classroom. The children appreciated this move and deposited anything they found into the boxes. The owners were then traced and the articles returned.

I believe that the teacher should aim to develop the inner creative strength of the child. Whenever I visit any village I first go to the village school and meet the teachers, so as to show them respect. Given that most of the village schools I have seen lack facilities, I think the quality of education provided by many of these is better than that of well-endowed city schools. During my entire career I have always had the full cooperation of the village *panchayats*. Teachers should work in partnership with the community. After my retirement I want to open a school which will teach crafts in the upper primary section.

CASE 30

MANJARI K. VYAS

"I believe that at the end of the day if I am happy with the work I have done, I am sufficiently rewarded"

My first two postings were in Jamnagar district. After about five years of teaching, I got married and moved to Bhavnagar. My father was a teacher and a freedom fighter. His influence has been very important for me. Early on I decided to become a teacher and do something for the cause of education of women. I wanted to learn more about my subject; and so completed my bachelor's and master's degree courses as an external candidate.

Enrolment of girls

While I was in my second posting, I noticed that many girls did not come to school. They were either engaged in agriculture and domestic work, or their parents' attitudes were negative. The general feeling among the villagers was that girls should not be educated after they reached a certain age. From the various class teachers (there were eight women teachers for classes 1 to 7) I gathered information about irregular girls. I then found out, through the girls attending school, the reasons for such irregularity. After that I met the parents to motivate them to send their girls to school.

I also found out that the village people were very interested in the *Navratri* festival. I decided to use this opportunity to motivate the girls to come to school. We organized dance programmes and other cultural activities. I also induced an informal youth association in the area to provide infrastructure support for such activities. Within a period of four years, I was able to achieve almost full enrolment.

Reviving a defunct school

My first posting in Bhavnagar district was in a village where the school had been closed down for about six years. A dispute between the former teacher of the school and the villagers had led to the closure. And after six years, the authorities decided to revive the school. I started working with a senior teacher in this small village of about 500 people. We decided to make this school functional within a period of six months. There were no records and no children either. The building was just a shell and was being used as a public toilet. I first put up a notice warning anyone who misused the school premises. This warning worked. We decided to open the school every day. We started collecting individual children of school-going age and brought them to the school. All of them, irrespective of their ages, were put in class one. We also started talking to the parents. Our main obstacle was the negative experience the people had had with the previous teacher. However, slowly they accepted us. Gradually, enrolment went up.

Then we concentrated on improving school facilities. We initiated a tradition of requesting parents to donate for the school whenever they enrolled their children for the first time. We made the village carpenter repair the school free of charge. We told him that we were unable to pay immediately but were willing to give him a note promising to pay as soon as funds were available. He then agreed to work for free. Similarly, we got the mason to repair the floor of the school with surplus tiles which we gathered from all the houses. My co-teacher and I decided that we would use the resources mobilised from the village for school improvement and our personal resources for school equipment like registers, chalk, books etc. The contingency grant that we received at that time did not meet even a quarter of our needs.

After getting the school into good shape, we met the village *panchayat* and requested them to allot an open patch of land adjacent to the school. With the help of the children we fenced the area with cacti. Then we collected used and unused bricks, soil and sand for borders and small gardens.

I repeated my efforts to enrol girls. The village was dominated by the Ahir community and child marriage was a common practice. Initially many parents were not positive, but I used to tell them that if their girls were educated, they would be able to keep the accounts and deal with business matters also. There is also a practice of presenting a bride with plenty of embroidered articles. The girls were very skilled in embroidery. I used this as an opportunity to enrol them in school. I introduced special sessions of one hour every day on embroidery, just after the end of school hours. This encouraged many girls to enrol and many dropouts to resume.

Many girls used to feel shy about working with boys. We decided to have separate classes for boys and girls. However, the prayers were common. After some time, I started telling the girls that I was a woman, but I did not hesitate to work with my co-teacher who was a man. Gradually we were able to lessen the distance and made boys and girls take part in joint activities.

After five years in this village, I was transferred to Limda village. The village was dominated by the Rajput community. It had a separate school for girls. There were 12 girls in class 7 and 20 in class 6. I started teaching these classes. First I developed a close rapport with the girls. I helped them with their personal problems also. The village had a poor record in the education of girls. I persuaded the parents to ensure the regularity of their children in school. The enrolment and retention of girls improved and I felt quite happy.

Adult education

I then went to another school in which a religious leader was working as a primary teacher. My husband joined me here. We engaged in several adult education ventures, in addition to our primary education work. The local station of All India Radio adopted this village, and the support we got improved dramatically. Funds and organisational support were easier to get. Within a few months we motivated the literate youth of the village to teach illiterate people. I told them that pride and self-satisfaction would be their only rewards. They responded readily.

We also involved students of class 6 and 7 and the high school in the venture. Within a year the village became fully literate.

Encouraging women teachers

In my next school, I found that the participation of female teachers in school activities was very poor when compared with that of their male colleagues. The latter considered women teachers 'inferior and unable to take the lead'. This attitude upset me. During one particular planning meeting I made some suggestions. Many teachers were surprised, since up to then such a role had been the men's prerogative. One male teacher ridiculed me and suggested that the women would not be able to answer a question he would pose. I immediately replied by saying that I would answer the question, provided he promised to answer a question that I would ask after I had answered. He backed down. The other women teachers realised that they could also assert themselves. We started organising various activities in school and many of the women teachers became self-reliant in matters of decision making.

The district cell of the Primary Teachers' Federation encouraged me and as a result of my efforts a women's cell was established in the State Teachers Federation. I became its first coordinator. In this role I have been dealing with women teachers who could not express certain educational, administrative or personal problems to their colleagues or higher officials.

I was influenced by the female characters in the works of Sharadchandra Chattopadhyaya and Kanaiyalal Munshi. I would like to be known as the *manas putri* of Kanaiyalal Munshi. One of his famous characters is also called Manjari. I believe that at the end of the day if I am happy with the work I have done, I am sufficiently rewarded.

GLOSSARY

<i>Arjuna</i>	mythological character, one of the five Pandavas
<i>ashram shala</i>	rural residential school
<i>babool</i>	Acacia tree
<i>bal mandir</i>	creche
<i>bhakti</i>	movement of medieval mystic poet saints
<i>bhavai</i>	Gujarati folk theatre form
<i>dal</i>	lentil
<i>dayaro</i>	Gujarati folk theatre form
<i>drishti</i>	vision
<i>ekadashi</i>	eleventh day of the month in the Hindu calendar
<i>guru</i>	teacher
<i>harijan</i>	literally 'people of God', originally used to refer to the community of sweepers
<i>katha</i>	narrative based on religious legends
<i>kotwal</i>	minor village official
<i>kumar</i>	Boy
<i>madrasa</i>	Muslim religious school
<i>mahila mandal</i>	association of women
<i>mandap</i>	platform with marquee
<i>matsya</i>	fish
<i>Maulvi</i>	Muslim religious leader

<i>panchayat</i>	local self-government body
<i>parivar</i>	family
<i>poonam</i>	full-moon day
<i>prasad</i>	edible preparations offered to the gods
<i>prerna</i>	inspiration
<i>rakhi</i>	sacred thread tied around the wrist on the occasion of rakshabandhan
<i>rakshabandhan</i>	festival symbolizing fraternal ties
<i>sarpanch</i>	head of village panchayat
<i>sati</i>	widow immolation on the husband's funeral pyre
<i>shala</i>	school
<i>upvan</i>	forest, wood