



LOOKING BACK TO THE FUTURE

A triannual report of the **Eklavya Foundation**
for the years 1998-2001



The Narmada in flood at Hoshangabad is an imposing - and terrifying - sight

WHERE WE WORK

The idyllic beauty of the countryside at Ratanpur in Dewas district



Contents

1. <i>Three Eventful Years</i>	3
2. <i>Hoshangabad Science Teaching Programme</i>	7
3. <i>Social Science Programme</i>	17
4. <i>Primary Education Programme</i>	25
5. <i>Participatory Planning for Rural Development</i>	37
6. <i>Extra Curricular Activities</i>	49
7. <i>Publications</i>	59
8. <i>Playing the Role of a Resource Agency</i>	65
9. <i>The Fellowship Programme</i>	71
10. <i>Building a Corpus</i>	73
11. <i>Focusing on Human Resources</i>	79
12. <i>Statement of Accounts</i>	82
13. <i>Funding Organisations</i>	83
14. <i>Individual Corpus Donors</i>	84
15. <i>Eklavya - the people and the governing body</i>	inside back

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Eklavya Foundation

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E-7/HIG-453, Arera Colony

Bhopal (MP) 462 016

Phone (0755) 463380, 464824

Fax (0755) 461703

email - eklavyamp@vsnl.com

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Contact us at:

Eklavya

E-7/HIG-453, Arera Colony

Bhopal (MP) 462 016

Phone (0755) 463380/464824

Fax (0755) 461 703

Email - eklavyamp@vsnl.com

Eklavya Field Centre

Kothi Bazaar

Hoshangabad (MP) 461 001

Phone (07574) 53518

Fax (0755) 52016/53717 (PP)

Email - eklavyah@yahoo.com

Eklavya Field Centre

Nehru Colony

Harda (MP) 461 331

Phone (0755) 22450

Eklavya Field Centre

33, Saket Nagar

Dewas (MP) 455 001

Phone (07272) 23496

Email - eklavyad@yahoo.com

Eklavya Field Centre

A-28/2, MIG, Vednagar

Nanakheda

Ujjain (MP) 456 010

Phone (0734) 510583

Email - eklavyau@yahoo.com

Eklavya Field Centre

Sandiya Road

Pipariya (MP) 461 775

Phone (07576) 22574/22612

Eklavya Field Centre

Pataupura, Shahpur

Dist. Betul (MP) 460 440

Phone (07146) 73236

Eklavya Field Centre

Ajnas Road, Khategaon

Dist. Dewas (MP)

Eklavya Field Centre

Sirali Road, Charua

Dist. Harda (MP)

Eklavya Subcentres at

Parasia, Harangaon, Ajnas,

Chandpura



Schoolgirls at a science exhibition in their school

THREE EVENTFUL YEARS...



Children in a primary school in Shahpur block

Viewing the solar eclipse with mylar filters in Ujjain



Three years may be a short span of time in the life of an organisation, but the last three years have been eventful ones for Eklavya, putting to the test the experience we have gained in the 18+ years we have been working in the field of education. The hallmark of these years has been change, rapid change in the ground conditions in which we work. Two apparently contradictory trends, privatisation and intensification of state control, have been simultaneously at work in the sphere of education as in other sectors.

The change is there to see in society as well as in the style of governance. There is a discernible shift towards ambitious and largescale projects in the social sector which reflect a desire to get on to the fast track to change. From parents there is a demand for the kind of education that will provide the necessary stepping stones to rapid socio-economic advancement. Thus, there has been a pronounced increase in experiments to give shape to alternative visions of education within the state sector, among private schools and society at large. Such attitudinal changes have become more pronounced in the past decade.

The State has taken the initiative to launch planned and targeted programmes like the District Primary Education Programme and the National Literacy Mission in a serious attempt to finally meet the long delayed commitment to universalisation of primary education. Several innovations like Seekhna Sikhana, Padhna Badhna and Education Guarantee Scheme have been introduced in rapid succession, changing the contours of the educational sector in Madhya Pradesh by bringing in new ideas in learning methodologies and delivery systems for reaching education to wider masses of people. These tend to simultaneously pave the way for a new system of para teachers and community initiated schools.

In parallel, the growth of private sector schools has also been rapid, with even *casbahs* and villages boasting convent and English medium schools. Children beyond a minimum threshold of affordability are shifting to these schools in the hope of receiving some quality time from their teachers. Another development of significance is the coming into force of the Panchayat Raj Act, which has also laid the ground for sharing management responsibilities with locally elected bodies.

This state of flux has shaken up old processes. Teachers, administrators, people's representatives and NGOs are all going through a period of much upheaval, waiting in anticipation and uncertainty. The dust is yet to settle down in Madhya Pradesh.

While these changes have opened out opportunities on the one hand, they have increased challenges and dilemmas on the other. The focus on improving access and quality of primary education in the mid-90s created a widespread demand for child-friendly methods. Not just in Madhya Pradesh, but across the country, in Rajasthan, Gujarat, Kerala and Andhra Pradesh, there was demand from both government and non-government organisations. Processes of implementing such changes took off with great enthusiasm in many states. But even as these processes spread, so did the questions, doubts and resistance.

Effecting change at the mass level requires conviction and commitment on the part of the governments concerned. Because any talk of largescale change immediately raises the political and financial stakes. Thus governments which show vision in encouraging and allowing space for small-scale experimentation by NGOs, demonstrate a distinct reluctance when they are faced with resistance to largescale change. Sensing the challenge posed, they tend to limit their agendas involving civil society initiatives.

Part of the reason may be that governments are answerable to political parties and pressure groups. Allowing space to civil society organisations and involving them in

decision making may expose governments to questions which they may find difficult to answer, given the ill-defined nature of the institutional base for such debate.

Even though Eklavya has worked with the governments with the objective of facilitating state level implementation of educational ideas that are universally accepted, there has been little progress beyond the experimental stage. The proposals for state level expansion of the HSTP or even the district level expansion proposal of the social science programme remain unattended to. There have been no more than feeble and half-hearted attempts to learn from these programmes when the government agencies themselves had to rework the state-level text books and curricula. The involvement of Eklavya in creating the government's primary education package could not be sustained after a strong beginning due to lack of an ethos of collaborative functioning. Similarly, the inputs given by Eklavya and some other NGOs in the training of panchayati raj personnel, too, floundered after a promising start. A fund-strapped government ceased to subscribe to *Chakmak* for all its schools as it had been doing for many years.

In a sense, the experiences of these three years have significantly impacted Eklavya's orientation and enabled the organisation to strongly focus on its other strengths. We reached out to schools, NGOs and individuals through many diverse strategies. We shared our work and materials flexibly and according to the specific contexts.

For example, an education resource centre was set up in Bhopal and through this team we began establishing communication with the management and teachers of individual schools. In Hoshangabad, we visualised (and have eventually carried out) a strategy of approaching both government and private schools to participate in Eklavya's social science programme, if they were interested. In Indore, we introduced the science textbooks and kit-based teaching methodology to three schools and, recently, we have even designed a book according to their need. In Mumbai, we have begun to help the teachers of Don Bosco school to develop activity based science teaching modules.

We extended our sales outlets to about 20 places in the country and participated in almost four book fairs every year to take our publications to the people. We established a books and toys outlet in Bhopal called Pitara. We published the *panchayat* book developed by Eklavya and other NGOs and offered it to district offices and NGOs directly and received a good response.

Thus, demand-based responses and demand generation thrusts have come to be part of Eklavya's endeavour.

Although our efforts are becoming flexible and multifaceted, we still strive to emphasise the basic tenets that drew us to this work. Our belief in the professional dignity of the teacher stands firm. We do not subscribe to the pious hope that insecure service conditions and contracts will force them to work seriously. We have seen people work when they are treated with respect and dignity, when their labour is highly regarded and when their imagination is fired. This spirit is the spirit of people who come together out of their own drive and inspiration. And come together they do, despite being government servants, for they stand up as human beings after all.

Largescale structural reforms and processes, which is what the government can at best enforce, cannot kindle this spirit. One does not expect it of the government structure. But one expects the space and opportunity to sustain civil society initiatives that can inspire people. Unfortunately, the serenity and vision to sustain movement in such a fundamental direction is getting increasingly constrained.

At our own end we admit to having ignored some key aspects of programme development ourselves. Teachers have been pointing out to us the lapses in accountability in members of the school community. Our overall vision tended to get

diluted as we concentrated on separate single programmes such as science, social science, *bal melas*, libraries etc. We could have visualised comprehensive involvements with all aspects of schools, academic as well as management. Such total involvement in the schools in our areas would have immensely strengthened the spirit of creativity and dedication in people. These, among others, are the challenges we will address with a high sense of urgency in the years to come.

We will also remember these last three years for the milestones reached in continuous curricular innovations. We had engaged the teachers and parents in a challenging dialogue on the innovative aspects of learning. The textbooks-cum-workbooks for science, social science and primary classes presented a major departure from the learning materials that are used by schools everywhere else. Our teacher support systems endeavoured to help teachers in the daily practice of innovative teaching. The practitioners had the opportunity to try out these methods, debate and reflect. Thus the process has not been one of toeing the line of received traditions and practices in education with marginal innovative changes on the frills.

On our part, the engagement taught us the deeper aspects of classroom difficulties and the extent of parental anxieties. We reflected, along with teachers and academicians, on creative ways in which innovative materials could respect ground realities while providing further scope for innovations in time. This deeper understanding guided us in accomplishing major exercises of revising our science books and our primary school books. This revision process is still under way.

We would like to add here as a post script some serious and unfortunate developments in Shahpur block, even though they fall outside the time frame of the present report. In response to our proposal to continue Prashika in Shahpur block the Government of Madhya Pradesh, in an unprecedented move, sought the opinion of the *janpad panchayat* of the block as to which textbooks they wanted for their block. The *janpad panchayat* decided in favour of using the textbooks in force all over the state so as not to be singled out for experimentation. The government accordingly decided to discontinue Prashika in Shahpur block with effect from July 2001. The decision raises procedural questions. While it is necessary to involve elected representatives in decision making on curricular matters, there is an urgent need to develop the proper framework for such consultations with both the community and academicians. Only then can informed decisions be taken. Such a framework would also provide the necessary space for continuing innovation as well as dialogue.

Most importantly, we remember the last three years for the internal churning that have taken place. As we debated and acted upon these concerns, the need to strengthen the organisation was articulated in a proposal for raising a corpus fund and developing infrastructure. With active support from Sir Ratan Tata Trust we launched into a corpus fund raising drive. The target that seemed formidable and far away gradually became feasible as we realised the groundswell of goodwill and support our work has generated. Many friends and well wishers have participated in the Eklavya mission in their separate ways. That shared vision gave a tremendous boost to our self confidence.

But as we grew in size, both in terms of staff strength and the range of our activities, we have found that managing ourselves has not been an easy task. We did evolve decentralised structures to permit more autonomy for various programme activities and ensure democratic functioning and wider participation in decision making. However, the needs of independent growth and divergences in the nature of the programmes have rendered it necessary to actively consider setting up a new society to carry forward some of the programmes initiated under Eklavya.

The past three years have, indeed, been eventful ...



The kit for conducting experiments

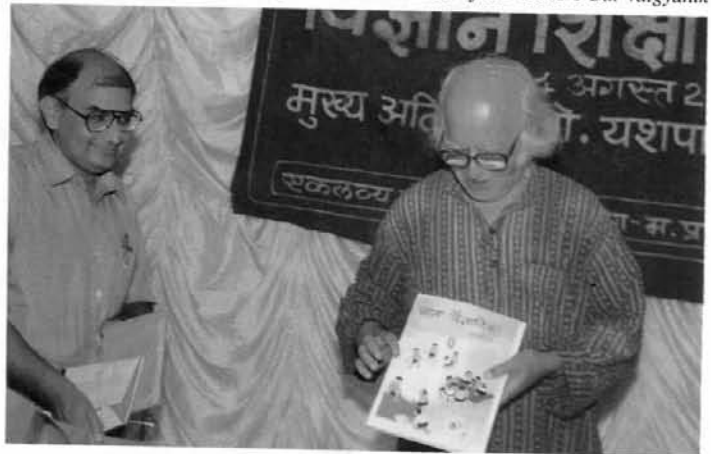


A resource teacher helping a toli with their experiment during a teachers training session

HOSHANGABAD SCIENCE TEACHING PROGRAMME



Girls demonstrating a science experiment at a mela held in their school



Prof Yash Pal releasing the revised edition of the Class 6 Bal Vaigyanik

The Hoshangabad Science Teaching Programme (HSTP) was our very first programme when Eklavya was set up in 1982. HSTP, which was started in 1972 by Kishore Bharati and Friends Rural Centre, presently covers nearly 700 middle schools spread over 14 districts of Madhya Pradesh. In terms of numbers, over 1,00,000 children study the HSTP curriculum every year and they are taught by 1,500 teachers.

HSTP focuses on improving science education from Class 6 to Class 8. In contrast to the prevailing textbook-based method of 'learning by rote', which negates all tenets of child-centred education, HSTP involves learning 'by discovery', 'through activities' and 'from the environment'. It emphasises the process of science, promoting scientific temper and making the child a confident life-long learner and creator of knowledge.

In its 28th year now, the science programme continues its steadfast journey to change the reality of science education in the country. Many new developments in society present new challenges and exciting possibilities to the programme.

Discovery and more – revising the Bal Vaigyanik workbooks

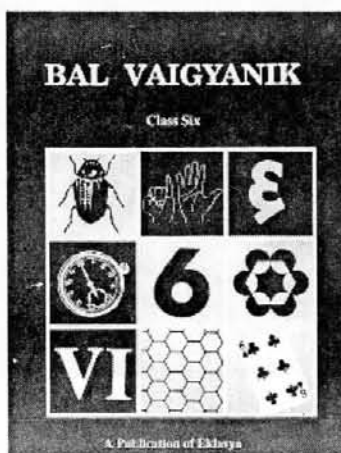
We have many channels for receiving feedback from the teacher and the taught which permit a continual process of appraisal and review of the HSTP workbooks. These channels are in-built into the programme and include teacher orientation workshops, monthly meetings with teachers, monthly *tayyari goshthis* with resource teachers, analysing examination results, children's letters to *sawaliram*, concept testing exercises with students and teachers and school follow-up visits by resource teachers and HSTP team members. As such feedback accumulates and as ground realities change, we find it necessary to undertake a major revision of *Bal Vaigyanik* once every 8 to 10 years.

Two editions of the books have been published till now. The last edition, now more than 10 years old, was, therefore, ripe for revision according to our timetable. So we initiated the revision process in 1999 with the Class 6 workbook. Work on the Class 8 workbook is currently under way.

After intensive consultations, we worked out the following guidelines for this revision:

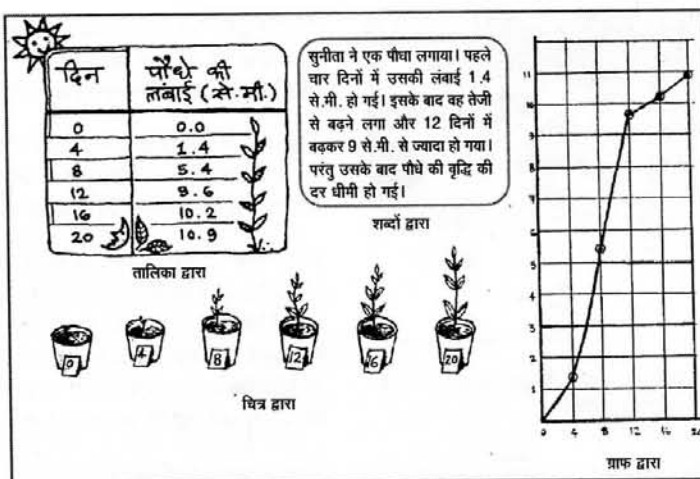
- 1) The discovery approach remains the guiding paradigm. However, we felt this approach needed to be enriched by exposing students to other ways of understanding scientific concepts and the nature of science. These could include anecdotes related to the history of science, descriptions of experiments, biographical sketches of scientists, more examples from nature and everyday life etc. We felt this approach would also address the 'process' versus 'product' debate in science curricula where it has often been said that the HSTP curricula is too heavily 'process' oriented and needs to be balanced with the 'product' aspects of science.
- 2) One of the basic premises of the *Bal Vaigyanik* approach is that science teaching in schools is crucially dependent on a well-equipped and motivated teacher. To aid and support the teacher in her/his work, we are preparing teacher guides along with the revised books.
- 3) An earlier study of the *Bal Vaigyanik* workbooks by a team of linguists from Delhi University had highlighted the fact that the language, though friendly, was somewhat terse. They felt the style of presentation lacked in redundancy, a factor they considered essential for promoting reading and comprehension skills.

The cover of the English edition of Bal Vaigyanik for Class 6. With the proliferation of English medium schools in Madhya Pradesh, demand for English translations of our workbooks is increasing apace.



This presented an interesting paradox. The terse style was followed knowing that most children in rural schools do not become mature readers even by Class 8. We expected the teacher to fill in the gaps by explaining the reason and background of the experiments and organising discussions as the activity proceeded. However, not all teachers could fulfil this role well and this left a serious gap in children's perceptions and understanding.

Heeding the advice of the linguists, we attempted to make the language of the chapters more communicative and lucid. We also sought to provide more scope for children to express their understanding, experience and perception in writing. Since these revised books are now being used in schools, we are attempting to closely monitor this aspect to gauge the impact.



This illustration from the chapter on Learning About Graphs from the Class 7 Bal Vaigyanik depicts the various ways in which information and data can be presented.

- 4) We have considerable feedback on the feasibility of various experiments in schools, especially long-duration experiments and those requiring night-time observations and field study. This has prompted us to try out some simplifications. However, one cannot think of teaching astronomy without observing the night sky or life sciences without extended field based experiments. Nor can the limitations of the formal school be wished away. So the challenge we face is to motivate children to undertake such activities at home.
- 5) Our feedback also told us that some concepts, particularly the more abstract ones, are proving difficult to deal with. One example is *Bal aur Bhar* (Force and Weight). Traditional curricula tend to take it for granted that explanations of such concepts in textbooks are successful in conveying an understanding. However, our field studies show that they only lead to cramming, without understanding. We are trying to address these conceptual gaps in our revised workbooks. However, we are becoming increasingly convinced that present curricula are too heavily loaded conceptually and need to be looked at more critically.
- 6) In chemistry, the traditional approach relies entirely on first building up a theoretical structure of concepts like atoms and molecules, elements, compounds and mixtures, laws of chemical change, chemical symbols, formulae and equations etc. In HSTP, we have tried to build up an experiential approach to introducing chemistry. During the current revision we sought to further enrich this approach since we felt that, proportionately, we were doing less chemistry in the classroom. We devised four new chapters. In fact we now feel that this solid base of experiential chemistry lays the groundwork for building up theoretical conceptual understanding in the higher classes, particularly Class 9 and 10.
- 7) We are also including some interesting activities/experiments in the workbooks which are independent of the chapters and the curriculum. These will not be covered in the evaluation process.

How the revision process works

Generally, once the drafts of the proposed chapters of the revised workbook are readied on the basis of our feedback, they are disseminated for comments to the HSTP resource group. Then follows a series of workshops in which the revised

Feedback for revising the workbooks is collected in several ways, including reports filed by resource persons who pay follow-up visits to schools. These notes on responses of children from different schools to a question in a chapter are from one such report.

प्रश्न - खाली बोटल या गिलास में हवा है या नहीं इस बात का फैसला करने का कोई तरीका बताओ?

माडर्न स्कूल इटारसी - इस प्रश्न के उत्तर में बच्चों ने मुख्यतः दो प्रयोग सुझाए।

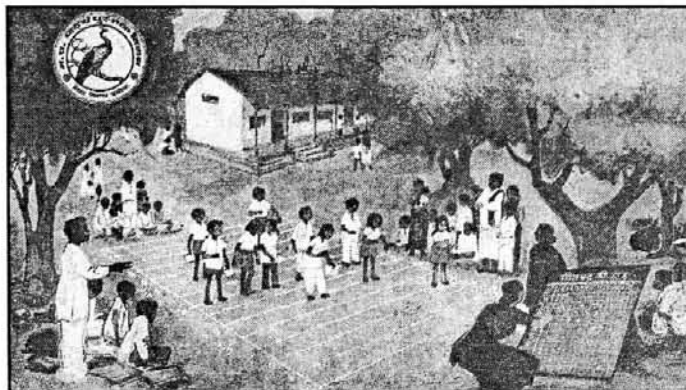
1. पानी से भरी बाल्टी में खाली गिलास उल्टा करने पर उसमें पानी नहीं भरता। इसके विवरण में उन्होंने बताया कि गिलास में हवा थी।
2. गिलास में रूमाल या कागज़ रूँसकर पानी भरी बाल्टी में इस गिलास को उल्टा डालने से कागज़ या रूमाल गीला नहीं होता। इस प्रयोग का विवरण वे नहीं बता पाए। इसके अलावा एक अन्य प्रयोग सुझाया कि पानी से भरे गिलास में नीचे कागज़ लगाकर उल्टा करने पर पानी नहीं गिरता परंतु वे स्पष्ट नहीं कर पाए कि इसमें गिलास में हवा की उपस्थिति का पता कैसे चलता है।

कन्या शाला रायपुर - इस प्रश्न के उत्तर में सभी टोलियों में लगभग एक ही प्रयोग सुझाया। किसी गिलास में धूल, मकड़ी का जाल या हल्की चीज़ जो हवा में उड़ती हो अगर उड़ती दिखे तो गिलास में हवा है। परन्तु इसका विवरण किसी ने नहीं किया। *



Lighting a bulb in an experiment on electrical circuits.

The painting on the back cover of the Class 8 Bal Vaigyanik depicts children undertaking an activity/experiment - the heads-or-tails race - in the chapter on Chance and Probability.



drafts are discussed and commented upon. Teachers teaching *Bal Vaigyanik* in schools, resource persons from universities and research institutions and our team members participate in these workshops.

The draft chapters are then field tested in schools. The feedback from these field tests is made available to participants in the final revision workshops, which fine tunes the chapters, giving them their final form.

The other aspect we are focusing on is the design of the workbooks. We organised a workshop in 1998 exclusively to study this aspect and suggest improvements. A team led by a faculty member from the National Institute of Design, Ahmedabad, worked on the illustrations and layout. We took this team to rural and urban schools in Hoshangabad district to acquaint them with the nature and level of children's understanding of pictorial, graphical and design elements of our workbooks.

The revised *Bal Vaigyanik* for Class 6 was approved by the State Textbook Standing Committee and then printed by the Madhya Pradesh Textbook Corporation and made available to students in the academic session beginning July, 2000. The book has, by and large, evoked a good response from both teachers and students. Similarly, the revised *Bal Vaigyanik* for Class 7 is ready for introduction in schools in the session beginning July, 2001.

Draft chapters of the Class 8 workbook are being prepared. Our work plan envisages the introduction of the revised edition from the July 2002 session.

The present revision process has brought to the fore some crucial issues which need to be understood and resolved.

- 1) We have already referred to the question of including concepts of atom and molecule, element symbols, chemical formulae and chemical equations in the middle school science curriculum. At present, the dominant opinion within the HSTP group is that these topics should be introduced in the higher classes because, as stated earlier, middle school children do not have the necessary cognitive and experiential wherewithal to understand such abstract concepts. However, this thinking runs counter to the oft-expressed concerns of parents and the dominant mainstream curriculum. We are struggling to address these concerns without violating the basic principles of learning science.
- 2) Another oft-repeated apprehension is that the HSTP curricula lack linkages with the mainstream Class 9 and 10 curricula. We have been studying this problem closely and two conclusions seem to emerge. First, the existing mainstream curricula in Class 8 and 9 are severely mismatched. They lack continuity and, in fact, involve a quantum jump conceptually. Second, HSTP children appear to be better equipped to tackle this conceptual jump because of our emphasis on doing, understanding and learning. Hopefully, the current curricular revision being undertaken at the national level will address the Class 9 discontinuity problem. We will again look into the problem closely after this round of revision.
- 3) For such studies, we require to expand our team of experienced researchers in the field. In fact, this is a major challenge for Eklavya. How are we to mobilise such human resources? How can we make Eklavya an attractive career option for trained professionals from faculties of education, science, psychology, linguistics etc? How do we mobilise

more and more young people from colleges and universities? As many of the pioneers in this experiment from the 1970s and 1980s reach middle age, we need to have younger people taking over to ensure a fresh infusion of ideas and enthusiasm.

4) At present, many children get very little to read other than their prescribed textbooks. This is especially true in rural areas. There is, thus, a strong temptation to stuff textbooks with every conceivable concept, narrative, scientific fact... This is not always helpful and may even prove counterproductive. We have made a serious attempt to provide supplementary channels of learning through *Sawaliram*, our question-answering service, and *Chakmak*, our children's science magazine. This points to a strong need for building up a vibrant school library programme.

5) Another question that confronts us all the time is: What sort of space can a middle school science curriculum provide for effectively introducing science-society issues into the classroom? One of our concerns is to enable students to learn from and negotiate contentious multifaceted issues in a group situation. To make this feasible, we need to move beyond the confines of the formal curriculum and examination system. Perhaps, such science-society issues can be picked up as part of extra-curricular activities in schools.

English edition of Bal Vaigyanik: The rapid growth in the number of English medium middle schools all over Madhya Pradesh has led to an increased demand for English editions of Bal Vaigyanik. In the initial years, when the number of such schools was small, we provided cyclostyled translations of the chapters. We have now come out with English editions of the two books for Class 6 and 8.

A successful experiment in supplying kit materials to schools

A necessary condition to ensure that activity-based teaching takes place in schools is that they are provided with the necessary equipment and material and these are replenished every year. Our experience over the years had made it more than obvious that a centralised purchase and distribution system for kit materials is totally incapable of delivering the goods. The state also appears incapable of making regular financial allotments to schools for purchasing the necessary equipment.

Hence, more often than not, we have found ourselves involved in the process of ensuring that kit materials do reach the schools. We have been thinking of ways to facilitate the setting up of a sustainable and easily accessible kit supply system for schools in the programme area. We have now devised a strategy for achieving this goal. It rests on the following three premises:

- first, a small contribution from the parents would suffice,
- second, placing the money in the hands of the science teacher, under the guidance of the school headmistress/headmaster, is probably the most corruption free and efficient system to ensure availability of kit materials in schools, and
- third, with active marketing support from Eklavya in the initial stages, it is possible to create a sustainable and independent market and dealer network for science kit items in the programme area.



Girls at a science fair in Kesla block, demonstrate how a customer can be cheated while weighing items bought in a shop. Science fairs and bal melas are regularly organised in schools, giving children the opportunity to explain to parents and other visitors what they learn in school.

After a long drawn-out effort, we achieved our first success in 1995 when the Madhya Pradesh government passed a general order prescribing a science fee of fifty paise per month in all middle schools of the state with effect from January 1996. This single step gave schools the much needed financial wherewithal to replenish their science kit on an annual basis. The next obvious step was to shore up the supply side of the fledgling local science kit market.

Evolving a market for kit materials: A major effort was required to make kit materials available in the vicinity of schools to enable teachers to purchase items as per their requirements. While some kit items of common use are available in a small town or *casbah* market, others have to be purchased from cities like Bhopal, Jabalpur or Indore. Initially, we decided to firm up the supply side of such items through Eklavya, by stocking and selling them to schools and individuals on a 'no profit-no loss' basis. This proved to be quite a success but placed a tremendous burden of space and personpower time on our organisation.

Setting up a network of shops: As a next step, we decided to explore the possibility of local shopkeepers stocking and selling such items at the block headquarters level. In early 1998, we announced a scheme whereby shopkeepers could stock kit items on credit, with the facility of returning unsold goods. Prices were fixed with a 25 per cent profit margin for the shopkeeper.

Ten shopkeepers in different locations in the programme area have come forward to participate in the scheme. They have reported satisfactory sales and periodically renew their stocks through Eklavya. While about two thirds of the block headquarters in the Hoshangabad and Harda districts have such outlets now, they are still dependent on Eklavya to replenish stocks. This is mainly because they are yet unsure of the market and would not like to block substantial capital. This means that our field centres will continue as supplementary or back-up kit outlets in their respective work areas - setting kit price standards and meeting residual demand.

Creating a sustainable market: Increasing the market size is crucial for making the whole system viable and sustainable. Several ways are, therefore, being explored to expand the size of the market and tap latent demand:

- Disseminating the kit price list and the relevant government orders to schools in the interior areas once a year.
- Holding kit exhibitions with sale counters along with our mobile science exhibitions and other school-linked events.
- Encouraging parents to set up small labs for their children at home. This would help children by supplementing their classroom learning. With this basic idea in mind, we designed a portable kit box. We felt such a kit box could help teachers in storing the kit safely and distributing it quickly in the classroom.

Regular happenings in HSTP

Teacher training: Provision of continual academic support to teachers is a crucial component of HSTP. One important way in which such support is provided is by holding annual in-service orientation workshops for teachers teaching science at the middle school level.

HSTP has been in existence in the Hoshangabad district (and the new Harda district which was earlier a part of Hoshangabad) for the last 23 years. As a result, a substantial proportion of the recent teacher trainees in these camps have themselves been HSTP students. Such teachers appreciate the spirit and pedagogy of the discovery and learning-by-doing approach more easily.

The science kit being sorted out at the Hoshangabad field centre for supplying to schools and to agents. A special kit box has been designed to hold all the kit items required from Class 6 to Class 8.



For the past few years, HSTP has been organising block-level trainings in place of one big centralised workshop. Each block-level training covers a small cluster of contiguous blocks. Consequently, most trainee teachers do not have to travel far to attend these workshops. The main reason for this shift has been that teachers from private schools seldom get travel allowances to attend such workshops. Consequently, their attendance in centralised trainings had become quite low. We have found that teachers participation, including those from private schools, in these block-cluster trainings is fairly high. Further, because of the decentralised nature of the workshops, the local resource teachers get relatively better opportunities to show their initiative and develop their competencies as teacher-trainers.

Year	Teachers trained	Place
1998	400	Hoshangabad, Itarsi, Pipariya, Harda, Ujjain
1999	150	Harda, Pipariya
2000	400	Hoshangabad, Itarsi, Pipariya, Harda, Ujjain

Monthly meetings and student evaluation: For more than 15 years Eklavya has consistently organised the monthly meetings of science teachers at the block level in 25 blocks of Madhya Pradesh. These are preceded by a preparatory meeting where the resource teacher groups prepare the agenda which they carry out in the monthly meetings.

Support continued to be given to schools and the Education Department in organising student evaluation for Class 6, 7 and 8, including the Divisional Board Exam in Class 8. The *Ank Punarnirdharan Goshthi* - a three-day workshop in which a random sample of children's answers is evaluated and analysed by a large group of teachers - continues to be an energetic exercise full of debate and discussion. Apart from the objective of laying down the criteria for answer sheet evaluation, this meeting is an important annual review of children's learning performance and the health of the programme.

Content enrichment trainings: Committed and interested HSTP teachers are called upon as resource teachers to perform various academic tasks like developing material, revising curriculum, training new teachers, evaluation, follow-up in schools etc. Over the years, about 200 school teachers have been trained as resource teachers and have been promoting new pedagogical practices with commendable confidence. To give these teachers a certain amount of formal training in sciences and stronger conceptual understanding, HSTP has been organising annual conceptual enrichment camps. These were also conducted during the period under review.

In these camps three to four courses are offered in selected conceptual areas out of which each teacher chooses one. In addition, special lectures on specific topics are also arranged. The courses are prepared and conducted by our resource persons from various institutions like Delhi University, National Institute of Immunology, Delhi; Holkar Science College, Indore, other colleges of Madhya Pradesh and many other institutions, along with the Eklavya members.



Retired science teacher and an active resource person, Mahadev Prasad Tiwari explains the working of a telescope to the sarpanch who visited her village school in Hoshangabad district during a mobile science exhibition. Intrigued, she takes a peek. Eklavya is making special attempts to propagate its ideas on education within the local community.

Some of the topics covered in these workshops were: Life Processes (in two parts), Atoms and Molecules, Ionisation and Solutions, Electric and Electronic Circuits, Force and Energy, Genetics, Experimental Techniques in Life Sciences etc.

Administrative restructuring: The recent creation of new districts and the dissolution of divisions and divisional offices in Madhya Pradesh affected the HSTP routine quite substantially. In this process, even the *Vigyan Ikai* housed in the Hoshangabad divisional education office, which was meant for the academic and administrative upkeep of the programme, was dissolved. It had to be resurrected, on the basis of the principles/instructions articulated in 1983-84 when it was set up formally for the first time. During this period, the Hoshangabad and Harda district level *Vigyan Ikais* were set up and staffed. The state government had issued an administrative manual in 1987 outlining the administrative structures necessary for such an innovative programme. Because of the recent administrative restructuring and the state government's Panchayati Raj initiatives, a sizeable number of sections need substantial modifications. However, we feel it would be prudent to wait till the restructuring process is over and the dust settles down before reformulating the administrative manual in consultation with the State Education Department.

Hoshangabad Vigyan Bulletin: We publish this newsletter specifically for all the HSTP teachers as well as the resource group from other institutions. It fulfills the need for exchanging ideas among teachers and also provides a forum for airing their views on various aspects of HSTP and education in general. In addition, it makes available information about various relevant government orders. Its publication has been quite irregular. After a break, we again revived the magazine and it is being published regularly since then (4 to 5 issues every year).

Class	Nature of questions in %		
	Original	From <i>Bal Vaigyanik</i>	From the <i>Sawaliram</i> picture
6th	67	8	25
7th	60	16	24
8th	79	12	9

A *Sawaliram* workshop in progress in Ujjain. An attempt is being made to create a data bank of *Sawaliram* questions and answers.



***Sawaliram*:** An integral component of HSTP is a fictional character called *Sawaliram* to whom children are encouraged to send queries on everything under the sun (and beyond). These letters are directed by the District Education Office, Hoshangabad to Eklavya where our team responds personally and individually to each student. This team generally comprises persons from within and outside Eklavya. Often, we get researchers working in reputed institutes like the Indian Institute of Technology and the Tata Institute of Fundamental Research to reply to these letters. Currently, we receive, on an average, 20 letters per month from schoolchildren. This number could easily be much higher if we have at least one person who can devote her/his exclusive attention to *Sawaliram*. Another challenge facing *Sawaliram* is encouraging more girl students to articulate and send in their queries. At present, only about 20 per cent of the letters are from girl students.

***Sawaliram* question bank:** Our bank of *Sawaliram* questions and answers has been growing over the years. Since questions are often repeated, we are trying to computerise this question-answer bank with a search facility. Over 100 questions and answers have been inputted after getting the answers verified by experts. Some technical glitches have to be overcome before we can come up with a truly *desi* 'Tell Me Why' series.

The challenge of mainstreaming: HSTP was expanded to all schools of Hoshangabad district in 1978 and further seeded in subsequent years in one school complex each in 14 districts covering the then educational divisions of Indore, Ujjain and

Hoshangabad. The underlying perspective behind the expansion was that macro-level implementation of an innovative programme would build up the experiential and human resource base for further spread across the state.

In 1990-91, an expert committee constituted by MHRD, Government of India, recommended a gradual growth of the programme, emphasising the need for financial, administrative and academic inputs to achieve this objective. However, with the focus of educational reform shifting to primary schools under the Rajiv Gandhi Shiksha Mission and the DPEP, the SCERT and State Education Department deferred further decisions until the time that programmes covering middle schools are launched. This 10-year period gave us the opportunity to further strengthen the programme through book revision, sorting out administrative problems, including kit availability, and reinforcing our resource group.

With state level planning for quality improvement in education at the middle school level being initiated in 2000-01, we began discussions with the government on the role HSTP can play in this context.

Developing resource material: We have always been aware of the paucity of good reading and training material in Hindi on basic concepts in science. About six years ago, we took the first intermittent steps to develop such resource material in Hindi for HSTP. The material is suitable for general reading as well as for use in training manuals for content-enrichment workshops. It is targeted at both school science teachers and high school students. Over the last three years, we have developed resource material on electric and electronic circuits, basic genetics, atoms and molecules and principles of ionisation. Some of our resource persons are currently working on reading material on electricity which could also serve as a reference manual.

Mobile science exhibition: A tour of schools in 10 places of Hoshangabad, Betul, Harda and Dewas districts was organised with the help of the Regional Science Centre, Bhopal. The science exhibition was mounted on their van. We followed up on this initiative by organising low-cost science exhibitions with several schools of Kesla and Itarsi blocks in 1999 and 2000.

Convention on science education in Hoshangabad: We conducted a one-day convention on science education on August 4, 2000 at Hoshangabad. Our prime objective was to bring science education issues into the public domain and initiate a healthy critical discussion on them. Parallel discussion sessions on several issues were conducted. Children from many schools put up their experiments and models at a science exhibition organised on the sidelines of the convention. Among those who participated were Prof. Yash Pal, local intelligentsia, educationists from all over the state and teachers from Hoshangabad and the neighbouring districts. Prof. Yash Pal addressed the joint plenary session.

Excerpts from a report written by a resource person after a follow-up visit to a school. Such follow-up is a regular feature of the school programmes and the feedback collected is used in revising the workbooks and other teaching-learning materials.

प्रयोग-3

प्रयोग 3 का पैरा 2 बच्चे ठीक से समझ नहीं पाए।

जिसमें लिखा है कि रबर नली द्वारा मुंह से ऊपर की ओर सांस खींचकर नली को मोड़कर उसका मुंह बन्द कर लो और बोटल को उल्टा करके रबर नली का मुंह पानी में डुबाकर नली को खोल दो।

इसे स्पष्ट करना चाहिए।

यह प्रयोग काफी मजेदार लगा क्योंकि बच्चे आश्चर्यचकित थे कि पानी ऊपर बढ़ रहा है। इस प्रयोग को बच्चों ने बार-बार दोहराया भी।

5. ध्वनि

1. प्रयोग 5 में स्केल बहुत टूटती हैं। और बच्चों को ध्वनि में भारी या तीखी का अंतर समझने में भी परेशानी होती है। स्केल का कोई विकल्प सुझाया जाए।

2. पाठ में ध्वनि प्रदूषण के बारे में भी बताया जाए। ध्वनि प्रदूषण से हानियाँ.....।

3. ध्वनि का भारी या तीखी होना तथा कंपन गति से उसका संबंध समझने में कठिनाई होती है।

4. प्रयोग 7 में फंसे गुटके तार हिलाने से निकल जाते हैं।

6. पानी - मृदु और कठोर

1. प्रयोग-1 में बच्चे कम ज्यादा झाग की तुलना ठीक से नहीं कर पाते हैं, क्योंकि उनमें अंतर कम होता है।

2. प्रश्न क्र. 8 अग्रपूर्ण है, शुद्ध पानी को समझाना होगा।

3. आसुत जल एकत्र नहीं हो पाता। बारिश के बाद कनेलू से गिरते पानी को छानकर प्रयोग करने पर भी वही निष्कर्ष प्राप्त होते हैं।

4. लवणों की घुलनशीलता वाले प्रयोग में भी दिक्कत आती है।

5. अवक्षेप स्पष्ट नहीं होता है। प्रयोग 1 व 2 ठीक से समझ नहीं आता।

Of spiralling creepers and curious children

Sawaliram is a name familiar to most children in Hoshangabad district. They write to him, posing questions that come to their minds. His job, somewhat at variance with his name, is to answer their queries - individually. Some questions probably occur naturally to most children and are repeated ad nauseam. However, some questions perplex us no end. Some time back there was one about the migration of common yellow butterflies. The tomes in our library had all about the migration of monarch butterflies across the Mexican Gulf but nothing about the humble yellow species of Hoshangabad! Or take this deceptively simple letter from a remote village: "I happened to notice in the jungle that all creepers spiralled in one direction only. Please tell me if my observation is correct and if it is, tell me why?"

The letter created quite a commotion, for no one knew the answer. So we wrote to two friends teaching life sciences in college and to one conducting research at the Centre for Cellular and Molecular Biology in Hyderabad. There was much excitement and debate as the replies came in one by one. Because each letter was at variance with the other.

Our friend from Holkar Science College (Indore) wrote that the child's observation was correct and all creepers in the northern hemisphere spiral in one direction and those in the southern hemisphere spiral in the opposite direction. A physicist in our group explained that this was because of the coriolis effect caused by the rotation of the earth. Apparently, Einstein had written about it in a famous paper explaining the spiralling of water in a bathtub.

A few days later came a letter from our expert on plant matters. He said spiralling was species specific - some spiralled clockwise while others went anticlockwise.

Yet later came the letter from CCMB. It agreed with our botanist and added that it is a matter of frontier research in both the physical and biological sciences. Particles or creepers had a definite probability ratio for spiralling in either direction. There was always a possibility of one or the other turning in the opposite direction, just as some people turn out to be left handed while most others are right handed. Scientists call it 'chirality'.

That was months after we received the child's letter. A humbled Sawaliram wrote back summarising the views of the experts as best as was possible and added that



this is how science proceeded - by observing, formulating hypotheses and testing them repeatedly.

There is a sequel to the story.

The HSTP covers about 600 schools and it is seldom possible for us to visit all of them to collect feedback. So once in a while we organise an extensive follow-up campaign. One such team was covering the Bankhedi region in the eastern extreme of Hoshangabad district during one of these campaigns. The following extract is from Rajesh's report of the visit:

Camp Pipariya: After covering a school in the morning we decided to visit the Dumar village school down the road - Gopal, Sahu our resource teacher and I. After a bumpy ride on a mud track we reached a point where the track gave way to mounds of rocks and a vast stretch of water. We left the jeep and set out on foot. A few hundred metres ahead, Sahu told us the water would get waist deep and we better take off our trousers and tie them around our heads. We did so and proceeded. After we crossed the sheet of water and walked semi naked for a while to dry ourselves, we put on our trousers and walked another half-an-hour to reach the school.

There were about 20 children in the school and one lady teacher ... the male teachers were away at the block office. We got to talking to the children. We asked them if they knew about Sawaliram. They all said they had read his letter in the beginning of their workbooks. 'Has anyone written to Sawaliram?' we asked. There was silence. Then a child from Class 8 put up his hand shyly. We wanted to know the question he had asked. Again silence. Then, hesitantly he said, 'I had asked about the direction in which creepers spiral.' A thrill ran through me. He probably did not understand the answer much but seemed very excited by the fact that he had got a reply at all.



A social science class in progress in a middle school

SOCIAL SCIENCE

PROGRAMME

अंग्रेजों से पहले लोग जंगल का उपयोग
 बहुत कमिनाई से करते थे और सरलता
 से करते थे और अंग्रेजों के शासन में
 जंगल का उपयोग बहुत कमिनाई से
 करते थे। और अंग्रेजों के शासन
 पर बहुत जुल्म करते थे और अंग्रेजों
 के शासन में जंगल का उपयोग पूरी
 तरह से नहीं कर सकते थे। यही
 तुलना अंग्रेजों से पहले के लोग की
 और अंग्रेजों के शासन की तुलना
 हमने अपने शब्दों में निश्चा है।

Samples of children's answers to the question given below in the school examination:
 अंग्रेजों से पहले लोग जंगल का उपयोग कैसे करते थे और अंग्रेजों के शासन में जंगल का उपयोग कैसे करते थे? तुलना करो और अपने शब्दों में लिखो।



Illustration of Bhimbetka cave paintings from Class 6 textbook

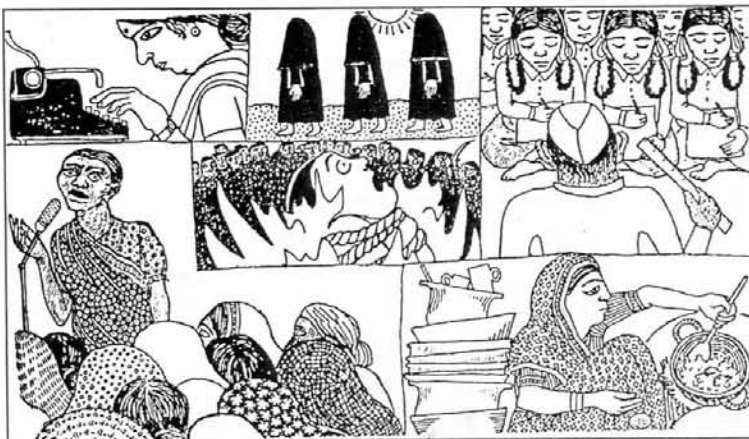
अंग्रेजों से पहले लोग जंगल का उपयोग
 बहुत कमिनाई से करते थे और सरलता
 से करते थे और अंग्रेजों के शासन में
 जंगल का उपयोग बहुत कमिनाई से
 करते थे। और अंग्रेजों के शासन
 पर बहुत जुल्म करते थे और अंग्रेजों
 के शासन में जंगल का उपयोग पूरी
 तरह से नहीं कर सकते थे। यही
 तुलना अंग्रेजों से पहले के लोग की
 और अंग्रेजों के शासन की तुलना
 हमने अपने शब्दों में निश्चा है।



The cover of the social science textbook for Class 6.

An introductory illustration from a chapter on New Ideas and Attempts at Social Reform from the Class 8 textbook. Children are asked to identify what is being said about women's issues in these illustrations.

नीचे महिलाओं के बारे में कई चित्र बने हैं।
तुम्हारे विचार में इनमें से कौन सी बातें 200
साल पहले हो ही नहीं सकती थीं?



In order to make a comprehensive impact on the quality of elementary education, Eklavya had planned to take up innovations in subjects other than science. Thus, we initiated a curriculum development programme in social science for Class 6,7 and 8 in 1986. The pilot phase of the programme was launched in nine government middle schools with the permission of the Madhya Pradesh government. We developed new textbooks, teacher training processes, evaluation methods and so on.

The pilot phase is now drawing to a close and the programme is being extensively reviewed, documented and evaluated by a group of experts in social science and pedagogy. Its expansion to a larger number of schools in Madhya Pradesh is also being mooted. Besides, Lok Jumbish Parishad of Rajasthan had taken it up for implementation in one block in Ajmer district since 1998.

We have tried to make the learning of social science more meaningful and interesting, moving away from the traditional approach of mere description of facts. This has, indeed, been a pioneering aspect of the programme and a new focus has been given to the curriculum by selecting issues and themes which can be examined in depth. The textbooks give space to real life experiences of people from many walks of life. To enable children to actively participate in the process of learning, we have interwoven many kinds of engaging activities and materials into the texts. We have also opted for an open book examination to evaluate children, focusing on skills like comparing, analysing, synthesising, reasoning and using texts, pictures and maps for gleaning relevant information.

Several interesting offshoots have been generated while we were developing the curriculum package. For example, we undertook pedagogical studies on important but complex topics such as how students in different classes understand the effects of rotation and revolution of the earth, and the structure and processes of the elected government in India. We hope such studies will indicate the appropriate place and manner in which such topics should be included in the curriculum.

We have also tried to understand and identify the kind of resource materials needed by students and teachers and some projects to develop such materials are under way. Involvement of academicians from the field of higher education in these efforts is also being actively pursued.

Looking back to review and document what we have learned

During the three-year period from 1998 to 2001, our social science team, which includes a large body of resource persons, has tried to bring to a culmination a process of reviewing and documenting the programme. Dr Poonam Batra and Ms Disha Nuwani have already completed a pedagogical review of the social science textbooks. Subject reviews of the text have been collated and summarised for history, geography and civics by Dr Tripta Wahi, Dr Kamala Menon and Dr Amman Madan respectively.

We documented in detail how the various aspects of the programme had evolved over the last 15 years and we also documented our reflections on the feedback collected from children on their process of constructing

knowledge. A preliminary draft of this review was completed by January 2000 and we are currently finalising it for presentation and publication.

This review has been a significant exercise for us because it is both participative as well as multidimensional. We have tried to look at the curriculum evaluation process from the perspective of the insider, the perspective of the expert and the perspective of field realities. Each perspective tells its own tale and the reader is able to experience the nuances of the different narratives as they converge and diverge.

Looking more closely at how teachers teach and children learn

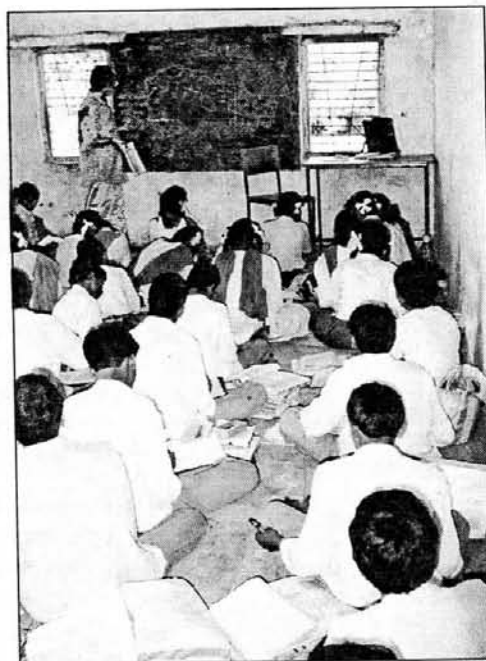
We undertook a programme of documenting the classroom transactions of a teacher in the school in Mankund village. We felt such detailed observations would give the necessary thrust for continuing innovations in the curricular package. Such teachers who are now experienced in the programme are able to cross-reference across the three subject areas of the three classes. By observing such cross-referencing we feel we will be better able to understand how the material can be used in an integrated manner. It also enables us to see how teachers relate to the experiential knowledge of children and how they use the texts in a flexible manner. Transactions in over 50 classes, covering portions of Class 6, 7 and 8 texts, have been documented. We are now reviewing this literature because we know it will contribute significantly to generating teacher-training materials.

We also tried to analyse concept acquisition by children in the context of eight lessons. A large majority of students display a grasp of the concepts in the lessons in a broad way but not more than half of them succeed in outlining the details and depth of their understanding in writing. This picture changes dramatically when they get the chance to participate in oral, small group discussions. In addition to the concepts they develop from the lessons, children also draw upon their general experiential knowledge, which may sometimes go against the understanding put forward in the text. In matters of depth, their response is not very consistent and rigorous.

The question we have asked ourselves is, should children of the 11-to-14 age-group be helped to engage with concepts more rigorously? If this is a desirable objective, the programme may need additional inputs to the concretised, lively, activity-based texts that make up the books at present. We are reflecting on issues such as these in our effort to continuously improve the curriculum.

We also feel that children's grasp over information needs to be strengthened to improve their analytical abilities. We decided to design inputs through which children could get stronger opportunities to assimilate and retain information. One of the ways to do this is to let children handle a large number of simple information questions as an open-ended kind of challenge. They could do the exercises as often as they liked to prove to themselves their improving performance. Thus, question sheets were made on six to eight chapters each in Class 6, 7 and 8. We tried these out in the eight programme schools. We encouraged children to evaluate their own or their friend's answers, to check information from the textbook and to make questions themselves for others to answer.

Both children and teachers found the activity interesting and welcomed it. We need to undertake a study on the impact of these exercises and also try out other more creative methods of study.



Prakash Kant teaching social science in Class 7 of the school in Mankund village in Dewas district where Eklavya documented detailed observations of classroom transactions.

Looking to the future: planning to expand the programme

So far, the social science curricular programme has been running in only eight government schools. We are interested in expanding the programme to all the schools of Hoshangabad and Harda districts and to the 22 middle schools in Bagli block of Dewas district. We developed a proposal to this effect and presented it to the government. Discussions were held with concerned officials and decision-makers. We also submitted the draft report of the review of the programme we had undertaken.

In order to involve the elected representatives, teachers and the local intelligentsia in planning the future of the programme, we also organised a number of meetings and contact programmes across the region. A consultative committee was set up, with the cooperation of the District Education Officer, to suggest improvements in the books we had developed. The committee, which comprised selected teachers of the district, examined the Class 6 book at length and suggested changes in its content.

However, the government was unable to formulate its response to our proposal to upscale the programme. We are still pursuing the matter and efforts to evolve an understanding with the government are continuing. Meanwhile, we have formulated a strategy to encourage individual schools to voluntarily participate in Eklavya's efforts for curricular reform and teacher development. This strategy will be tried out from the coming school session.

Looking at children's understanding of the structure of government

As mentioned earlier, we had felt a sharp need to explore children's understanding of the structures of government during our classroom interactions. We felt their understanding of these political institutions, terms and processes was far from satisfactory. The standard texts were terse and cluttered, with a large number of technical terms. But we found that even Eklavya's own modified versions, though they tried to elaborate and explain, remained inadequate.

What should be the agenda for creating a more relevant narrative on the *sarkar* for children? The study we undertook was intended to provide a critique of the present texts and explore the perspectives of alternative discourses. The fieldwork on the research began in 1998. A background note on the concepts was prepared and presented at a workshop. A set of about 12 leading questions were worked out, such as: "What happens after all the MLAs are elected?", "What is the difference between a Vidhan Sabha and the Lok Sabha?" and "What does an MP/MLA have to do?"

Using such questions as a basis, we conducted discussions with children in small groups of three to six. The sampling was done in Dewas district, in both urban and rural situations. In each situation we included both government and private schools, considered to be good, in order to account for differences in exposure. Discussions with about 70 children of Class 8, 9 and 10 were recorded. These tapes were transcribed and analysed. The draft report of this research has been written out and needs to be edited and presented.

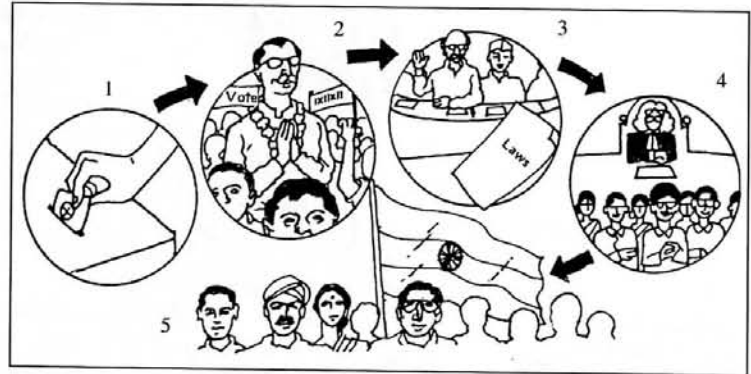
The study attempts to explore whether textbook images are complementary with the images learned in the context of children's socialisation process. For example, do people associate the *sarkar* and its institutions mainly with the making and execution of laws? Or are other images more dominant, such as the provision of welfare services? The main thrust of the textbook is in conveying law making as the function of various legislative houses and that is the role associated with people's representatives such as MPs and MLAs in the textbooks. But children often do not give even a third place to law making while prioritising it among a list of five

Excerpts from an Eklavya study on children's perceptions of the Sarkar - discussions with a rural high school group:

- प्रश्न अलग-अलग विधायक जीत के गए, उनका क्या-क्या काम है?
उत्तर इसका कार्य जिस क्षेत्र में से जीता उसका विकास करना।
प्रश्न और कुछ काम है क्या?
उत्तर सड़क बगैरह बनाना।
प्रश्न ठीक-में कुछ सूची दे रहा हूँ। उसमें से सबसे प्रमुख काम- ये बताना है। सबसे प्रमुख काम कौन-सा है? अपना-अपना मत रखना। इसका कारण भी बताना पड़ेगा।
उत्तर सड़क बनाना तथा पानी.....
प्रश्न तुम्हारा क्या कारण है?
उत्तर जनता इसलिए चुनती है, अपने इलाके के बारे में विकास करे। नई योजना को लागू करें।
प्रश्न और तुम्हारा?
उत्तर जनता अपनी-अपनी समस्याओं को विधायक को भेजेगी और विधायक सदन में रखेगा।
प्रश्न तुम्हारा?
उत्तर सड़क में पुल नहीं तो बहुत परेशानी होती है। जब पानी गिरेगा और पानी भी बहुत समस्या है।
प्रश्न इसके बाद सबसे मुख्य काम क्या है?
उत्तर सदन में कानून बनाना। चर्चा में भाग लेना।
उत्तर सदन में कानून बनाना।
प्रश्न ठीक। ये कानून कैसे बनाते हैं?
उत्तर विधानसभा या लोकसभा में बनाते हैं।

possible important responsibilities of a representative. On the other hand, it is important to note that the role of the representative in facilitating the execution of welfare activities does not get even a passing reference in textbooks. The study brings out such gaps between textbooks, children's experiences etc.

Looking at map reading skills: an innovative atlas for beginners



During our classroom interactions, we discovered to our dismay that children had very basic problems in reading maps. Usually, in map reading, concepts such as scale, scale conversion and colour are considered fundamental. But we found that children did not even understand that a map is representative of a place. This experience made us take up the challenge of creating an atlas for beginners.

We set out by studying available maps in India and abroad. We also intensified our interactions with children to get a better understanding of their grasp of maps and map reading.

Our first step in creating a new atlas of Indian states was to abandon the usual physical map and political map representation. That was a major deviation. Instead, we sought to develop maps using the following seven themes: land forms, natural vegetation, cultivation, urban centres, non-agricultural activities of people in rural areas, transportation and wildlife. We developed separate maps on each theme and then superimposed all the maps to make the final dummy maps. Ways were found to avoid overcrowding. We worked closely with an artist so that he could translate our ideas on paper.

We have done the labelling of these maps separately because we anticipate that they will be brought out in several Indian languages. The larger states are each made on a separate plate. Each group of smaller states is represented by one plate. Two pages of text are to accompany each plate.

We faced a problem in depicting the Himalayan states. How does one transfer a mountainous terrain from an ordinary map to a pictorial one, while keeping to a certain vertical scale? In fact, we had to cancel the plates of Himachal and Punjab we had made earlier. We have now found a possible way around the problem. GAIA Infosystems, Thiruvananthapuram, is currently assisting us in obtaining the proper perspective drawings with the help of the GIS computer software developed for obtaining satellite images for the Geological Survey of India.

The basic problem is to show state boundaries which fall behind mountain ranges, or depict some themes beyond these ranges. We worked out various versions of the perspective drawings of the map of Himachal Pradesh with the help of the GIS software and selected the most promising output. We feel that the problems related to state boundaries and non-visibility of themes will, however, have to be eventually sorted out through the use of supplementary maps.

We conducted an eight-day workshop (at Thiruvananthapuram) to share our work and ideas with other geographers and to get their help in tasks like referencing and note making.

Work on 10 plates covering 12 states and Union Territories has been completed and another nine remain to be completed.

Illustration from the NCERT textbook for Class 7 (1988) on How a Democratic Government Functions: 1) People vote; 2) Representatives elected; 3) Representatives make laws; 4) Laws govern the people; and 5) People obey the laws.

Further excerpts from the Eklavya study on Sarkar:

Similar confusion was seen in another urban high school group, too. It is possible that the absence of any clear explanation of the law making process in the state legislature was creating this confusion. It is very significant to note that these are high school groups who are expected to have studied these aspects twice in their schooling.

- सवाल सबसे प्रमुख काम क्या है?
उत्तर-1 विधायिका का तो सबसे प्रमुख काम है - सड़क बनाना, पानी की....
उत्तर-2 संसद का काम है। सदन में कानून बनाना।
सवाल क्या? कारण बताओ....
उत्तर-1 विधायक को जिले का सब देखना पड़ता है।
उत्तर-2 उसको जिले का काम देखना पड़ता है।
उत्तर-3 संसद को पूरे देश को देखना होता है।
सवाल ठीक है- अमी सांसद का काम क्या होता है
उत्तर सड़क बनाना और पानी...
सवाल अरे ये उल्टा हो गया ना।
सवाल पहले तुम उल्टा बोल रहे थे।
उत्तर उसमें ठीक किया।
सवाल इसमें कुछ गड़बड़ है। विधेयक शब्द का मतलब क्या है? कानून है ना?
उत्तर हाँ
उत्तर-1 ये उनका काम है।
उत्तर-2 विधायक मतलब विधि करना।
उत्तर हाँ। ये एक होता है। विधायक विधेयक।



Our dummy map of the state of West Bengal to be used by an artist. The attempt is to go beyond physical and political representation and give details of seven themes which cover geographic, economic and other features in a manner which is comprehensible to middle school children.

We have not kept any particular curriculum in mind while preparing the maps. Our primary focus is to enable children to understand maps. We have found that children in Class 5, 6 and 7 are, indeed, able to deduce information from these maps. We feel they could actually use this atlas to learn the principles of map reading on their own. Teachers, too, would find the atlas useful as teaching material.

Events, activities and new beginnings

Training teachers and conducting monthly meetings:

Given the small scale of the programme, we felt there was no need for a centralised workshop to train the few new teachers who had begun teaching in two schools. Three small on-site workshops were held for them. Our attempt to hold regular monthly meetings also did not succeed after seven meetings that were held in one year. The smallness of the programme does not allow such meetings to be viable. Follow-up visits to schools by our team members proved to be a more effective form of providing support to teachers and such contacts were maintained throughout the period under review.

Some resource material for teachers: The manuscript of a book on sources of Indian history was edited and work began on its design and layout. The book has been written by Prof Shireen Ratnagar and Dr Ajay Dandekar.

And some resource material for children: A question bank for Class 8 and a workbook on referencing skills were prepared and tried out in schools. These exercises are intended to make children aware of the different levels of referring to information and thereby improve their own capacity to undertake similar tasks.

In order to generate enrichment material on themes that are part of the Eklavya textbooks, we decided to work on the geography of Indonesia, Japan and the Polar regions. Two student volunteers from Ramjas College, Delhi, helped us review the relevant English texts on these themes and adapt and translate them into Hindi.

English edition of our Class 7 book: We are currently editing the English translation of chapters from our Class 7 textbook. We expect to publish it by June 2001.

Setting question papers to evaluate students: We organised annual workshops to set question papers for the Class 8 Board examination and to evaluate answer papers. In addition, teachers were helped to make question papers for Class 6 and Class 7. We are attempting to evolve a modified evaluation scheme that would include a component of closed-book tests as well.

Do children perform better in open-book examinations?: We undertook a small study to compare the performance of children to the same questions in open-book and closed-book examinations. We wanted to assess their ability to assimilate concepts and express their understanding in both situations. We compared and

analysed the responses of over 100 students from Class 6, 7 and 8 of one school with the help of two college student volunteers.

The study pointed out that well developed texts elicited better responses and reflected construction of concepts in open- as well as closed-book tests. Also, many children have limitations in higher skills such as summarising, comparing etc and these persist irrespective of the availability of the book.

Supporting the work of SCERT in Madhya Pradesh: SCERT requested us to contribute to its efforts to review the social studies curriculum. An Eklavya team participated in three workshops with SCERT. Subsequently, SCERT decided to continue the exercise of developing new books for the state by associating some resource teachers from Eklavya's programmes. Our books were used as resource materials. The new books for the state were published in July 2000. They contain some features of our programme, but in a very limited way. We reviewed the new books and submitted our views to SCERT in the hope of carrying forward a professional dialogue with this government agency.

Participating in CBSE's attempt to reform curriculum: CBSE invited one of our social science team members to join its committee on curriculum reform in middle schools. The draft curriculum prepared by the committee was reviewed and the trial of the new efforts in a school each in Chennai and Delhi was observed. An alternative draft of a curriculum was also prepared and proposed to the committee.

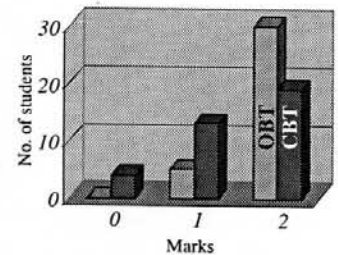
Initiating the programme in Vidyasagar School, Indore: On Eklavya's initiative, Vidyasagar School of Indore introduced our Class 6 social science textbook in its classes. Teachers were oriented to the new approach through workshops and monthly meetings.

Do adults understand government structures and principles? We undertook this investigation to complement the findings from our study of children's understanding of the same themes. We first reviewed the literature on the subject and developed a research design. We have initiated the pilot phase of field work in Jasalpur village.

Evolving a social science programme for Class 9 and 10: We got together a team of researchers and writers and began a review of existing social science textbooks in Class 9 and 10. The team also undertook observations of classroom processes. We then organised a workshop in February, 2001 at Hoshangabad in which 30 participants tried to outline alternative curricular frameworks that would maintain a link with our work in middle schools and also make social sciences more meaningful for students in Class 9 and 10. The participants decided to hold a second workshop in June 2001 and work towards preparing alternative materials as illustrations of a new approach.

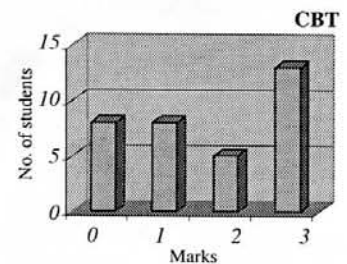
Workshop on history writing and research: We organised the third workshop on history writing and research, for college teachers and researchers in Madhya Pradesh, in Hoshangabad in February 1999. Conducted over the course of a week, the workshop drew 15 participants. They studied extracts and summaries in Hindi of published research on the thuggee phenomenon, the creation of Bhopal state, the Gond state in Mandla, the opium trade in Malwa and the impact of British rule in Madhya Pradesh. These were studied and discussed. Participants also studied some primary historical sources, such as the family history papers of a family in Jabalpur, the inscriptions of Raja Bhoj and some other Gond rajas and a *peshwai farman* given to a feudatory. Our attempt is to create a climate in society and in academic circles that is favourable to scientific historical enquiry.

(CBT - Closed Book Test
OBT - Open Book Test)

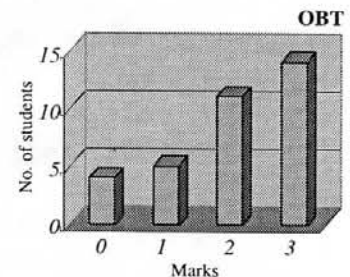


Average marks CBT = 1.35 (67.5%)
OBT = 1.85 (92.5%)

Eklavya conducted a study to assess children's performance in open-book and closed-book tests. The graph above shows the responses in both tests to the question - बैंक के कौन से कार्य हैं? The two graphs below show the responses to the question - बैंक खातेदारों को कहां से और कैसे ब्याज देता है?



Average marks- 56.7%



Average marks- 67.7%

Seminar presentations and publications:

- A paper was presented at the South Asia Conference on Education organised by CIE, Delhi University, in November, 1999.
- A paper was presented at a seminar on Challenges in Education organised by the B.El.Ed. programme at Gargi College, Delhi University.
- A lecture was delivered at Udaipur on current debates on the Indus Valley civilisation.
- A paper on history textbooks was published in Summer Hill Review, Indian Institute of Advanced Studies, Shimla.

The path ahead . . . our future plans

The social science team looks forward to:

- Implementing the curriculum programme in all the schools of Hoshangabad and Harda districts and some school clusters in Dewas district.
- A diffusion of the materials and approaches of the programme to volunteering schools in Madhya Pradesh and elsewhere.
- A vibrant involvement of university teachers and students in creating exciting reading and study materials in Hindi, to strengthen the body of non-fiction literature available to children and teachers.
- The evolution of a more holistic understanding of curriculum design based on skills, concepts and learner's experiences till Class 10.
- Encouraging the creation of a stable and active peer review and professional exchange forum within the SCERTs.
- Establishing linkages with chains of schools and organisations such as ICSE and CBSE to promote curricular innovations.
- Encouraging the creation of school and out-of-school libraries and activities to give children greater as well as peer opportunities for nurturing their educational interests.
- Encouraging the creation of people's forums to review and intervene in educational issues.
- Creating a rich body of social science material in local contexts.
- Encouraging research on issues of social science education.

Some of our forthcoming publications:

- Collaboration in the publication of the journal of Kaveri Shodh Sansthan, Ujjain, on history writing and research.
- The review report of the social science curricular programme.
- The Atlas for Beginners.
- The source book on Ancient Indian History.
- English editions of Class 7 and 8 textbooks.
- Papers on children's and adults' understanding of structures and principles of government in India.
- Papers on students' understanding of concepts related to the movements of the earth.

experiences etc. We reworked some of the mathematics portions, spreading a compact chapter over two or three chapters, strengthening concepts such as simple interest, decimals and measurements and adding more opportunities for exercises. In response to a suggestion from SCERT, more chapters related to social science were added. We also made good the deficiency of stories and poems in the book. The books were finalised, printed and sent to the schools for the 1998-99 session.

Additional workbooks: In March 1999, we again collected comprehensive written feedback on the programme from about 200 teachers trained in and practising the new methodology. The overall feedback on curriculum and training was positive. But teachers had expressed a need for workbooks which would provide more creative contexts for exercising various skills outlined in the curriculum. This has been a major issue in material development. Since teachers are hard pressed for time in a multi-grade situation, they are unable to formulate exercises which are expected of them in an open-ended programme. They then either tend to fall back on rote methods or leave the children with nothing to work with. So we developed workbooks for Class 1, 4 and 5 with the help of our resource teachers and other resource persons.

Integrated package vs discipline approach

When we began the programme, we had opted for an integrated approach in the content of *Khushi Khushi* to emphasise that learning takes place in a relevant context which would encompass various subject areas and provide opportunities for exercising different skills.


The intensive interaction with teachers in Shahpur block soon exposed the implementational limitations of this framework. We found that even five years after the programme had been in operation, teachers and parents were still sceptical about an integrated package and there was a strong demand for a subject-wise/discipline oriented approach. Another contradiction was that the evaluation procedures in the Prashika curriculum followed a subject-based format as per the government scheme of examinations. That is, children were tested in language, mathematics, science and social science. The parents and teachers grew uncomfortable with this contradiction.

We also found that the discipline-oriented approach at the higher levels had influenced the selection and treatment of material in *Khushi-Khushi*. Developing a particular skill or concept requires that it be pursued in depth. This entails a logical sequence that is discipline-oriented. Both language and mathematics units become fairly distinct by the end of Class I. In science and social science, the scope for integration is greater in


पाठ - 4 नाव

हम सीखेंगे - * संयुक्ताक्षर वाले शब्दों को पढ़ना। * सिंग के अनुसार क्रिया को बदलना।
* तार्किक सोच का विकास करना। * कल्पनाशीलता का विकास। * स्वयं कहानी को आगे बढ़ाना।

एक था मल्लाह। नाम था कालीचरण। गाँव वाले प्यार से उसे कल्लू कहते थे। एक रात कल्लू मल्लाह की नाव में बिल्ली छिपी बैठी थी। एक उल्लू उड़कर आया और नाव के किनारे पर बैठ गया।



बिल्ली उस पर झपटी। उल्लू उड़ गया। बिल्ली पानी में जा गिरी।



अब आगे क्या हुआ होगा? बताओ।

शिक्षण संकेत - कहानी पढ़ने के बाद 'आगे क्या हुआ होगा' पर बच्चों के साथ विस्तार से चर्चा करें।

A chapter from *Khushi Khushi* Class 2 titled *Shikar* (below right) adapted for the Madhya Pradesh primary school textbook *Bharti* under the title *Nav* (below left). The innovative work of several non-governmental organisations was tapped in the preparation of the *Seekhna Sikhana* package.

शिकार

एक रात को कल्लू मल्लाह की नाव में बिल्ली छिपी बैठी थी। एक उल्लू उड़ कर आया और नाव के किनारे बैठ गया।



बिल्ली उस पर झपटी। उल्लू उड़ गया और बिल्ली पानी में जा गिरी।

उल्लू उड़ गया।
कौआ उड़ गया।
टिल्लू उड़ गया।
घिड़िया उड़ गई।
हाथी उड़.....।
घूहा उड़.....।
मैना उड़.....।
मछली उड़.....।
* उड़ का खेल खेलो।



the early primary stage because learning is mostly restricted to comprehending descriptions of the environment and verbalising these descriptions and other experiences. These skills integrate quite well with the development of language skills in the early years. In the later primary years, however, skills particular to science and social science, such as experimental and mapping skills, begin to emerge. Content areas, too, become a little more specific by Class 3.

The 'integrated package' versus 'discipline approach' debate also forced us to explore primary school curricula across the world. While there was some evidence of curricular integration within several subjects, as for example science, social science and mathematics, integration across subjects or fields of study was not evident even at the primary stage. The interdisciplinary approach manifested itself more in planned cross curricular transaction of the same concept in different disciplines. For example while language, mathematics, science, history and geography continue to be taught separately, some themes like water could be selected for interdisciplinary study. In such cases, water could be studied in a poem, in earth sciences, or as a mathematical skill such as measuring its volume.

The importance of language across the curriculum is, however, underscored by a

number of curricula across the world. This may take different forms - language exercises and opportunities in different subject books, or a separate course spanning language skills for different subject areas designed as a single course. Similarly, there are also certain skills that span disciplines, though several others are favoured by specific disciplines.

It became clear to us that teachers who were receptive to a more inter-disciplinary or integrated approach were generally the ones who had access to academic resources such as libraries etc and had a broader understanding of educational issues. They could assess conceptual gaps and design exercises for children to bridge these gaps. Unfortunately, we found that many teachers themselves did not have an adequate conceptual understanding, given the

limited opportunities for intensive training and the dearth of additional resource material. Furthermore, it was difficult for the teacher to ensure continuity and identify conceptual links in the units of different disciplines that were spread across our integrated package.

What was needed was a more balanced approach, with some amount of clear structuring for the teacher to better organise her/his teaching. So we decided that most units of the books would remain more or less as they were but would be reorganised and placed together in more appropriate sections. Where required, new units would be written in the same spirit - retaining the fundamental principles of learning through interesting contexts and generalising from concrete examples. In 2000, we reworked the books for Class 4 and 5 and divided their curriculum content into three broad disciplines - language, mathematics and environmental studies, while the curriculum objectives continued to be presented in a holistic manner.

While merging the existing language material in the books we introduced additional reading materials to provide for newer contexts and to reinforce certain skills. Specific evaluation activities were also interspersed to aid the teacher in the process of continuous evaluation of the child. Emphasis was also placed on exposing the child to reading material other than school books.



Toys provide moments of joy and excitement for children at a bal mela. Eklavya has a workshop at Harda which manufactures educational wooden toys.

In mathematics, we paid special attention to the sequencing and spiralling of material and sought to bridge some evident conceptual jumps. This made it easier for children to visit earlier concepts but at an increased level of complexity. Some exercises were added to offer enough opportunities to strengthen basic arithmetic skills.

The book also included a chart to pictorially represent the spiral structure of content and skills covered and the relative level of complexity of a particular skill. We felt this would enable teachers to facilitate sequential learning and children in one class at different cognitive levels could be appropriately challenged at their level.

In environmental studies, we enriched some science units and juxtaposed others with related concepts for purposes of comparison. We felt that if experiments related to a particular concept were clustered together it would enrich understanding, help the child build up hypotheses, encourage minute observation and, where possible, reach simple conclusions. Certain skeletal structures were created for children to fill from their own knowledge of the world around - this was primarily to enhance their ability to observe and classify critical attributes.

In social science, we first undertook a comparison of the content in Prashika and the state syllabus. We found ways to address the need for more space for discussion on Madhya Pradesh and India. Our Class 4 book now has a focus on Madhya Pradesh and provides glimpses of its various elements - forests, crops, people, historical places etc - with a definite sensitivity to the reader's own socio-cultural milieu. The Class 5 material focuses on India, its physical features and a holistic description of some representative states. We also focused on map reading and picture-reading skills. Besides this, some aspects of governance at the state and national level were included.

Training teachers and providing back-up support

The objectives of teacher orientation are to make the teacher a part of the discussion on what needs to be taught and how, to strengthen her/his conceptual understanding and creativity and to discover with them the process by which children and adults learn. During the trialling, we conducted a 15-day training programme every year at the block level. The training focused on the class for which materials were being trialled that year.

In 1998, we conducted a training programme in summer for teachers of Shahpur block in the curriculum of Class 4 and Class 5. In June 1999, the shiksha karmis who had been recruited by the government on probation for two years were oriented. To help us in this effort, we selected about 40 resource teachers and held preparation workshops with them before the main orientation course. These resource teachers were thus able to handle most of the orientation sessions fairly independently, giving us a greater sense of confidence in the replicability of such trainings independent of Eklavya's presence.

Mid-term short training: In the initial years of implementation, we organised only summer trainings for teachers. But the teachers kept demanding that we demonstrate these activities with children because they didn't feel confident about



Children enacting a play at a primary school in a village in Shahpur block of Betul district.

going back to their classes after the annual training and handling fresh situations. We, therefore, decided to have short mid-term trainings at the cluster level. The advantage of such trainings is that schools are in session and children are available for hands-on experience of whatever is discussed in the trainings.

We conducted such short trainings for the new teachers and shiksha karmis in the block in the three years under review. During the three-day training the teachers interacted with small groups of children to develop activities using picture cards, poems, stories and games. They then presented their experiences to the whole group of teachers, discussed issues in child learning and planned how to conduct such activities in their schools. These trainings had a positive impact, boosting the morale of the teachers and also increasing their clarity about the Prashika methodology.

Supporting schools in implementing the programme

Teacher training needs to be followed up with on-line school support. We set up a system of peer follow-up in the block by teachers who function as Cluster Academic Coordinators (CACs). We focused on two issues revealed by past feedback: the need for more organised planning and the need for a strategy to identify and deal with the different levels in one classroom that a teacher has to address. An exemplar monthly plan for Class 1 and 2 was developed and distributed to the schools. A test to identify different levels in Class 1, 2 and 3 was also developed. The Eklavya team also visited schools that the CACs were unable to visit because of time constraints.

Visiting schools and meeting teachers every month: The 130 schools in the block are divided into 13 clusters, with about 8 to 12 schools in each cluster. Every month, each cluster holds a meeting of all its teachers with the support of the cluster in-charges and CACs. The emphasis in the first round of monthly meetings in 1998 was on preparing activities for children in order to improve fluency in reading, comprehension and expression, consolidating the concepts of addition, subtraction and multiplication and exploring higher levels of observation, analysis and map reading.

In the later part of 1998, the meetings focused on developing methods of identifying the learning levels of children in Class 1, 2 and 3. The monthly meetings in 1999 focused on problem areas related to language and mathematics which required reinforcement, such as place value and decimals. We also collected detailed chapter-wise feedback on the workbooks of Class 1, 4 and 5 and the Class 4 and 5 *Khushi Khushi* during the October 1999 monthly meetings.

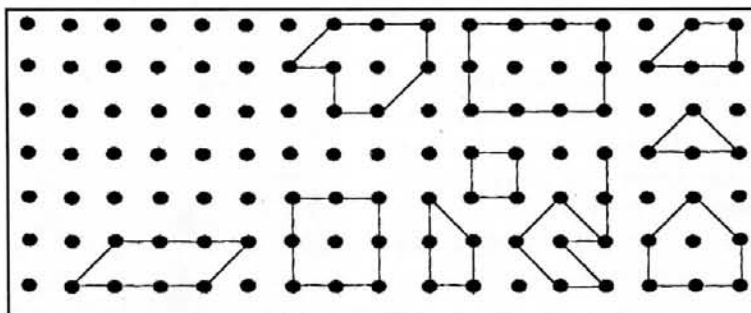
A further seven rounds of monthly meetings were held from August 2000 to February 2001. The monthly teaching plans for Class 1, 2 and 3 were reviewed during these

meetings and these formed the basis of school follow-up by CACs. For the Class 4 and 5 monthly meetings, the introduction of the new books was a major agenda. These books have been well received.

We also discussed ways of tackling the problem of poor school attendance of children during the monthly meetings. The causes include festivals, agricultural work and bouts of illness in the village. Another troubling

non-academic issue was that teachers had to spend a large part of their teaching time that year on election duty - there were four elections that year! Such circumstances often prevent them from applying their training inputs in the classroom.

An exercise from an activity chapter on making shapes by joining dots from Khushi Khushi Class 4 Part 2.



Evaluation proves to be an exacting test

We organised the evaluation of students of the entire block for Class 1 to 5, of which Class 5 was a Board examination. The preparation of evaluation papers forces discussions on the need for evaluation, the place of continuous and year-end evaluation, the types of questions that need to be formulated, what needs to be evaluated, which skills can be evaluated, which skills get consolidated much later and need not be tested at a particular level, which skills need to be tested by the traditional written method and which require a different methodology, what percentage of the evaluation should test memory and recall etc. Thus it is crucial to orient teachers on the evaluation process because this invariably strengthens understanding of the new curriculum and methodology.

The contradiction between an integrated curriculum and subject-wise evaluation was reviewed with teachers, especially in view of the fact that Class 5 has an external examination. Since both teachers and parents want to know what will be tested in which paper, we selected the skills that would be evaluated in the different papers. Children were oriented in the new ways of evaluation through preparatory question papers.

March 1999 was the first year for the Class 5 Board examination for Prashika students. We needed to set a different type of question paper. Three versions of each of the four subjects were prepared and given to the District Education Officer. Before evaluating the Class 5 answer papers that year, we held a workshop with about 40 resource teachers in which we worked out a memorandum of expected answers on the basis of samples of children's answers. Gradation of marks was then finalised on the basis of which over 2,000 children's papers were evaluated. Question paper preparation for the Class 5 Board examination for 2000 was done in late 1999.

In this entire process, we helped teachers develop ways and means of evaluating students not on information retention, but on skills like reading, mathematical abilities, powers of observation, problem solving, map reading, map making etc. The evaluation had elements of oral, written and experimental examinations. However, since oral or practical examinations have less credibility in the system and are logistically tedious to conduct in a large number of primary schools, evaluation of these skills was made part of the internal assessment process. Teachers were trained and CACs and Eklavya personnel supported them in conducting this process in the schools.

Creating responsive administrative structures

Since our programme runs in government primary schools, it is necessary to orient the system to respond to its implementational requirements. This is a time consuming process because government functionaries, including teachers and CACs, are responsible for a number of programme tasks. We worked on implementation systems in 1999, including the coordinating role of the CACs, which is crucial to the programme. The government was seeking to converge its education programmes at the cluster level through the CACs, including the EGS schools and the Padhna Badhna adult literacy programme. The CAC's time was therefore spread thin across 15 to 18 schools (including EGS) and 8 to 10 Padhna Badhna classes. Since Prashika runs in 130 formal primary schools, we had to constantly struggle to be able to ensure a significant portion of the CACs' time for the formal schools.

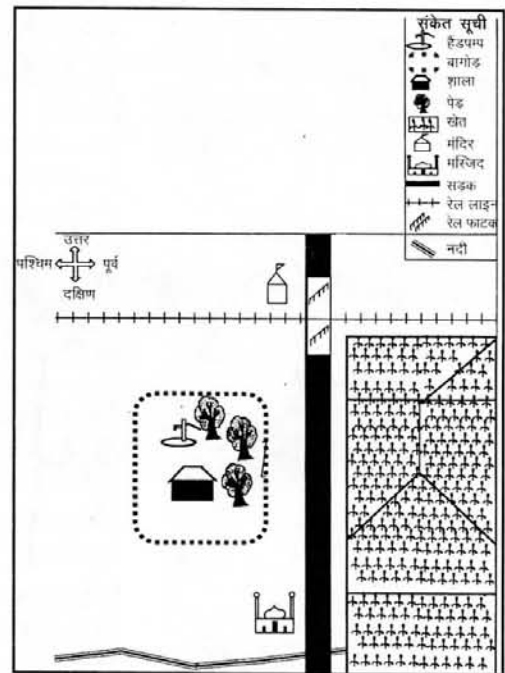


Illustration from a chapter on drawing maps from Khushi Khushi Class 4 Part 3.

IIM study evaluates the programme

The Indian Institute of Management, Ahmedabad, at the behest of the Madhya Pradesh government, undertook a study of the various experiments at the primary school level in the state, including the EGS system, the Prashika programme and the Seekhna Sikhana package. This qualitative study by the IIM's Ravi Mathai Centre was meant to inform policy at the elementary school level.

We agreed to take part in the evaluation study and debated many aspects of its design with the RGSM and IIM team. Two contentious issues for debate were i) whether the programmes should be compared and ii) the nature of achievement tests which could actually capture their innovative content. Indeed, evaluation design is an area that will require much professional intervention if it is to be a constructive exercise. Several studies have shown that academic achievement of children is not a function of the academic package alone. Socio-economic, institutional and cultural factors also play an important part. So care needs to be taken in comparing educational packages since the contexts in which they are implemented differ.

In spite of trying to understand the strengths and weaknesses of each programme, some comparisons have inevitably crept in, perhaps because the three programmes were being evaluated simultaneously.

Commenting on the Prashika programme, the IIM study points out that teachers working in the government system have been able to imbibe the importance of making learning joyful and interesting. They also showed dynamism in problem solving and analytical thinking and sought to connect their teaching with the local environment. The point made by the study is that an input like teacher training and orientation has had a significant impact on the performance of teachers in schools and has been able to impress upon them the need to involve the village community in the affairs of the school.

The study found that the Prashika books and learning materials excel in encouraging creative, critical and analytical thinking. They succeed in creating an environment in which learning is fun. However, because they are more unstructured than normal textbooks in teaching basic competencies, they tend to put more pressure on teachers and demand higher levels of motivation from them. Within the classroom, learning through activities and child to child learning are encouraged, and the emphasis is on problem solving and analytical activities and games.

In looking at student performances, the study does note that Prashika children may not fare well in the early years in acquiring basic competencies, but in the later years they seem to be able to articulate their thoughts with a greater level of competence and confidence. A comparison with students of other government primary schools in Betul district - the closest sample for comparison with Prashika - shows that Prashika children perform better, particularly in Class 4 and 5 levels.

On the basis of the experiences gained over the last few years, the state amalgamated books have been instituted across the block.

Research studies in Prashika: Baseline survey

We have been conducting baseline surveys of Prashika since 1994-1995 in order to assess the impact of the programme in Shahpur block. We compare the achievements of Prashika children of a school with those children who were not exposed to the programme because they were in Class 3 when Prashika was taken up in Class 1 and 2. We focused on reading, writing, comprehension, numerical and spatial skills.

We selected 15 of the 130 schools in which the Prashika methodology is followed, thus covering 200 to 250 children in each survey. Each batch of students was tested for three consecutive years, at the end of Class 3, 4 and 5. The data is currently being analysed.

Preliminary results show that the Class 3-end results indicate an increase in the percentage of correct answers in subtraction and division algorithms and multiplication. However, there is a decrease in the percentage of correct answers in multiplication algorithms. No difference is observed involving additions with carry over. School-wise, there is an improvement in 5 to 7 schools but a decline in 4 to 5 schools. In some schools there is no discernible change. The Class 4 and 5 results are being analysed.

In language, too, reading and writing abilities have definitely improved but are still much below expectations. The school-wise pattern is similar to that for maths.

Our analysis of the preliminary results, in consultation with experts in education, led us to the following general conclusions:

- Comparing two batches of students from the same school is essential as a control for accounting for many other factors arising from region, culture, exposure etc. Also, conducting the survey for three successive years allows us to assess whether particular skills have been picked up in subsequent years and, therefore, to assess the cumulative impact of the programme. Another factor is that since the teacher in the non-Prashika class is also trained in the Prashika methodology, and children are exposed to Prashika activities in school even if they are not studying in our programme, there is likely to be an influence in the class on the non-Prashika control group.
- We feel the need to study the impact of the programme on teachers and their teaching. We also need to conduct in-depth studies of student achievement to assess creativity, articulation and other skills which are more difficult to quantify.
- That the performance in some schools improved while it decreased in others indicates that other factors are influencing the performance of students. It would be important to profile different types of schools to identify the factors that influence education, and identify ways in which teachers involve the community in solving infrastructure and other problems in schools. The task of documenting and reflecting on the experiences of the programme is far from over.

Mobilising the community for primary education

Our work in developing community based learning support centres grew out of the need to involve parents and the community in the educational agenda, particularly outside the school framework. They needed to be closely associated with children's learning in order to understand how children learn, so that they can extend support to this process and help children overcome their alienation from the school. Children's learning is a function of the teaching-learning time and the learning atmosphere both within and outside school. Out-of-school support, particularly for first generation learners, goes a long way in sustaining children within schools. The interest of parents and the community in their children's schools also helps. Eklavya's curricular efforts have helped improve the learning environment within schools. This new initiative has helped in a similar way outside the school framework.



Eklavya publications on display at a stall in a bal mela at Shahpur. Bal melas have been used as a means of introducing Eklavya's work to the community and involving the community in the setting up of out-of-school support systems such as Shiksha Pratsahan Kendras.

We had been making sporadic efforts to evolve a programme to sustain these objectives since 1997. We experimented in Shahpur block where the primary education programme was being trialled in all the schools. We organised *bal melas* to which the community was specially invited. People were able to see the talent and potential of their children in these *bal melas* and realise the role the school was playing in fostering these abilities. Parents were also called to join the monthly meetings of school teachers at the cluster.

In the course of these interactions with parents the idea of setting up out-of-school support centres for children gained ground. Of course, there was the danger that some people would see this input as a parallel school in the making, or a coaching class, so we felt a dialogue was needed to evolve a vision of what the centre would do. We began setting up these centres or Shiksha Protsahan Kendras (SPKs) in 1999. The response of the community has been overwhelming. The modality for setting up the SPKs is as follows:

We first organise several consultative contacts culminating in a couple of meetings in the village. These meetings discuss the issues related to the education of children and what the community can do to improve the situation. Finally, the meeting discusses the concept of the *kendra* and decides on the venue to be used, the person to be chosen to run the *kendra*, the monetary contribution each family should make, the *samiti* which would be in charge of the affairs of the *kendra* on a regular basis etc. A *balak palak mela* is then organised and the SPK is inaugurated.

The community selects a Shiksha Protsahan Samiti and, through this samiti, pays the SPK teacher Rs 250 a month. Eklavya pays a matching amount of Rs 250. In the off-season, when some *adivasi* families cannot give in their monthly contribution, payment in kind is accepted. The space for the *kendra* is also provided free of cost by the people. The cost of materials and training of the volunteer is met by Eklavya. An important feature of the community's contribution is that these are not in the nature of fees for a service. The children of those who contribute need not necessarily attend the *kendras*. Conversely, the children of parents who cannot afford to contribute are not barred from the *kendra*.

The *samiti* meets at least once every month and reviews the working of the *kendra* and pays the volunteer the stipend. Eklavya resource persons frequently visit the village to meet parents and *samiti* members and help them resolve problems that crop up regularly. We also organise a monthly meeting of volunteers managing the *kendras*. In addition, small trainings are organised from time to time.

The *kendra* is the site for multilevel and multifaceted recreational and tutorial activities. These include reviewing schoolwork, organising associated activities related to mathematics and language and library-related activities for reading and writing, story telling, games and origami.

The *kendra* runs for two hours in the morning before school begins for school-going children. In the evening it runs for another two hours for non-school-going children. The morning and evening batches are further divided into three subgroups - those who cannot read and need pre-reading and pre-number activities (group A), those who have begun to recognise letters and numbers (group B) and those who can read by themselves and are able to do basic addition-subtraction (group C).

The community was initially reluctant to support the *kendra* if the activities were only in the play format, with no formal studying. However, as learning through play progressed in some *kendras*, questions along the following lines are now being raised: "Our children have learned in three months what other children going to government schools have not learnt over a much longer period. How is it so?" The

A boy working in a tea stall in Shahpur gets a chance to indulge in some creative activities at a *bal mela* organised in a primary school.



involvement of the community in the *kendras* is also putting more pressure on the government school teacher. In four villages we noticed greater interest on the part of the Village Education Committee in monitoring the working of the schools. Another spin-off is that more children are attending schools more regularly as their basic abilities improve and their confidence grows. Also, some non-school-going children have been encouraged to go back to school.

Initially, we began with three *kendras*. As word spread, people began requesting that *kendras* be opened in their villages too. As a result eight *kendras* were functioning in March 2001 and there are about fifty more requests from different villages in the block.

We are addressing the challenge of evolving a model for expanding the *kendras* with community support. To what extent should Eklavya be responsible in helping the community manage the increasing number of *kendras* is a question we are trying to answer. Can other forums or organisations be developed and supported in the block to undertake the programme in new areas if people are interested in it?

The community has been experiencing problems in continuing its stipendiary support for the volunteers during years of drought. In addition, a number of villages are endemically dry and poor, with low sustaining power. Such vagaries are likely to surface on and off and other means to stabilise the finances of the *kendras* need to be worked out. We expect that as a result of these activities, by the end of five years, the places where *bal melas* and *kendras* have been sustained will show an increase in enrolment and retention in schools and in the efficacy of schools.

Participation in seminars and workshops

We made a number of presentations on different aspects of our work at National seminars and workshops during this period.

Presentations on Eklavya's work were made at:

- CARE, New Delhi, January 1999
- National Law School, Bangalore during the National Consultation on Right to Education in May 1998
- Comet Media Foundation, Mumbai
- Tata Institute of Fundamental Research, Mumbai
- National Institute of Advanced Studies, IISC, Bangalore, April 2000

A paper on 'Assessment of learning as an integral part of the teaching-learning process' was presented at a seminar on Innovative Practices in Pupil Evaluation held at the Centre of Advanced Studies, M.S. University, Baroda in May 1998

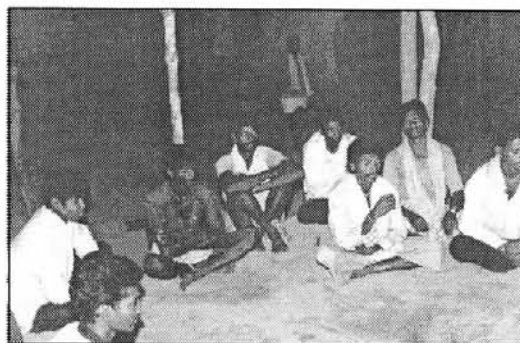
Publications

Eklavya's experiences in Primary School Education have been included in the 'Public Report on Basic Education in India (PROBE)' published in 1999.

An article on Eklavya's Primary Education Programme has been published in the ICCW Journal, October 98 to March 99.

An Article on 'Innovating the Elementary School System' was published in the February 2000 issue of 'Perspectives in Education'.

Eklavya's experiences have also formed part of the case studies for the EFA review documents published in 2000.



A meeting of people from a village in Shahpur block to discuss the setting up of a Shiksha Protsahan Kendra. The attempt is to set up such kendras with the active involvement and participation of the village community.

We Believe . . .

- That education can help build a scientific-historical understanding of the structure of society and its development.
- That education equips us with the necessary skills and methods for analysing the physical and the intellectual world.
- That education should help to develop problem-solving skills, the spirit of inquiry and scientific temper.
- That education cannot be looked at in isolation from the society and environment in which it is located.
- That education can be a means for motivating people to change the conditions in which they live.
- That education should first be centred around the needs and thought processes of the child.
- That, given the chance, children have an immense capacity to imagine, to learn and to create - traits that need to be nurtured and encouraged.
- That the child-to-child learning process must be given as much importance as the teacher-to-child learning process.
- That the content and methodology of education should be open to undergo continuous change and evolution.
- That educational innovations should not be restricted to islands of excellence 'in a sea of mediocrity'. They must encompass the entire education system.
- That the teacher's role is important to the process of educational innovation and the teaching community should be given the recognition which is its rightful due in all matters pertaining to education.
- That science and technology are not esoteric spheres of thought and action. They need to be approached with wisdom and a concern for social equality and justice.
- That if science and technology is rooted in people's knowledge and understanding, and addresses their needs, it can be a powerful engine of change and development.
- That development must, necessarily, be sustainable and in consonance with environmental imperatives. Such development must be based upon the participation of local communities.

eklavya : a profile



Rubble masonry work to strengthen an earthen dam in a village in Dewas district

PARTICIPATORY PLANNING FOR RURAL DEVELOPMENT

Leaders of self-help groups at an orientation workshop in Harda district



There has been a long-standing debate within Eklavya on the need to work directly with those sections of the community which are not accessing schools on a firm basis. Some work of this nature had been undertaken through PSM programmes, rural technology projects, our participation in the literacy movement and, later, during panchayat trainings. As a result of this experience we decided to initiate programmes to work with panchayats and in the related areas of community mobilisation.

We have been involved in panchayat training and other forms of interaction with elected village representatives since 1995. By 1998, this involvement took the shape of a comprehensive programme for developing strategies in rural development. This Participatory Planning for Rural Development (PPRD) programme focuses on organising rural communities so that they gain confidence and play a more effective role in local self-governance. In addition, it also aims to build up the capacity of rural communities to make better use of economic and social opportunities available to them. Our objective is to speed up social development, especially of poorer communities and women, promote their social standing and create more gainful economic activities.

Community mobilisation needs to be followed up by increased responsibilities in social sectors such as health and education, as well as improvements in the quality and availability of natural resources. With increased social organisation, disadvantaged groups are in a better position to take up suitable economic activities and related marketing efforts. These activities need to be supplemented by raising public awareness through open debates about the nature of participatory processes and their role in development.

Our overall objective is to evolve a model of community based development, integrating various activities under the guidance of elected representatives and local community leaders.

Thus PPRD is an umbrella programme comprising several components which include:

- orientation and training of panchayats;
- formation of community groups;
- community involvement in health and education;
- natural resource management with support from local communities and panchayats.

We began work under the PPRD programme in 1998 and, except for the health component, we have initiated work in each of the planned areas. Although health is an important area, we decided to postpone work in this field due to lack of appropriate personpower. To evolve our work strategy and establish working models at the field level, we selected two blocks, one each in the districts of Dewas and Harda. The programmes have been initiated in selected panchayats (numbering about 30) of these two blocks.

Planning in these areas must be followed by mobilising resources from various sources, including the state government. Our strategy is to identify practical steps that would help panchayats and village communities to develop the capability and know-how required to do their own planning and implement these plans effectively. Therefore, the operational steps of our programme are:

- Evolving and trialling training methods and materials for panchayats and community groups. These would also be of help to other NGOs and the government;

- Supporting community mobilisation around issues of economic security, for example, microcredit through women's self-help groups, seed-banks etc; This is also expected to strengthen the functioning of the gram sabha, with a greater say for those mobilised;
- Mobilising panchayats at the cluster level in the field area. We identify issues and problems around which panchayat members can meet and make common cause of. Cluster level interactions between panchayats encourage members to rise above village-panchayat level inter-personal antagonisms, and also allows new learning from the experiences of others.
- Establishing block level resource centres which will provide systematic support and information to panchayat members and the local community in various ways. Our experience with panchayat clusters, the identification of common problems as well as a joint motivation towards solving them, work towards the establishment of such centres.
- Supporting the local community in building up programmes in selected sectors such as education, natural resource management and, later, health. These initiatives are expected to evolve into some form of local area planning covering more activities.
- Organising studies on various aspects of panchayat functioning, community mobilisation and economic development to create depth of understanding and support for the above programmes.

Training elected members of panchayats

Since panchayats form an umbrella institution for a variety of developmental efforts in rural areas, we are seeking to evolve a long-term training-cum-interaction programme for panchayat members. Members are being helped to develop social and administrative skills for managing the routine affairs of panchayats, and planning and implementation skills for developing programmes. We are not limiting the training process to the present members of panchayats, but are including other active and promising members of the gram sabha. This will ensure that others can play the role of watchdogs as well as be groomed to be future panchayat members. Since a majority, including panchayat members, are illiterate, we have found that written material cannot be the sole medium of communication and we are pursuing other modes such as role-playing, theatre or audio-visuais.

State level training programme: The Madhya Pradesh government and UNICEF requested a group of voluntary organisations, including Eklavya, to participate in evolving a training package for panchayat members in the state. Eklavya coordinated this effort. A number of meetings, of various voluntary organisations and agencies were organised to include different experiences and points of views. Meetings were also held with the government representatives.

As a result of these deliberations, a training plan was evolved wherein preparation and training would be carried out in cascading order from the state level downwards. The training structure was as follows:

- At the state level, a core team and a resource group to be set up.
- Regional committees to be set up in each of five regions for district resource group trainings.
- District level core groups for each of the 64 districts to be developed through these trainings.
- Block level master trainers to be trained for each of the 459 blocks.



Elected women representatives of panchayats at an orientation workshop with NGOs. The objective of such workshops is to help the panchayat members develop social and administrative skills for managing the routine affairs of panchayats, and planning and implementation skills for developing programmes.

The district and block teams included elected representatives, government functionaries and NGO members, with the district panchayat presidents as chairpersons.

To implement the training programme, a meeting of about 30 organisations, along with government representatives, was organised at the State Institute of Rural Development, Jabalpur. A state-level resource group was set up with members from different organisations from the state, including both government institutions and NGOs. The joint functioning of members from various sectors in the state generated enthusiasm.

The five regions for organising trainings and other activities at the regional level were: Ujjain-Indore,

Gwalior-Chambal, Bilaspur-Raipur-Bastar, Jabalpur-Raigarh-Sagar and Bhopal-Hoshangabad. A combined team of government and NGO representatives was set up to orient master trainers. The trainings were carried out at the SIRD extension centres in each region.

Core teams were then set up at the district level, with the elected district chairperson as coordinator. The six-member teams, which comprised government, non-government and experienced people's representatives, were responsible for overall coordination, selection of block level teams, and organising trainings of block level master trainers. The teams included two or more women. The training of these district core groups has been completed.

The block level resource group comprises about 20 to 30 master trainers per block. Their training is being organised at the district level by the district core team. Trainings have been completed in about half the districts and altogether, 12,000 to 15,000 block level master trainers were to be trained for the whole state.

In addition, all panchas and sarpanchas in the state and over five lakh panchayat members were to be trained. The modalities of this training programme are being coordinated by a committee set up by the state government.

Material preparation: At the suggestion of the state government and Unicef, we helped prepare an illustrated manual, about 150 pages long, entitled *Panchayat ki Kitab*. It is a primer for panchayat members and the general public, with simple text and illustrative case studies.

This primer is divided into four parts. Briefly, Part I consists of a discussion on 'What is development?' covering the economic and social aspects. This part also includes topics such as 'Strengthening social organisations like SHG', 'How to prioritise needs?' 'How to carry out village level planning?' etc.

Part II includes some basic issues in development. These are soil, water and forests; the role of panchayats in education; women's issues; and health. The approach is to acquaint panchayat members with the issues involved in each sector and make them aware of their responsibilities in monitoring the services available.

Part III gives a simplified version of the Panchayat Act, including the responsibilities and rights of members. This is a very vital addition to existing training materials, since the language of the original Act is too complex to decipher.

Part IV gives an introduction to administrative procedures in panchayats, including accounts, records, stocks etc.

We have also produced a 40-page manual for master trainers at the district and block levels to support the field level training of panchayat members. This manual has been used extensively in training panchayat resource persons and was also supplied to around 12,000 block-level resource persons in all the 459 blocks of undivided Madhya Pradesh.

Work with panchayat clusters: We initially focused on a planning forum or *Vikas Samooh* at two clusters in Ajnas, Khategaon block, and Morgarhi, Khirkiya block. A cluster covers around 10 to 12 villages. At *Vikas Samooh* meetings, *panchas*, *sarpanchas* and concerned citizens meet and discuss issues and problems of the area. The two forums are now active and meet on a monthly basis. They are an attempt to rise above party affiliations and work jointly at the grass roots level to consolidate village institutions and improve the quality of services available. We plan to build up resource groups within each cluster who will be able to monitor and improve village level services such as schools, *anganwadis* and ANM workers.

Panchayat resource centre: We are in the process of setting up a block-level Panchayat Resource Centre to coordinate and provide information-based support to panchayat training and development programmes. Its objectives are:

- Setting up a block-level data bank and information centre for planning support; dissemination of development related information to panchayats and the community;
- identification and training of resource persons at the block level;
- planning and coordination of trainings at the block level;
- guidance and support to panchayat members in planning and troubleshooting;
- support to panchayats for acquiring feedback on functioning of schemes in the local area.

Many of these functions, apart from the first one, are now being regularly carried out by a combined team of Eklavya members and active panchayat representatives. Initially, we plan to carry out these functions informally, without setting up an 'office' for the resource centre, to gain a thorough understanding of the problems and issues involved. The effort is also to actively involve panchayat and gram-sabha members in taking up a major portion of the responsibilities. We also plan to publish a series of five booklets related to panchayats and development. We have already begun publication of a panchayat newsletter, which has met with a good response.

Mobilising the community

Women's self-help groups: The basic objective of this programme is to help organise women from poorer and backward communities, initially around economic activities. Along with the development of group functioning and social skills, this programme strengthens literacy and numeracy skills. Once established in sufficient numbers, the groups can cooperate among themselves at the cluster or block level to acquire greater stability and interact with other institutions such as banks and panchayats.

Our plan was to set up around 40 women's self-help groups by July 2000. A total of 35 groups have already been formed, the oldest being just over a year old. About 20 of these are strong, seven weak and the rest middling, requiring more support and inputs. Current membership of these groups exceeds 350 women. They make savings on a weekly basis when they meet to discuss issues and take decisions. The combined savings are around Rs 40,000 and this figure is expected to grow by about Rs 1 lakh per annum for this number of SHGs.

All groups have started providing credit to members. Initial loans, often made within a month of formation of a group, are of small value. These build up confidence in group processes and evolve a culture of discussion and joint decision making. Apart from loans for domestic needs such as illness or marriages, members have started borrowing for seed purchases, petty trade or home enterprises such as poultry or dairy. Accounts are maintained with support from local educated youth, Eklavya team members or, in some cases, the members themselves.

The groups now need to develop higher level skills to be independent and prepare for coming responsibilities. Now that basic functioning of the groups has stabilised and their numbers have grown, we need to initiate the process of federating the primary units. To start with, we are identifying active members in each group and organising a system of monthly meetings. Members will share experiences and identify issues where joint efforts are possible. The need for joint efforts will grow as members participate in micro-enterprises that require interaction with financial institutions and other bodies.

We now need to study the pattern of borrowings and results achieved in order to help plan more organised support to micro-enterprises. This is to be complemented with a study of local and neighbouring markets. We also plan to conduct training programmes for women in account keeping, interacting with bank officials and managing micro enterprises.

Member's sammelan: Around 50 women from four separate groups from three villages attended a sammelan at Sarsud, in Khirkiya block on December 20, 1999. These women from different groups met each other for the first time. Members from tribal, scheduled castes and backward castes sat together, learnt about each other's activities, including the need for record keeping skills, norms of SHG functioning and rules pertaining to loans and credit. Initially, some women from the upper castes had reservations about serving and eating food with scheduled caste women. However, they sorted this problem out among themselves and decided to organise the programme on a common platform.

Seed-banks for small and marginal farmers: The objective in forming seed-banks is to help small and marginal farmers come together in manageable numbers to build up their own store of seed for cultivation. If managed successfully, such seed banks help them to stay free of seed-lenders (akin in character to money-lenders), get quality seed in time, and build up a larger, self managed stock of seeds. Members can develop expertise in selecting, purchasing and storing seeds, gain insights into market functioning, and learn to maintain their stocks and accounts. In addition, in the long-term, farmers would learn to function as a group and self-manage their economic activities. It is expected that increased confidence and group skills should lead to better participation in the gram-sabha of local panchayats.

The initial understanding with seed-bank committees was that members would contribute half the requirement of seeds in kind and Eklavya would contribute the other half through cash support. The members would return the loans to the committee starting from the following harvest and borrow for the next crop. The committee would return Eklavya's share in a period of two years and the returned amount would be used to support the functioning of new committees. Thus, the money loaned out to the committees would constitute a rolling fund for a federation of seed-banks to be formed in the region.

The first seed banks were started in mid-1998. So far, 12 seed banks have been initiated, with a total of 120 members. Fifty quintals of seed have been distributed to the first six seed-banks. After the first year's experience, we felt that members

were still not adept at group functioning. Hence, it was decided to first form self-help groups of those farmers keen on setting up seed banks. These self help groups would conduct regular meetings and undertake to build up savings. Once they stabilised in about six months, and achieved a basic level of group functioning, these groups could be given seed-bank loans. The expenses of each seed bank would be closely monitored to understand the finer points of their functioning, including seed acquisition, sale of grain, storage of seeds etc. With the inclusion of their own money in the seed-bank farmers would become more alert in giving loans and making recoveries.

When news of the seed-banks spread, an increasing number of small farmers expressed a desire to set up such banks. In many cases even medium-sized farmers expressed keenness to join such collective efforts. However, at present, we have chosen only six groups to start self-help groups. The number of groups will be increased once a working model is evolved. At present we are carrying out work on seed banks in Khategaon at the cluster level in collaboration with another NGO, Bhopal Rehabilitation. One of the problems we have encountered is that widespread poverty causes fluctuations in the participation of farmers in the activities of seed banks, particularly in times of natural calamities like drought.

While working with seed-banks we got to understand other farming needs such as irrigation facilities, fertilisers (stress on organic fertilisers) and pesticides in a more holistic fashion. As the financial situation of the group strengthens, we are confident that it could support other farm inputs as well. At that point, we will have to focus on two aspects - buying agricultural inputs collectively to save on costs, and taking up collective marketing of products to increase volumes and get better returns.

Panchayat studies: We carried out a baseline study of 32 panchayats (out of a total of 73) in Khategaon block in early 1999. We collected information about the current status of panchayats, their strengths and weaknesses and the main challenges they faced. We also collected feedback from different sections of the community about the performance of panchayats.

Our study showed that sarpanches in the general category are better informed about legal and administrative procedures of panchayat functioning and, therefore, exercise more confidence and control over the panchayat secretaries. Sarpanches in the SC and ST category need special orientation in these aspects, but they are generally more sensitive and inclined towards participative methods in decision making.

Data collected during this study, and during the intensive direct interaction with around 200 elected panchayat representatives, has been feeding into development of the training package. This study was presented at a meeting of 25 representatives from 11 organisations working with panchayats in Madhya Pradesh. Subsequently a three-day workshop was organised with these organisations to share experiences of working with panchayats, including problems and successes. A number of panchayat representatives, including women, also participated. The inputs from people in diverse settings ensured that the workshop was a useful sharing and learning experience. This had important repercussions for panchayat trainings that were organised at the state level later on.

Two students from the Indian Institute of Forest Management developed a software package under our supervision to analyse the data collected. We plan to develop more such software for analysing databases in various areas of development such as education, health and natural resources.

Community involvement in education: In many ways, there is a positive atmosphere for our programme today, since the government also realises the need

A panch welcomes students to the kendra. The attempt is to set up such kendras with the participation of the community since panchayats have been given a say in all activities undertaken at the village level, including education.





A sarpanch seeks to understand some of the educational activities being undertaken at a shiksha pratsahan kendra in a village in Khategaon tehsil of Dewas district.

to involve the panchayat and community in looking after schools. In the past, the rural community has normally not seen a role for itself in ensuring quality education through village schools. Thus, our objective was to identify methods by which the public can identify a greater role for itself in pursuing the goal of better education for its children. It is a complex programme, requiring the participation of four categories of people: the voluntary organisation, the village community, the panchayat and the education set-up i.e. the teachers at the village level. The primary areas of interest have been limited to the enrolment of children in schools, their retention, regular attendance and attainment of some basic standards of learning.

Our initial focus is to interact with the teachers to prepare them for the task of involving the community in affairs of the school. We have worked out a programme of collaboration with the DPEP team, consisting of 23 full time primary school teachers, in Khategaon block.

We also conducted a study of schooling conditions in four schools over six months. We studied the following types of issues: (i) children's response to and involvement in school activities; (ii) community involvement, support and interest in school activities; (iii) role of caste factors in the school-panchayat-community relationship, and (iv) possible conditions under which positive dynamics occur.

This school-cum-community study brought out a comprehensive picture of the social aspects of education, providing many insights into how the community looks at the functioning of schools. Observations of the administrative mechanisms in the school system opened up issues related to the effect of bureaucratic measures on the quality of education. The data generated provided a basis to discuss and analyse the school situation with our resource teachers. Another issue brought up by this study is the role of a sympathetic and motivated *sarpanch*, or a teacher from a backward community, in increasing the linkage between the community and school. Teachers have described the lack of support and guidance on various issues at the field level as the main cause for their ineffective performance. Sharing case studies of this nature during training helps to identify favourable situations that can then be nurtured.

This programme has been slow in developing. A measure of understanding has to be reached with the resource teachers and the teaching community regarding relationships with the community. The programme that has emerged has two components. One component includes working with the DPEP resource group of teachers, and the other includes working directly with panchayats and community members. We will be working along these lines in the immediate future.

We have also set up a network of *Chakmak* clubs, or children's activity centres, which are largely run by the children themselves. Apart from developing the creativity and leadership qualities of children through a host of activities like writing workshops, libraries, *bal melas*, cultural activities etc, they provide an entry point for community mobilisation. Similarly, we have also planned and conducted activities with village youth, particularly in tribal areas, with similar objectives in mind. Three out-of-school support centres for children, or *Shiksha Pratsahan Kendras*, are already in operation and another three are in the process of being set up.

Jan Pahal: As part of the multifaceted PPRD programme, we have helped the local intelligentsia at various centres to organise culturally and socially meaningful

activities. This initiative helps us select resource persons for our programmes and, in the long run, to develop local leadership. Therefore, we see great relevance in setting up and consolidating such groups.

One such group named Jan Pahal has been set up in Khategaon through the initiative of some local people, and with the support and guidance of Eklavya. This group, with a core of 10 to 15 committed members, decided to set up a small library and reading room. To generate more local support and raise local resources, the group decided on a target of 100 members who would each contribute Rs100 a year. This target was recently achieved. The Eklavya office provides space for the library, with books mainly supplied by us. Coordination and personpower is supplied by Jan Pahal.

The agenda for one Jan Pahal meeting held in December 1999 is given below to provide a flavour of the group's activities. Twentynine persons, including eight women, attended. They included teachers, functionaries from the local block office, a social worker, students and Eklavya field staff. The number of Jan Pahal members at this meeting was relatively small due to the pulse-polio programme on the same date.

The agenda was: the relationship between Jan Pahal and Eklavya, main responsibility for the library and selection of books, economic status of Jan Pahal, involvement of girls/women in Jan Pahal (Sakhi Pahal), how to gain recognition through programmes and responsibility for various tasks.

Selected points raised at the meeting included. (i) A suggestion for a new place for the Jan Pahal library, close to Eklavya, but separate. This would help them evolve a separate identity. Eklavya members welcomed this suggestion, but it was not clear how the required funds would be generated. (ii) A membership drive to help meet present financial needs. (iii) The limited interest being shown by some members in the library activities. Members do not renew their membership after one year, or are transferred. How could their interest in the group's activities be increased? Some members felt that other activities such as work in areas such as health, literacy or panchayat functioning could be taken up. However these are exploratory ideas and need to be examined more closely. (iv) A drive to increase the number of women in the group, made at the suggestion of women members. The current active members are some young teachers and college students. They have initiated a Sakhi Pahal to take up women's activities.

Community based health system: Under this programme, we had visualised a two-pronged approach, namely working with the community to improve the reach and utilisation of the existing government health care system and providing alternate community based health support in areas where the government system is unavailable or is very weak. However, we decided not to initiate this programme in 1998, when the PPRD activities were initiated. Now, with a growing number of women's groups, this programme has enhanced relevance in our context and will be taken up.

Natural resource management: The main objective of the Natural Resource Management (NRM) programme is to evolve simple packages for developing micro watersheds in areas of around 500 hectares, including soil planning and water conservation. This involves training our team in the basic components of watershed



Children from a Chakmak club in a village in Khategaon tehsil of Dewas district. Run largely by the children themselves, these clubs seek to develop creativity and leadership qualities in children through a host of activities.

management, gaining experience in working with local communities and helping organise user groups who would participate in planning and implementing simple village level watershed management schemes.

In the past, we had gained experience in mapping micro watersheds with community participation, and planning required forms of land treatment in the area. These included making gully-plugs in hilly tracks, field-bunding in undulating plains at the base of hills, and treating the sides of nullahs to keep floodwaters from breaking into the fields.

A stop dam was designed and constructed in 1997-98. Since the construction involved masonry, the dam cost several lakhs of rupees. Furthermore, due to sophistication in design and construction, the local community had a limited role to play in its actual execution. Therefore, in 1999 with help from a former chief engineer of the state government, we designed earthen-stone structures. This design required that building materials be local with the construction being totally managed by local artisans and farmers.

NRM work is currently being carried out in Chandpura, Ratanpur and Siraliya villages in collaboration with Bhopal Rehabilitation, and financial support for earthwork and NRM activities from SPWD, New Delhi. Construction of each stop-dam is planned and supervised by a committee of farmers whose fields will benefit from the stop-dam. Eighteen small but strong structures were constructed using stones and earth, and ranging in size from 20 to 200 feet in length and 5 to 6 feet in height. The dams proved their worth in the monsoons. It is hoped that with proper maintenance by the community, these stop dams will cause the water table to rise, augmenting water supplies in wells and increasing crop yields.

Around 60 hectares of agricultural land in Khirkiya block have also been treated with field bunding to address the problem of soil and water erosion.



An earth and stone stop dam constructed through community participation in Khategaon tehsil of Dewas district. The building materials are available locally and the construction is totally managed by local artisans and farmers. It is hoped that such microwatershed development programmes involving a series of these dams will help augment water supplies in wells and improve crop yields.

The village community has borne 40 per cent of the labour costs of making these dams. Considering that most are wage earners with small land holdings, this is a substantial contribution. Tractor costs for supplying stones and other construction costs were borne by Bhopal Rehabilitation. The overall planning, designing and community participation was coordinated by Eklavya. A small booklet has also been prepared to help train local persons in stop-dam construction.

A larger number of villages are now requesting help in constructing stop-dams, water harvesting structures and percolation tanks. We would like to spread them over a larger field area, coinciding largely with areas where women's self-help groups and seed-bank programmes are taking off. Wherever possible, we would then link them in a package with seed-bank activity, so that those investing in seeds, fertilisers and other inputs also gain from a rise in underground water levels for irrigation. In future, we will be initiating work in setting up nurseries, to link up plantation work with other NRM efforts.

Rural technology and artisanal development: To strengthen our inputs in rural development we have initiated training programmes as well as models of appropriate technology. The methodology involves trying out improved methods and techniques in specific areas of productive activity and environmental upgradation. We are also

interested in developing strategies for wider people's participation in developmental and productive processes using these methods and techniques. Thus, production centres for artisanal trades such as leather have been set up in cooperation with local artisans.

We initiated these activities after conducting a base study in 1992 of socio-economic conditions and production techniques of 8 to 10 artisan groups in three blocks of Hoshangabad district. The study helped us identify areas in need of technological interventions. Some of these were taken up as separate projects as detailed below.

Rural leather tanning project: This project supported the use of adapted techniques in vegetable tanning to upgrade local leather and to develop the skills of local flayers and tanners. The artisan leather unit, set up in 1992 at Charua, had stopped production for about one year due to marketing and financial difficulties. It has now been upgraded to include facilities for improved vegetable tanning as well as carcass utilisation with help from the Centre for Technology and Development (CTD), New Delhi. The major difficulty this unit faces is the slump in the market for both raw and tanned leather, due to imports of finished leather at very competitive prices.

Carcass utilisation project: The centre is now well equipped to undertake improved cooker techniques for utilising cattle carcasses for obtaining fat, bonemeal and meatmeal. Here again marketing of the products had been the main problem.

The toys workshop: The toys workshop was started in Harda in 1985. It was initially set up to address multiple objectives, viz produce educational toys, propagate the use of toys as educational aids and provide employment to school drop-outs. The unit was to become self-sustainable.

A team of six youth from the local area were trained to manage the production of toys. Over the years, this team has become fairly independent in its functioning. The unit now produces over 40 toys, including dynamic, logical, Montessori and construction toys. These have been widely used by hundreds of children in our *Chakmak* clubs and at *bal melas* organised by us. They have also made a place for themselves in a large number of *balwadis* and primary schools in Madhya Pradesh and other states. The growing demand for our toys has put pressure on us to create new designs and improve quality.

The workshop has a range of machines, including fret-saws, circular saw, wood turning lathe, compressor and sanding machine. However, it does not have dies and fixtures to improve productivity. Production is entirely dependent on human skill and is prone to error when production volumes are large.

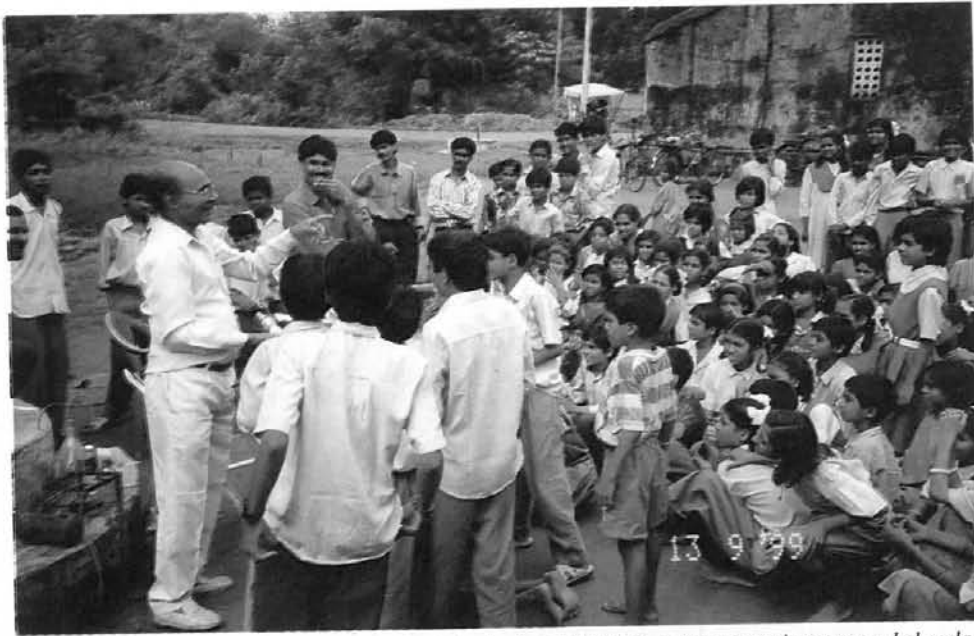
Experiences with the market have also shown us that employment generation cannot be a major objective of such a venture. Although about 50 youth have been trained in the workshop and now work in local industries, school dropouts are not necessarily interested in such work. Since toy making is not a traditional skill in the region, the toy workshop does not support a local cottage industry either.

Although we have achieved our aim of making toys available as educational aids, self-sustainability is an unfinished task. We started with distribution of toys through an informal network of friends. We have recently liaised with a few outlets to undertake marketing in a more systematic fashion, viz Comet Media Foundation and Navnirmithi (both Mumbai) and Jodo Gyan and People Tree (both New Delhi). This has helped us during the last couple of years to almost attain break-even level, despite higher wage pay-outs. If we can liaison with five or six groups on a regular basis, the unit could become self-sustainable even without large orders. Annual sales have reached Rs7 lakh, with a market as widely distributed as Himachal Pradesh

and Karnataka. So far, production has largely been in response to orders from a couple of regular outlets.

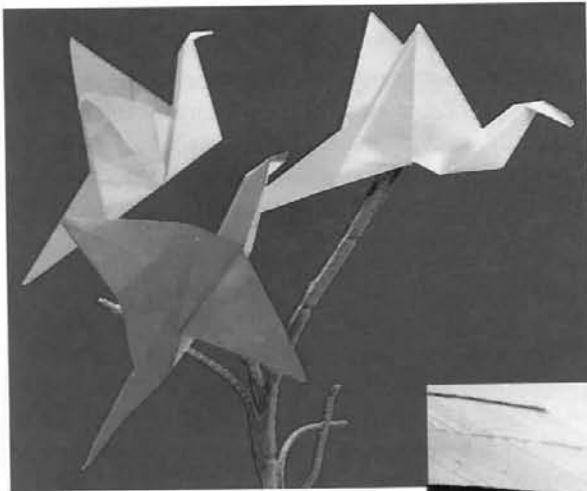
An analysis of the entire range of products has now been carried out and it is possible to produce the more popular items in larger volumes and carry an inventory. This should help reduce production costs and shorten delivery time while improving quality. Currently, we are looking into setting up a design unit and a bigger production facility, hopefully within the next couple of years. It is expected that automating certain aspects of production will reduce variations in quality.

Other programmes: During early 2000, we organised a festival of documentary films at Bhopal on issues related to the environment, development and human rights. The festival was organised in collaboration with the 'Consortium for Educational Communications', New Delhi, a branch of the UGC, and included 23 documentary films. The filmmakers were present to talk about their films and answer questions. Thus, the festival brought together a good number of professionals, activists and administrators in Bhopal to discuss issues in development and environment, such as women in panchayati raj, problems of education, watershed management and joint forestry. In addition, the film festival inspired us to think of using film as a medium of communication, since a large majority of the people we work with are partially or completely illiterate.



A resource teacher introducing children to science experiments at a bal mela

EXTRA-CURRICULAR ACTIVITIES



Birds in flight, prepared at an origami session in a bal mela

A street play being staged in a village near Hoshangabad





The drummer: figure made from leaves of different trees.

From its inception, Eklavya has engaged in a wide range of activities with the community to generate greater awareness of issues related to science, society and culture. In due course, many people with social concerns became part of the larger family, carrying the work forward. Most field centres of Eklavya are involved in a range of activities that basically create a social milieu to support a scientific outlook among people. Libraries, public discussions, activity groups for children and youth, special programmes geared to understanding adolescence and its requirements etc are some of the strands which tie this effort together as the people's science movement of Eklavya.

Libraries at field centres

All field centres run libraries where newspapers, journals and a number of books pertaining to literature, science, society and development etc are available for children as well as adults. Each of these libraries has about 60 to 80 regular members. Besides, many others visit the reading room daily, with their number going as high as 60 in the case of the Pipariya centre, which has the best functioning library. College students use these libraries for reference work while school students delve into books to prepare for debates, essays, model making, competitions etc.

MALWA REGION: Children's activities

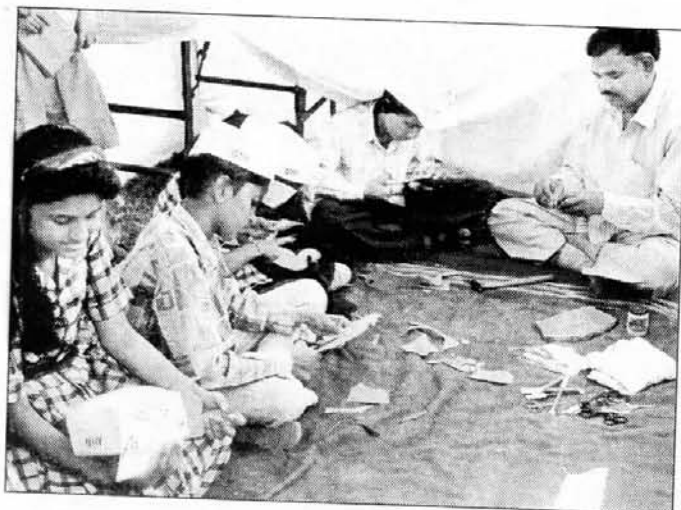
Workshop: and camps for children: For the last 11 years, the Ujjain centre has been conducting summer workshops for children. Dewas has also conducted similar workshops for many years. These workshops generally extend over a period of 9 to 12 days and, over the last three years, the major activities included making puppets, jute toys, kaleidoscopes, traditional *mandnas* etc.

Apart from the summer camps, we organised many short workshops at the request of schools. These focused on paintings for Environment Day, training for organising *bal melas* and learning arts and crafts such as mask making. At times, cultural programmes were also organised at these workshops. We organised a discussion forum for members of the science club of a school in Ujjain. The forum conducted a discussion on 'Science and Environment'.

Apart from libraries, arts and crafts, strengthening writing abilities of children is emerging as an important area of interest for children. We organised a writing workshop in Dewas jointly with Bharat Gyan Vigyan Samiti. Students from schools and colleges participated in writing letters to the editor on 'Challenges of education with respect to the teacher-student relationship'. Many of these letters were later published in various local and regional dailies. Some well known personalities from the town also spoke to the children on the occasion.

Children's activities along with school follow-up visits: We conduct children's activity programmes and *bal melas* during follow-up visits to schools as part of the science teaching programmes. For example, we use play acting and story telling woven around charts of the internal organs of the human body to give children a more holistic understanding of their body and its organisation and functions. An exhibition on snakes was also organised. Many children make science models based on the activities they learn in our workshops.

Children learning origami during an activity workshop.



Bal melas: *Bal melas* are occasions where a large number of children come together to do a range of activities offered to them. Apart from those held during school follow ups, our Malwa team conducted a number of *bal melas* at the invitation of the managements of schools and other educational institutions, such as the government school in Mankund village and Oxford School and Vishvakarma School in Dewas. In all, over 30 *bal melas* were organised in the Malwa region during the period under review.

Library: We made fresh efforts to promote the field centre library in Dewas. We sent out letters to various schools informing them about the library and its multifarious activities. Letters were also sent to library members asking them to introduce their family members to Eklavya's various programmes and activities. To begin with, two schools responded well by borrowing books and inviting Eklavya resource people to organise children's activities.

In addition to the weekly sessions at the field centre, children's activities were also organised at Karamchari Colony and Itawa Nagar in Dewas. The community arranged the space for conducting these activities and the programme went on for a year. For several months, the centre also brought out a wall magazine for children called *Baat to Suno* and a cyclostyled magazine called *Ankur*. A similar magazine called *Nanhi Kalam* was brought out by the Ujjain centre.

Training of teachers and activists: The District Institute of Education and Training (DIET) in Ujjain requested us to act as resource persons in several workshops where teachers were trained to develop teaching aids. The trainees included teachers from the EGS and Seekhna Sikhana programme.

We also conducted trainings for students from the BEd College in Indore, activists of the Madhya Pradesh Vikalang Sahayata Samiti, which works with disabled children, activists of Vikalp in Kesla (Hoshangabad) who assist government school teachers in running primary schools efficiently, activists of non-formal centres run by Jagriti Sansthan in Kanpur which works with children of slum areas and non-formal education teachers from Indore working with children from various villages.

If we look back on all these activities over the years in the Malwa region we see a certain dynamic of increasing involvement of people from different walks of life. They include teachers, activists from various organisations and children. Many of the children who participated in our Sunday workshops and summer camps became our reliable resource persons in conducting *bal melas*. They also pursue independent activities like writing press reports etc. Some of those who have grown to adulthood are now independently running activities for children in *bastis*. One of them set for himself the target of conducting 200 origami workshops!

Another interesting feature is the changing character of *bal melas* conducted in schools in the region. Some of the teachers we trained acted as master trainers for DIET for the Seekhna Sikhana programme which covers all the government schools in Ujjain district. As a result, where once *bal melas* meant putting up foodstalls, they now feature children's activity corners. This concept of focusing on creative activities is now diffusing far and wide.



A time for fun and games during a children's activity programme in Dewas.

Science popularisation

Exhibitions: On the day of the solar eclipse in October 1998, we put up an exhibition in Ujjain and distributed cardboard spectacles with mylar filters at a busy area near the bus stand. About 700 people bought these filters to view the eclipse. We also conducted an educational campaign in 30 schools and colleges of Dewas town and district on the issue which was widely covered in the press and on local television



An activist duplicating the tricks of itinerant mendicants at a bal mela in Dewas district.

Again, on the occasion of Nagpanchami, our team held exhibitions on snakes at Ujjain and Dewas. The display, put up during the festival at Mahakal Temple and during the Tejaji Mela at Hat Pipalya, was viewed by thousands of spectators.

Discussion forum: Dewas field centre has a discussion forum that meets almost on a monthly basis. People from the town and from various NGOs gather to discuss current issues and topics of general interest. Often, book reviews become an agenda of these meetings and mini-workshops on journalism are conducted.

The forum also responded to calamities like the recent Gujarat earthquake. Some of the issues discussed by the group included the emergency in India (on its 25th anniversary), the Narmada Sagar dam project etc.

Local NGOs find the forum a useful avenue for sharing their experiences.

Adolescence education

The aim of this programme is to educate adolescent girls on changes that take place in their body during puberty and to address issues like malnutrition, pregnancy, child care and gender relationships. The programme, being developed in 22 schools of Tonk Khurd block of Dewas district, focuses on material development, teacher trainings and school level workshops. It also emphasises traditional, herbal and home remedies for common ailments. Networking with other groups has led to sharing of experiences and mutual contributions to workshops etc. Besides, we now feel the need to develop a programme for boys along similar lines. This programme is, indeed, gradually beginning to take shape.

Manuals and booklets: Our regular interaction with girls had led to the development of a book called *Beti Kare Sawal* in 1997. We are also developing a manual to help resource persons working on adolescence education for girls. A five-day workshop was organised for ten teachers to document our experiences in this area over the past five years. We discussed the objectives of the manual, topics to be covered, its style, design and language etc. The teachers will test some of the modules developed in the workshop in their schools before we finalise them. A student of TISS, Mumbai, also assisted in this work as part of her field placement.

Teacher training and school level workshop: We held two workshops with teachers every year. These were followed by workshops in a large number of schools in Tonk Khurd block. In 1998-99 the workshops focused on menstruation, reproduction and gender relationships. In 2000-01, a four-day workshop was held to train teachers on (a) nutrition for the adolescent girl and (b) urinary tract infections, reproductive tract infections and HIV-AIDS. The causes and effects of poor nutrition on adolescent girls and detection and medication of nutritional anaemia were discussed. To understand the nutritional status of girls, their height, weight and age were recorded.

For the theme on infections, teachers were trained to test urine samples. They were also trained in the use of posters to enhance AIDS awareness.

The training inputs described above were then used in two-day workshops in 19 schools of Tonk Khurd block. To encourage involvement of families, a pamphlet on 'Nutrition for the adolescent girl' was prepared.

Workshop on mental health: A four-day workshop on the subject was held for 17 teachers, followed by one-day workshops in 18 schools. Resource persons were invited from Manasi Swasthya Sansthan, Indore. The workshop focused on (a) kinds and role of stress in our lives (b) effects of stress (c) methods to reduce stress and (d) role of yoga, acupressure, pranayam and homoeopathy in the management of stress. At the school level workshops, girl students talked on stress, revealing a lot about their adolescent lives.

Training and networking: Eklavya members acted as resource persons at a two-day workshop organised by the Gram Sewa Samiti at Nitaya in Hoshangabad. This was a second level workshop with the same group of girls. The themes were 'Our body' and 'Gender'.

We also participated in a training programme organised by Jan Swasthya Sahayog at Bilaspur on detecting reproductive and urinary tract infections and anaemia with the help of a low-cost kit. We assisted a team of girls from Radhabai Government Higher Secondary School in Dewas in preparing a project on traditional, herbal and home remedies. The team represented the school at the Science Congress in Indore.

Apart from the school-level workshops, we also tried to strengthen our interaction with adolescent girls through a summer camp in May 1998. A seven-day residential camp was held in which 35 girls participated. Apart from issues related to gender, we responded to other interests of girls as well. For example, visits were organised to a temple, mosque, church and gurudwara and participants held discussions with the religious heads of each place of worship. We followed up the camp by organising libraries and *bal melas* in the villages the girls came from.

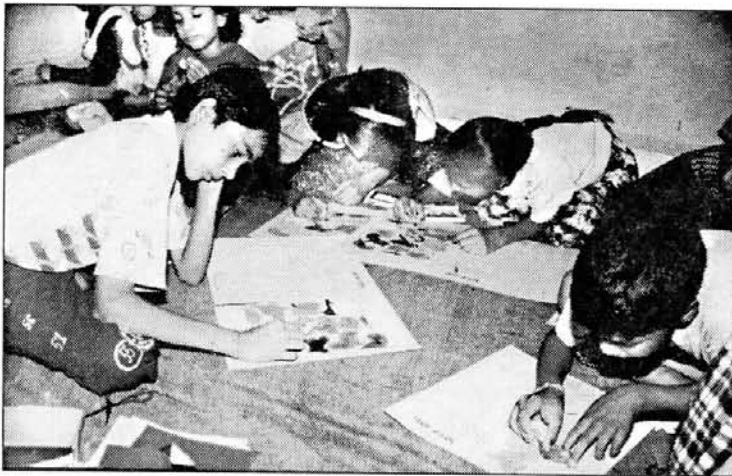
Our endeavours in adolescence education have shown that girls pick up new skills and gain in confidence. Normally, discussions on physical development, menstruation, puberty and reproduction are labelled 'dirty talk'. Equipped with sufficient knowledge and confidence, teachers can exert a strong influence to create healthier attitudes and alleviate the fear associated with such physical developments.

Adolescence education programme for boys: One of our team members has been taking sessions with boys of two schools to explore ways of building a dialogue on issues of adolescence. He held discussions with various local healers who look into sexual problems in order to form an idea of the



Adolescent girls participating in a Sakhi Samavesh (above) and an Eklavya member explaining the haemoglobin test at a training workshop for teachers in the adolescence education prog. (below).





The Bharat Jodo exercise from the social science workbook for Class 8 has been incorporated into the basket of activities for children at *bal melas*.

“नाटक के बारे में जब बात शुरू हुई तो बहुत बार बुजुर्गों ने एक सांस्कृतिक खालीपन के बारे में विनोद व्यक्त की। उनका यह कहना था कि आज की पीढ़ी की यह खालीपन है। पहले जमाने में जब ये लोग बच्चे थे या युवा थे तब गाँव में सभी लोगों को मिलकर गाना, नाचना और नाटक करना बहुत आम बात थी। इस पीढ़ी में अक्सर गाँव के बाहर की ओर, यानी शहर की ओर ही काम की दिशा दिखती है, शायद यह भी इस स्थिति का एक कारण हो सकता है। बैरखेड़ी में हमारे सभी लखनसिंह के पिताजी का कहना था कि इस संदर्भ में बाल्यमूक जैसी कठोरियों का महत्व है। ‘हम जरूर चाहते हैं कि हमारे बच्चे सक्रिय बनें, नाटक में गुंजाईश बहुत है।’”

- बाल समूह की एक रिपोर्ट से

prevalence of sexual diseases as well as perceptions of the local community regarding these. He also participated in a workshop on sexuality organised by Initiatives: Women in Development (IWID), Mumbai. The objective was to learn and share experiences of sexuality to help develop an adolescence education programme for boys.

Science and technology literacy project

This is a project initiated by the Centre for Science Education and Communication, Delhi University with which the adolescence education team of Dewas centre is involved. Seven teachers from Dewas district participated

in a workshop organised by CSEC in Delhi. Two teachers each were from primary and high schools and one each from middle and higher secondary schools. The issues they worked on included tobacco abuse, plastics, microbes, electricity, growth of plants, magnets and magnetic therapy and rational drug therapy. Lesson plans were prepared and field tested in their schools and their reports were also prepared. The focus was on making science more friendly and meaningful for girls.

HOSHANGABAD

The main thrust of PSM at the Hoshangabad field centre involves activities for children and youth in rural areas and a library run at the centre.

Bal Samooh

Bal samooh refers to children's groups organised in villages to provide a platform for developing their creativity. The responsibility of running each *bal samooh* rests with a team of 3-4 youth of the village and the programme is coordinated from the Hoshangabad field centre. At present, 17 *bal samoohs* are functioning in and around Hoshangabad town.

Each *bal samooh* is centred around a children's library run by one of the team members from her/his home. Children's activities and *bal melas* are also organised. Children give their writings, pictures etc to team members and these find their way into the children's monthly magazine *Udan* brought out from Hoshangabad, the cyclostyled *Bal Prayas* and various other wall magazines.

Monthly meetings: On the first Saturday of each month *bal samooh* team members and Eklavya members hold a meeting at the Eklavya office. Reports of past activities are presented and plans made for the forthcoming month. Discussions on issues of interest are held and some new activity or skills are also learnt in these meetings. In the recent past, the monthly meetings have focused on learning mask making, doing simple science experiments, methods of conducting discussions with children, new games etc. Some members who had attended a writing workshop shared their experiences and held small training sessions for the rest of the team. The focus was on writing and reporting for newspapers. Other discussions included responses to our street plays and the significance of street plays. The need to switch to a neater printed format for the children's magazine *Udan* was also debated by members.

Libraries: Every *bal samooh* has a children's library containing around 25 to 50 books and some magazines. Books are chosen from our stock at Hoshangabad according to the age groups of children using the library. Every one or two months,

books are returned to us and a new set of books is issued. In the last few years, some of the weaker libraries were rejuvenated. Small libraries for adults were also begun in response to demand from the villages. Thus, in three *balsamoohs* around 25 books each have been made available for the adult readership.

There is also a resource library for team members at Hoshangabad. It caters to a range of reading needs. Thus there are books on children's activities, literature, drama, poetry, simple science activities and issues like education, history and philosophy. These books are issued every month during the monthly meetings.

Children's activities and *bal melas*: Activities with small groups of children in the neighbourhood are conducted regularly by team members. At times, they take the larger dimension of a *bal mela*. Often we ourselves, or members of other *bal samoohs*, help in their organisation. In course of time, new activities get added to the old ones. For example, children once painted on a 10-metre cloth which was later used as a screen during the staging of a play.

Discussion as an activity is a recent addition in *bal melas*. Discussions were held with children on topics like rain, theatre, attitudes of society and family towards girls etc. About 76 *bal melas* took place in the last three years of which four were held in villages which do not have a *bal samooh*. These took place at the initiative of the *bal samooh* teams from adjoining villages.

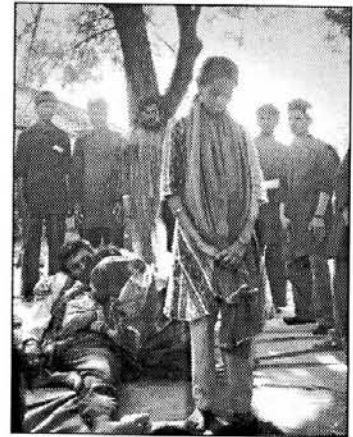
Wall magazines: These are prepared by team members and pasted or hung on walls where children can easily read them. This could be the library or the school wall or elsewhere. Five *bal samoohs* regularly bring out wall magazines with names such as *Gramanchal*, *Basant Bahar*, *Deewar Patrika*, *Sadabahar* and *Bal Tarang*. These contain children's writings and drawings.

The Hirankheda *balsamooh* uses a low cost cyclostyling machine made available to them to bring out a cyclostyled magazine called *Bal Prayas* every three months. The magazine wholly caters to the *bal samooh* as a base for the circulation of writings and pictures of children. Editing, stencilling and cyclostyling are done entirely by the Hirankheda team members.

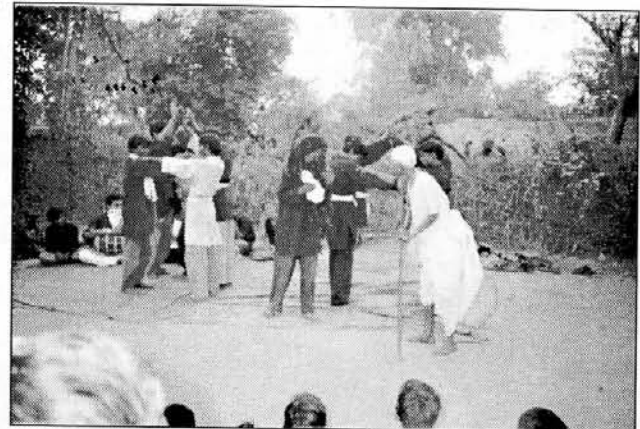
Udan is brought out every two months by the Eklavya team at Hoshangabad. Of the total of 20 printed pages, 14 are devoted to children's writings and six to our writeups for children. The former includes stories, poems, puzzles, jokes, experiences etc. Children's drawings are used to design the cover as well as the inside pages. The latter includes issues related to water, drought, gender, simple science experiments and puzzles and stories for children.

Theatre workshops and plays: A major involvement with street theatre has crystallised in this period which saw the preparation of four plays - *Haddi*, *Ab Kya Hoga*, *Yeh Kaise Sarpanch* and *Sudama Ke Chawal*. Four theatre workshops of eight days duration were conducted in the last three years and the plays were enacted in Hoshangabad town and villages around. Altogether 29 shows were organised and around 20 to 40 persons participated each time. The script writing, direction, music, publicity etc saw a lot of team effort. Discussions on issues like theatre and society were also held.

A souvenir titled 'Smriti' and a document called 'Smriti se Aage: Ek Dastawej' were brought out. The latter dealt with theatre experiences of *bal samoohs* and the feedback from the team, the audiences and our assessment of the entire process.



(Above) Children from *bal samoohs* enacting a street play, *Ab Kya Hoga*, in Bairakhedi village and (below) the play *Sudama ke Chawal* being staged in Anupura village in Hoshangabad district. The preparation of the plays in four theatre workshops was an invigorating exercise in team functioning.



Writing workshops: Four team members participated in three writing workshops conducted by Gram Seva Samiti, Nitaya, Hoshangabad. They have since been regularly writing 'Letters to the editor' and reports for newspapers. We also organised a one-day writers' workshop in Mahendrawadi in which around 20 girls and boys participated.

Other activities: In order to share our experiences of theatre with a wider public, efforts were made to involve the press and we got several newspapers to cover these events. In some places, *bal samooh* team members made efforts to publicise *bal melas* through local television channels. At Hirankheda, an Akashvani team interviewed children of the *bal samooh* for a radio programme. The Hirankheda *bal samooh* also held a meeting on the birth anniversary of Shri Makhanlal Chaturvedi. Also, in response to the earthquake in Gujarat, funds for relief work were collected in some villages at the initiative of the Hirankheda team members.

The Bairakhedi *bal samooh* organised a talk with a magician for its children.

Assessing these years of *bal samooh* involvement, we find the team members increasingly upgrading their creative, organisational and analytical skills. Most of them are seen to be shouldering responsibilities that go beyond the basic expectations of handling children's libraries and activities. They independently handle many responsibilities in conducting monthly meetings and workshops. They conduct *bal melas* in adjoining villages on their own initiative. Some *bal samoohs* have even staged short plays in public. Some have come out with new activities, for example making clay models and play acting stories with these.

Libraries and *bal samooh* magazines have definitely encouraged children to hone their writing skills. They also provide openings for parents and elders to see what their children are doing. Theatre has been a good starting point for this dialogue. Issues like gender, dowry, corruption etc raised in plays and the role of children in *bal samooh* activities have been topics of discussion. Such discussions also veer towards other pressing concerns of parents, such as unemployment, poor rural infrastructure and rural-urban migration.

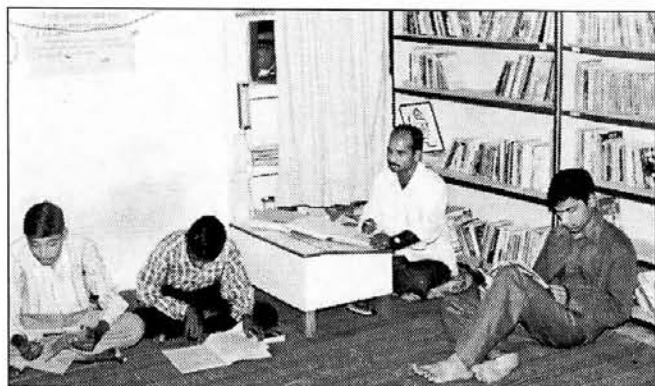
Our team members grow up and make the transition to increased family responsibilities and financial realities. It could mean a job in a city or farming in a village. But wherever possible, they continue taking up responsibilities in *bal samoohs* even as a second line comes forward to take over and keep the process going. In the last three years, 10 *bal samoohs* have been taken over by new leaders.

The resource library at the Pipariya field centre is one of the best organised libraries run by Eklavya's various field centres.

PIPARIYA AND PARASIA

Library: Pipariya field centre has facilities for science kit materials which are issued to children. We provide space and kit for children to perform experiments and make models. In fact, experiments contained in the Eklavya science teaching programme are performed every week.

Discussion forum: Pipariya has a discussion forum for adults and meetings take place either at fortnightly or monthly intervals. Discussions, which are sometimes organised jointly with other groups, include reviews of literature and current issues. Among these was a review meeting on the poetry and satire collections of Sharad Joshi, done jointly with Pragatisheel Lekhak Sangh, a discussion on Bharatendu Harischandra, done in collaboration with Divya Jyoti Manch, and a discussion



with Piyush Kothari, producer and actor of the TV serial 'Lekin Woh Sach Tha', done in collaboration with Sutradhar Natya Sansthan, Piparia.

We also organised day-long seminars with school children and teachers on occasions like Teacher's Day, Hindi Day, Children's Day and Literacy Day.

Parasia is a subcentre of Pipariya field centre. The main activity here is running a library for children and adults.

BHOPAL

The PSM and extra-curricular activities at the Bhopal centre are structured around programmes which seek to involve the public in discussions on issues of social relevance. Another important segment relates to children's activities, particularly in connection with the display-cum-sale centre, Pitara, maintained at the centre.

Over the past three years we have organised several events, sometimes in collaboration with fraternal groups. These include a lecture by Arundhati Roy, a documentary film *Kaise Jeebo Re* by Jharna Zaveri and Anurag Singh on the issue of dams in the Narmada valley and a one-day seminar on 'Pollution and the threat to life in Asia'. We also organised a lecture by Prof. A.K. Jalaluddin on universalisation of elementary education. In the same programme, K.T. Margaret presented excerpts from her book *The Open Classroom*.

We collaborated with a number of non-governmental social, cultural and literary organisations to organise a state conference to safeguard our culture from threats of regionalism, communalism and casteism. The seminar was addressed by, among others, noted historian Prof Irfan Habib, educationist Dr Krishna Kumar and scientist-cum-filmmaker Gauhar Raza.

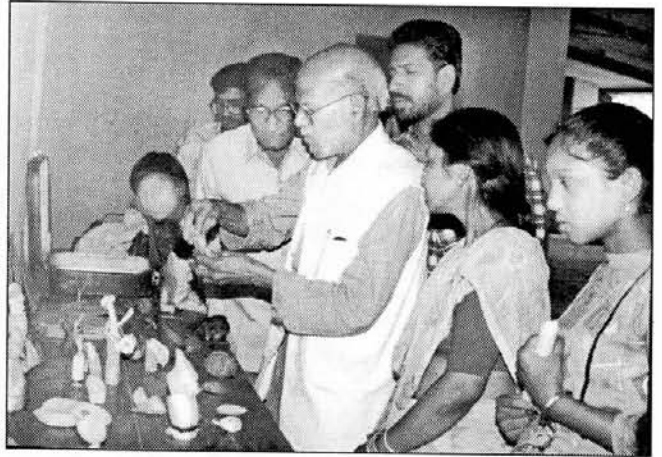
We also organised a small gathering of people in the city interested in literature and culture. Entitled 'Insan Hain Hum', the programme focused on humanitarian values, religious tolerance and the after effects of violence.

The work of Shri Chandi Prasad Bhatt in the field of environment conservation was presented in a programme which included a slide show and an open discussion. The issues discussed included conservation of the environment, livelihood rights of people in forest villages, wildlife and domesticated animals in forests etc.

A public lecture was organised on 'Science and technology education in the information technology age'. The key speaker was Prof Yash Pal.

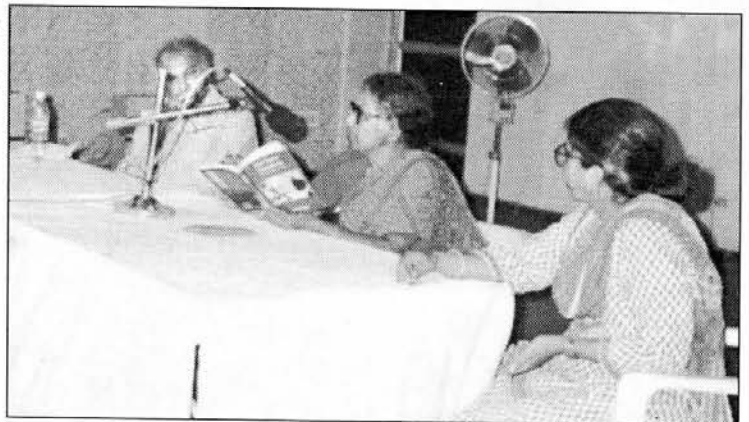
A two-day children's fair was organised on the occasion of the inauguration of Pitara in April 1999. It was attended by a large number of children who were able to participate in activities like origami, clay modelling, drawing, story writing, science experiments etc.

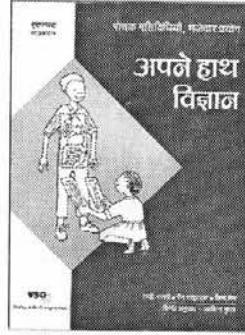
As a continuation of the above effort, a second fair was organised after six months. This was attended by a large number of students as well as some enthusiastic parents. Various activity corners for origami, toys, mask making etc were arranged for children.



Guruji Vishnu Chinchalkar, who died last year, was a constant source of inspiration for all of us in Eklavya. He taught us how to look for beauty in ordinary things. He inspired a whole new movement in Eklavya of creating art out of commonplace things around us and discarded odds and ends. We are proud to acknowledge that we are carrying his ideas forward through our bal melas and children's activity programmes. Guruji will be with us always and forever in the smiles of children who discover the beauty and creativity within themselves ...

Prof A.K. Jalaluddin and K.T. Margaret at a lecture programme on universalisation of elementary education organised in Bhopal.





एकलव्य के प्रकाशन

1998-99

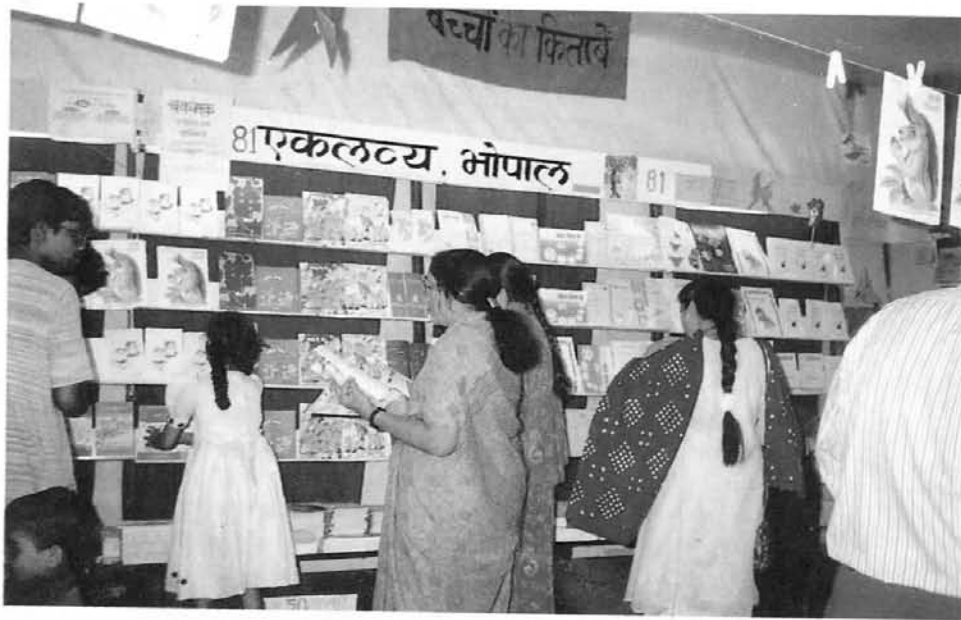
1. चूहे को मिली पेंसिल
2. रूसी-पूसी
3. मैं भी
4. नाव चली
5. विल्ली के बच्चे
6. तितलियाँ और अन्य खिलौने
7. गुब्बारे
8. टिपिक पाँ भरट . . .
9. पते ही पते
10. पास या नापास
11. अनोटवी प्रदर्शनी
12. कार्ड सेट पुस्तिका

1999-2000

1. छुटकी गिलहरी
2. नई सवारी
3. माथापत्ती
4. वूझो-वूझो
5. भालू ने खेली फुटबॉल
6. बाल वैज्ञानिक-6
7. घुमक्कड़-2
8. अपना चिड़ियाघर-1

2000-2001

1. मिट्टी की बात
2. अपने हाथ विज्ञान
3. चूहे को मिली पेंसिल (रंगीन)
4. नाव चली (रंगीन)
5. अपना चिड़ियाघर-2
6. ओरिगेमी (5 पुस्तिकाएँ)
7. भारत जोड़ो (संशोधित)
8. बाल वैज्ञानिक-8 (अंग्रेजी)
9. सामाजिक अध्ययन-6 (अंग्रेजी)



The Eklavya stall at a book fair in Bhopal

PUBLICATIONS

Shrimati Vibha Devsare has a word of encouragement for a child at Pitara Utsav, Bhopal



Covers of early issues of Chakmak



The cover of an illustrated booklet *Bhalu ne Kheli Football* published for young readers (above) and the cover of the first booklet in a *Mathapachchi* (Brain Teasers) series (below).



Our publication programme began as an offshoot of our innovative educational programmes. Initially, our attempts in this direction were fitful, generally in response to an immediate need. However, over the last three years, the programme has gained stability and carved out a distinctive niche of its own.

It is a widely recognised fact that there is an extreme paucity of good quality children's literature in Hindi. We have tried to fill this gap by developing and making available affordable progressive literature of children's interest and cognitive level, particularly outside the school framework. More importantly, we have been able to give a different and much needed dimension to children's literature by regularly publishing and popularising children's original writings.

Broadly speaking, our publications can be categorised as: (i) to make, to break, to solve; (ii) to sing, to read, to act; (iii) to learn, to teach, to share; (iv) to question, to challenge, to change. This has given an interesting range and depth to the entire effort. In fact, we have moved beyond the initial focus on children's literature to bring out publications aimed at sharing our field experiences and innovative materials in education and development. One such example is *Beti kare sawal*, a popular book on health issues for adolescent girls, evolved from many years of rich experience in the adolescent girl health programme developed at our Dewas field centre.

We have also begun a process of bringing out some of our titles in more than one language in order to expand our outreach and bring down the costs of production. The response to these bilingual titles has been quite enthralling.

We have been striving to steadily increase the number and range of our publications. Starting with two booklets in 1983, we now have as many as 75 titles in our catalogue and bring out around ten new titles each year. We feel we now have enough experience in this field, including the marketing aspect, to confidently plan, develop and print popular titles with a first print run of 10,000 copies.

Expanding our catalogue with a wider range of titles

We have tried to respond to demand from our readers. For example, we found that there was a paucity of good reading material for beginners in reading. So we focused on the three-to-seven year age group. In the past three years, we have developed 16 new picture or picture/activity books with print runs of 5,000 to 10,000. These include translations of five Russian picture storybooks and five Marathi books written by Mrs V. Sahasrabudhe, based on her innovative work with schoolchildren. In addition, 13 titles with print runs of 5,000 to 10,000 were reprinted. We also brought out an activity booklet to accompany the card set of letters, words and pictures for our primary education programme.

Currently, we are in the process of bringing out the following new titles: (i) *The VSO Science Teachers Handbook*. We have been able to acquire the publishing rights of this extremely useful resource book from Heinemann Educational Publishers, UK, and have already got it translated into Hindi. The final editing of the book is in progress*. (ii) *Na Shariram Nadhi*. This Telugu book is a documentation of a sensitisation and training programme for rural women's health workers. It is being translated into Hindi.

What we are doing to strengthen our publications thrust

The future success of this programme is crucially dependent on a strong in-house publications team and an extended resource group. As a first step in this direction, we have set up an in-house publication committee, with members from our other programmes to aid and counsel the present working group on important policy

* Now available

level issues. We are also in contact with around 45 to 50 persons whom we have identified as potential resource persons. In fact, we have already received several useful inputs from them. In addition, we are also trying to add to the strength of our working group.

We are making regular efforts to enrich the programme by drawing upon creative inputs and experiences from other organisations. To give just two examples, a member of our publication team participated in a month-long training course on book publishing organised by NBT in October 1998, thereby widening our exposure and understanding of all aspects of the trade. Secondly, a student from the National Institute of Design, Ahmedabad, undertook a two-month project with Eklavya that entailed designing a brochure for our publications.

Reaching our publications to a wider market

The marketing and distribution of our publications continue to present tough challenges. One reason is that the market for such literature is still comparatively undeveloped. So we have consciously followed a low pricing policy in order to reach out to both children and adults in villages and small towns across India. For instance, an activity chart of the human skeleton costs Re 1, a storybook may cost Rs 10 and an educational classic – John Holt's *How Children Learn* – translated into Hindi costs Rs 50. We are able to do this by subsidising the intellectual costs and overheads and including only the printing and marketing costs in determining the price of each publication.

In rural and semi-urban areas, marketing and distribution channels for such literature are simply nonexistent. Existing channels for conventional and mainstream literature operate on such heavy commissions and discounts that we just cannot subscribe to them because it would then be impossible to maintain our low pricing policy. Thus, over the last few years, we have been making a concerted effort to explore alternate ways and means to reach our readers without compromising either on the quality or the pricing policy of our publications.

One such possibility that has emerged is book fairs. We are making a focused and sustained effort to spread awareness about our literature to increase sales by participating in such book fairs. We regularly attend the World Book Fair held every alternate year in New Delhi as well as national level book fairs organised by the National Book Trust. Other book fairs we attended were at Bhopal, Ranchi, Patna, Mumbai, Bilaspur and Jaipur. We also put up stalls at an international book fair in Calcutta, a festival in Karnal that focused on children's literature and two mini book fairs in Bhanpura, Madhya Pradesh and Bikaner, Rajasthan.

We have found that participation in such book fairs has, indeed, helped spread Eklavya material far and wide. A remarkable spin-off has been the bulk orders we have received from several chains of schools, government education departments, other non-government organisations working in education etc. In this context, it is interesting to note that a committee set up by the National Book Trust in 1998-99 to recommend reading material for children in various Indian languages selected three Eklavya titles in its shortlist of 10 publications in Hindi!



The cover of a book containing a collection of short stories for children originally published in the children's magazine Chakmak.

A mini touring book exhibition organised in Bhopal schools during National Book Week.





The inaugural function for the opening of Pitara, a display and sale centre for Eklavya's publications, in Bhopal. We are seeking to consolidate our marketing efforts by exploring several avenues for sales of our publications.

In tandem with this effort, we have also channelised our publications through about 20 booksellers and organisations that market alternative publications. Other new and innovative modes of distribution are also being tried out. For example, we organised mini book fairs in schools of Bhopal and also enthused local youth in places like Hoshangabad and Harda to undertake the promotion of our publications in schools. These explorations have shown that there is a vast latent demand for our publications even in interior rural schools. Further, these books are well within the reach of many students.

Another outlet for Eklavya's publications has been its field centres, the most successful being the Bhopal office. To make it easier for customers in

the city to access our books and toys for children, we have set up 'Pitara', a display and sale centre, at this office.

However, all these separate efforts have yet to yield a lasting and satisfactory solution to the distribution and marketing bottleneck. Therefore, building up a cost-effective and self sustainable marketing and distribution network remains a major challenge.

Chakmak: Igniting the creative spark in children

Chakmak, a monthly magazine for children was started in 1985. This science monthly, which seeks to fulfill the need for good reading material for children, especially in rural areas, has since become a very important part of our educational and children's activity programmes.

The magazine provides an entry point for children to explore the varied and exciting world of science without being overawed. It also encourages children to look at their society from different standpoints and to enter into a lively debate with each other and the authors of various articles in the magazine. In fact, the first page of the very first issue of *Chakmak* related to the Bhopal gas tragedy, setting the tone for its involvement in issues concerning science and society.

About eight to ten pages in every issue – *Mera Panna* - are reserved for unedited contributions from children. We do not ignore even those whose creations we do not publish. We write letters of encouragement to them and discuss the importance of original writings and creativity. Four to six pages every month are devoted to science experiments and activities. Another popular column is *Mathapachchi*, a page of puzzles or brain teasers.

Much of the material used in the magazine is generated at *bal melas* and through the activities of *Chakmak* clubs set up by field centres in *casbahs* and villages. Of course, we have been able to build up a strong team of resource persons and subject experts who provide special articles and also help us vet material prepared by our editorial team. This material is often based on letters received from children.

Chakmak also acts as a conduit for our ideas and a forum to gauge children's responses to issues that concern them. For example, in one issue we took up the Child's Right Charter, setting off each item against real life writings from children. UNICEF placed an order for 5,000 copies of that issue. Again, on Teachers' Day, we asked children to write about their teachers. They responded most enthusiastically and we are now considering compiling these responses into a booklet.

Chakmak has, for many years, been our only communication channel to some of the most remote regions in Madhya Pradesh (and, now, Chhattisgarh). Children from areas like Kondagaon in Bastar district, Garhi Barod in Shivpuri district or Arlavda in Dewas district are enthusiastic about the magazine and maintain regular contact with our editorial team. Often, it is a teacher or someone in the village who excites their interest in the magazine. We have reports of *Chakmak* igniting the spark for starting a *Chakmak* club or making an origami enthusiast of a child.

Chakmak, now in its 185th issue, has always been a low-budget publication without high visibility. We have sought to circulate it through government channels or through other NGOs. But circulation has recently sunk to an all-time low, drastically affected by a decrease in government orders and the uncertain situation of one large buyer, the Lok Jumbish Parishad in Rajasthan. Although the magazine does extremely well at book fairs and has a steady stream of individual subscribers, including many schools in the Hindi belt, there is urgent need to revitalise it and reach out to a wider audience.

Srote: Creating a space for science and technology in newspapers

Our involvement in science education showed us that attitudes to science were, in part, shaped by newspaper reporting on the subject. Such reporting is usually not well informed and tends to emphasise the dramatic elements, with little analysis. *Srote* was launched in 1987 as a science and technology (S&T) feature service aimed at enhancing the quality and quantity of S&T coverage in Hindi newspapers and periodicals at the behest of the National Council of Science and Technology Communication (NCSTC). At the same time, it was meant to be a source of reference material for teachers, students and various organisations in the development sector. Although there are several such services available in English, *Srote* is one of the first of its kind in Hindi.

Over the years, *Srote* has been successful in creating and enlarging the space for S&T related issues in the print media. We make a conscious effort to ensure that its language is accessible, by using the appropriate technical English words rather than complicated Sanskritised Hindi translations. Prior to publication, all its material is authenticated by double checking in our library of about 5,000 books as well as by referring it to our panel of advisers on scientific and other aspects.

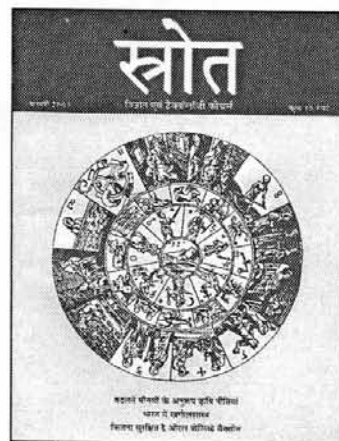
We have permission to excerpt and translate articles from journals like *Current Science*, *Economic & Political Weekly*, *Resonance*, *Seminar*, *Health for the Millions* (VHAI), bulletins published by FRCH and ICMR, and Dr D. Balasubramanian's writings in *The Hindu*. Many students, university, college and school teachers, researchers and other professionals also write for us. Sometimes topical articles are prepared in-house, at others themes are suggested to outside writers.

Most of the articles we carry deal with issues at the interface of science and society. They relate to agriculture, environment, astronomy, education, ecology, flora and fauna, wildlife, health policies and other aspects of S&T. *Srote* also carries in-depth studies, analytical articles on contemporary issues and human-interest topics related to advancements in S&T.

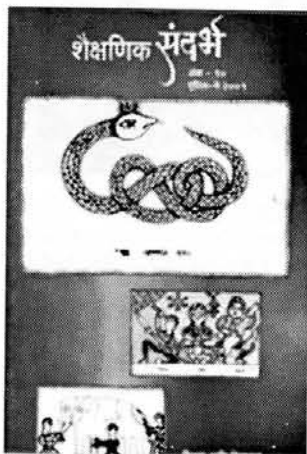
The feature service has evolved considerably since its inception. Initially, a monthly with very long articles, it was streamlined into a weekly in an 8-page 12-page format,



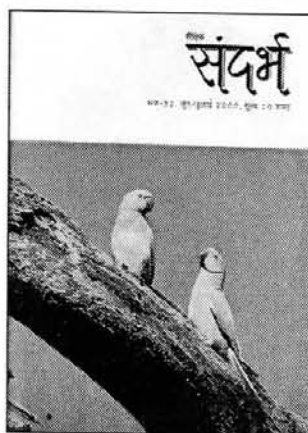
Chakmak has been one of our pioneering ventures in the field of popular science literature for children. The magazine was established in 1985 and has given an impetus to Eklavya's publication programme as well as its school education programmes.



Cover of the monthly collated edition of Srote press releases. The feature service has made a significant contribution to increasing the coverage on science and education in the daily Hindi language press.



Covers of the Marathi (above) and Hindi (below) editions of Sandharbh. Eklavya publishes the Hindi edition while the Marathi edition is published by a Pune-based group. The magazine has established a name for itself as a dependable source for general reading and reference material on science and education for both teachers and students.



with shorter articles, more news stories and fewer policy issues. An exclusive service, offered to one newspaper per region, was later added. Currently, *Srote* has three components: (i) Weekly despatches in the 4-8-4-8 format, i.e. 24 pages a month, (ii) Exclusive weekly despatches to selected newspapers in the 4-4-4-4 format, i.e. 16 pages a month, (iii) A monthly magazine compilation of the weekly despatches.

The *Srote* feature service is sent to newspapers (mainly in the Hindi belt), All India Radio stations and Doordarshan *kendras*. The best approximation we have of utilisation of articles is to multiply by 1.5 the number of utilisations that come to our notice. The resultant figure, which reflects the pick up rate, was between 5 and 6 during 1998-2000. This is an improvement over previous years and is possibly due to improved quality and shorter length of articles, the impact of continuing publication for several years, a contact programme with newspapers etc.

Srote published its 146th issue in March 2001. It is supplied to 174 newspapers and 300 magazine subscribers.

Sandarbh: Widening our horizons of understanding

Sandarbh is a bimonthly resource magazine for science teachers and high school students. Its publication was taken up in 1994 and March 2001 saw its 36th issue printed. From pedagogy to inexpensive classroom activities and projects, *Sandarbh* profiles a wide range of topics and developments in science and related areas.

While it is expected that *Sandarbh* would appeal to Hindi speakers from the Hindi-speaking belt and those familiar with Hindi, what is surprising is that several of its readers are from the non-Hindi speaking states like Assam, Goa, Tamil Nadu etc. As a result, articles from *Sandarbh* have been translated into Telugu, Kannada, Gujarati and Marathi.

Another interesting development has been the launch, in September 1999, of a Marathi journal on the lines of *Sandarbh* by a group of teachers, educationists, researchers and development professionals based in Pune. Our *Sandarbh* team extended its full support during the initial brain-storming, planning, material coordination etc that preceded the launching of that venture. Groups from Bengal, Orissa and Karnataka have also expressed interest in starting similar ventures in their languages.

The importance that people attach to *Sandarbh* can be gauged from the fact that the Madhya Pradesh government relied heavily on the magazine to provide resource material for teachers involved in its Seekhna Sikhana package for primary education.

We have sought to involve both teachers and other readers in the process of publishing *Sandarbh*. They help in reviewing and editing articles, identifying issues/subjects that teachers find difficult to handle, collecting feedback on the nature of articles and the layout and design, suggesting ways in which we can help teachers articulate their rich repertoire of experiences etc. We have also built stable relationships with several leading science institutions, such as the Indian Institute of Science, Bangalore, and journals like *Resonance*, which is targeted at under-graduate and post-graduate students. Resource persons from these institutions regularly write for *Sandarbh*.

We have utilised several strategies to try and increase the circulation of the journal, currently at 5,000, with paid subscriptions at 2,300. Successful attempts include open sales campaigns among teachers and students of Class 9 and 10. There has also been a tremendous demand for annual, indexed and bound volumes of *Sandarbh*, as reference material, for which we now set aside 500 copies of each issue.



Teachers discussing a chapter during a training programme for upper primary social science in Rajasthan

PLAYING THE ROLE OF A RESOURCE AGENCY

Theatre workshop during a children's festival conducted by the Bhopal resource centre



There has been a growing recognition in the country of the importance of improving the quality of education. As a result, the demand for work of groups like Eklavya has grown in many ways. Our experience in field testing innovative curricula and implementing systems in the mainstream has been found useful by government and non-government institutions across the country.

Our role as a resource agency takes many forms. The field-tested and stimulating learning materials, activities and training methods developed in our school programmes are widely used. The activities and processes developed for our out-of-school programmes, like *bal melas* and Chakmak clubs, have gained popularity in a number of schools and groups running non-formal education centres, night schools, children's activity centres, *balwadis* etc. Although our role as a resource agency has primarily been in education, our work in women's health has also proved useful to several groups.

Providing intensive inputs to collaborators

Intensive collaborations with other organisations require us to provide resource support in developing all elements of an education programme. In the past three years we have provided support to efforts in Gujarat, Rajasthan and Orissa.

Gujarat: Groups in Gujarat have been keenly following our work for almost a decade. Over the years, Eklavya has built up a valuable relationship with organisations like Gujarat Vidyapeeth, Vedchhi, Gandhi Vidyapeeth, Ahmedabad, Lok Bharati, Sanosara, Community Science Centre, Ahmedabad, Centre for Development Studies, Surat, and Shishu Milap, Baroda. Some of these organisations carried out an experiment in school science teaching for five years. After this experiment came to an end, the challenge of pushing for quality innovations in formal schools was taken up afresh by Shishu Milap.

Shishu Milap aimed to create an innovative intervention in the formal schools of Baroda district. They sought to explore ways in which Eklavya's work in teaching science and social science in the middle schools could be helpful to them. We supported them in the process. A team from M.S. University, Baroda and Shishu Milap participated in our teacher training camp in Hoshangabad, while our academic personnel participated in a curriculum review and development workshop in M.S. University and the *bal vigyan melas* in schools organised to build up a positive pre-launch atmosphere in the schools. Eventually, the programme was launched in 24 schools with permission of the State Education Department. New science books for Class 5 and 6 were prepared and teacher training was conducted by Shishu Milap.

In order to formally support the experiment, we helped in setting up a state committee for the programme, (which is called Avishika) under the Directorate of Primary Education of Gujarat government. Separately, some elements of our work on science textbooks have been incorporated in the state middle school science textbooks published by the Gujarat government in 1999.

The SCERT in Gujarat has shown considerable interest in our work. In September 2000, a 10-member team from the SCERT and some DIETs of Gujarat visited Eklavya in this context.

Rajasthan: In 1996, we were invited by Lok Jumbish Parishad (LJP) to help develop a science and social science package for Class 6 to Class 8. This project was seen as building up on the work done by Sandhan for the primary classes. The Education Resource Centre of Vidya Bhavan, Udaipur, became the nodal agency, especially for the science programme, since the current head of that centre is a former member of Eklavya, with vast experience in HSTP.

We actively strove to build a Rajasthan-based resource group and network with Rajasthan-based NGOs. A large number of new resource persons from institutions of higher learning were approached and commitments obtained to these fledgling programmes in that state. The institutions included Regional Institute of Education, Ajmer, universities in Jaipur, Udaipur and Aligarh, Institute of Development Studies, Jaipur, and the Solar Observatory, Udaipur.

We also attempted to interact with the SCERT in Rajasthan. In fact, earlier in 1997, a team from SCERT had visited Eklavya in Madhya Pradesh.

With the help of this team of resource people from academic and research institutions in Rajasthan, books for Class 6 science and social science, adapted from the books we had developed in Madhya Pradesh, were brought out in two parts in 1998. These were introduced on an experimental basis in all 54 government schools of Pisangan block of Ajmer district. Training sessions were held for teachers who would be handling the new material. Newsletters for teachers were also produced. For the purposes of orientation, practice question papers were sent to schools. Open book examination was discussed with the teachers and their inputs incorporated into the evaluation paper for the Class 6 annual examination.

Workshops were also organised for developing the science and the social science teaching package for Class 7. Chapters were prepared and revised by the large body of resource persons and the books were readied in May 1999.

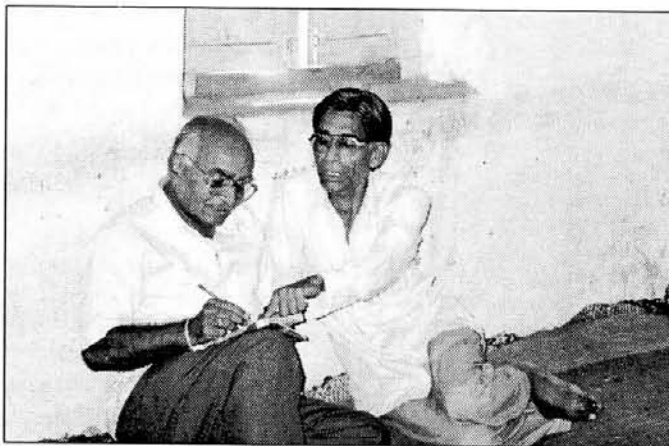
The teacher training workshop for the Class 7 curriculum was held in the Masuda DIET. One of the highlights of the training was the exercise with teachers on the open-book evaluation system. The idea was to demonstrate to them that an open-book examination did provide a serious challenge to the child even in social science.

Feedback from the school visits we made showed that teachers were trying to use the discussion and activity methods in the programme. They appreciated the inclusion of Rajasthani material in the social science books in particular, as also the child-friendly language and approach. However, they had questions about Eklavya's stand on reducing the curriculum load, and this point was debated with them. Additional information sought by the teachers was circulated through the newsletters.

Our follow-up visits also showed that the LJP personnel in the field were very capable and handled a lot of management responsibilities, leaving us free to concentrate on the academic aspects of the programme. However they needed conceptual support to convincingly resolve doubts raised by anxious parents and teachers.

The monthly meeting system, a crucial element of instituting an innovative programme, suffered in periodicity in Rajasthan due to financial and other compulsions of the LJP.

The uncertain phase: After the nuclear explosion by India in May 1998 SIDA withdrew aid, imperilling the LJP programme. With the introduction of DPEP, the position of LJP became even more uncertain. Furthermore, there was a change in the state government. The newly elected government was keen to bring in major changes in the functioning of the LJP and, for a while, there was even talk of winding up the programme.



A professor from Rajasthan University and a middle school teacher from a school in Pisangan block discussing factors affecting rainfall in Rajasthan for a chapter in the social science textbook.

The Ovari cluster project

This project, undertaken in 1998-99, attempted to study in depth and document local songs, stories, arts, games and the daily activities of rural children in 50 villages and indicate the inputs these resources could make to curriculum and learning materials being developed by Lok Jumbish. A three-member team was trained by Eklavya resource persons for this project. Eight booklets of local stories, poems and riddles were prepared.

Considerable public opinion was mobilised to pre-empt such a step. The changing situation often created communication breakdowns. In fact it has not been possible to recover the ground on which the understanding for curricular renewal processes had been reached between Eklavya and Lok Jumbish till 1999. This work could not continue into Class 8 despite consistent efforts to develop mutual understanding.

Support for DIETs: As part of the close support Eklavya offered to the Lok Jumbish, a year-long period was devoted to selecting, training and working with the faculty members of the DIET in Dungarpur district of Rajasthan.

The challenge of curricular reform processes: The intensive collaborative work in Gujarat and Rajasthan has taught us many lessons. When placed in perspective with the longer experience we have had in Madhya Pradesh, patterns of non-government interventions in mainstream education begin to clearly emerge. We need to reflect in depth on these experiences which, if anything, underscore the need for some fresh and flexible approaches. We outline some lessons here which, we feel, could come true for any state endeavouring to pursue an innovative path:

- People from universities and research institutions come forward with excitement and commitment to contribute to and attempt at initiating fundamental curricular changes.
- NGOs and specific government programmes come forward to develop experiments and provide the institutional structure for testing them.
- State governments as a whole are unable to evolve a long-term perspective on the necessity and utility of experimental programmes.
- SCERTs and DIETs are, more often than not, unable to evolve a fruitful relationship with experimental programmes.
- New curricula create motivation in teachers as well as debate. In parents they often create anxieties. These get resolved through conviction and proper communication. However, attempts at capitalising on fears and anxieties by various politicised people need to be constantly neutralised and countered.
- The managements of many NGOs are not able to provide long-term support for experiments.
- A committed resource group of interested people can sustain the work and take it forward in the midst of many setbacks and uncertainties, but, building such a cohesive group of people requires considerable time, energies, sensitivity and ideas to create and generate contexts for good group dynamics.

Orissa : In 1999, a group of scholars from Orissa approached us for help in setting up an organisation to work in the formal education system at the primary level. We welcomed the initiative and offered support under our fellowship programme. Dr Subrat Kalyan Pattanaik, a member of the proposed group called Shiksha, initially spent 10 days in our book revision and workbook development workshop in Shahpur and helped in the language analysis of these books. He spent another month in Eklavya studying our programmes as well as our organisational functioning.

Subsequently, Dr Pramod Mohanty took up a fellowship with Eklavya and concentrated on establishing the new organisation in Bhubaneswar. The group formulated a project proposal and undertook a process of forming a resource group in Orissa, translating Eklavya's learning materials into Oriya and building up a dialogue with the SCERT in the state. The group has completed its registration and is in the process of mobilising funding support.

Extensive interactions with groups

The objective in this programme is to enable us and a large number of groups and individuals to share experiences and insights with each other.

- We continued our interaction with Himachal DPEP, begun in 1997 with a review and finalisation of the books for Class I, and a review of a new draft curriculum.
- Block resource persons from Karnataka DPEP participated in our primary education teachers' training camp.
- Eklavya has interacted through workshops and field visits with more than 50 government and non-government organisations, from Andhra Pradesh, Himachal Pradesh, Madhya Pradesh, Bihar, Delhi, Rajasthan, Orissa, Gujarat and Karnataka. Individuals from many organisations participated in our primary education teachers training programme.

Initiatives in urban areas: Eklavya has felt the need to develop models of better education in urban areas of Madhya Pradesh, Bhopal and Indore in particular, to extend the ambit of discussion and debate on quality education and space for innovation and improvement.

With this objective in mind, we began explorations in Bhopal about three years back. We set up a resource centre for education at Bhopal. We organised children's activities, school libraries, wall newspapers and teachers' workshops to introduce ourselves to schools and generate demand for our educational materials. At present we are working in eight schools in Bhopal. We are running libraries and bringing out wall newspapers in all these eight schools. Three schools have also shown interest in our social science curriculum while two schools have shown interest in using *Khushi Khushi* as supplementary learning material.

There is also an increasing demand from schools for teachers workshops in maths, English and science, as well as for children's activities. The Bhopal resource centre has, therefore, been conducting teachers workshops and organising lectures and discussions on education and environmental issues.

Many of the schools which opted to work with the Bhopal resource centre were private schools. Such schools are rapidly increasing in number in the state, but the teachers have little opportunity for training. Yet, they are becoming opinion leaders in school education. Thus, even though our work has primarily been in government rural schools, we consider it important to interact with private schools.

In addition, we are working with other non-governmental groups in Bhopal. We have organised trainings for teachers working in 23 *balwadis* run by Sewa, Bhopal. We are also helping local groups to run libraries in eight mohallas of the city.

We established a children's literature resource library at Bhopal. Out of a collection of 3,000 books about 300 books for three age groups, 5-8 years, 8-12 years and 12-15 years, were selected and graded for quality and usage. An annotated bibliography has been prepared.

We also trained 30 teachers from 14 private schools of Khategaon, with a focus on language learning and learning to read, setting up libraries, working on a wall newspaper and discussions on evaluation.

Indore: One of our concerns was to expand our educational activities into private schools in urban areas and to respond to specific demands for change instead of offering a complete curricular package to them. We sought to work within the

framework of the existing curriculum but introduce several of our ideas in learning methodologies and some of the content we have developed in various subjects.

We felt such an effort would show that our ideas in education were relevant across the whole range of schools from the rural government school to the better off private school in urban areas. It would, thus, help us evolve an alternative strategy for expanding our ideas in education without having to depend on the formal system of government schools. We also felt the impact of such work would put pressure on national level organisations such as the CBSE and NCERT to modify their approach to curriculum development.

In February 2000, we established contact with Sahodaya, an organisation of CBSE-affiliated schools in Indore. They showed interest in the HSTP and social science programmes. In the session 2000-2001, one of these schools, Vidya Sagar, took up both the programmes. The social science book was replaced in Class 6 with the Eklavya textbook. However, the science textbook was only partially replaced in the sense that chapters common to both the existing book and *Bal Vaigyanik* were taught by the HSTP method.

The teachers were given a one-week orientation in the summer vacation and this was followed by continual follow-up visits. We supplied the kit material for science experiments. A remarkable feature of the programme was that the children sat in groups for science and social science classes and this seating arrangement was followed for all other subjects.

The Choithram School and a non-CBSE school affiliated to the Madhya Pradesh State Board also evinced interest in taking up both the programmes. An attempt is also being made to introduce other Eklavya programmes like children's activities and adolescent health into these schools.

Mumbai: As a result of explorations undertaken by a resource person associated with Eklavya on its fellowship programme, Don Bosco's school in Matunga, Mumbai has opted to introduce the HSTP methodology in the teaching of science in the middle school level. Teachers were oriented by Eklavya and the methodology has been introduced in Class 6. Other classes will be taken up in subsequent years. It is hoped this programme will have a considerable impact in propagating the Eklavya philosophy and work in education on a broader canvas.

Participation in seminars and workshops

The details of the seminars and workshops attended by us have been mentioned under the sections on the respective programmes. The extensive inputs to a large number of groups have helped to expand the space for innovative education. At another level, our advocacy has helped to bring the concepts of integration and flexible learning paces, the issue of quality in elementary education and the nature of social science education into the discourse on school level education.

THE FELLOWSHIP PROGRAMME

The fellowship programme is an attempt to achieve greater outreach and linkages with resource persons and experts in the field of education from different states. The objectives are manifold and include:

- seeking contributions to any of Eklavya's ongoing programmes;
- reviewing curriculum and textbooks in other states;
- preparing and designing new materials for teachers and students;
- studying children's relationship to learning;
- studying teacher training and improvement processes;
- studying social issues related to human development.

The fellowships are also looked at as a means to support preparatory and exploratory work in other states for introducing innovative programmes into mainstream education, including those based on Eklavya's work, until such time as arrangements to sustain such fledgling programmes on a long-term basis are formalised.

At the time of Eklavya's formation, the University Grants Commission contributed by allotting six teacher fellowships to the organisation. The fellowship permitted interested faculty members from recognised universities and colleges to take leave from their parent institutions and spend three years working with Eklavya. It is noteworthy that nearly half the initiating group came on fellowships. Many stayed on to work for longer periods. The UGC subsequently discontinued its teacher fellowship scheme. However our need for inputs from professionals and experts from academic institutions has grown and we have sought alternative ways of getting salary support for such persons. The fellowship programme was revived with support from Sir Ratan Tata Trust for a limited period.

The fellowships, offered initially for a period of a year, are extendable for a maximum period of another two years, following a peer review. It is expected that those working under the fellowships devote at least a month every year during the fellowship period to participate in Eklavya's ongoing activities.

Initially, we offered fellowships to four persons: Dr Arvind Gupte to provide academic inputs to all HSTP activities in the Malwa region and explore possibilities for fresh initiatives in Indore; Margaret K.T. to write a monograph on the functioning of the core group of teachers she worked with in Bangalore; Prakash Burte to review textbooks of Maharashtra state; and Dr H.S. Mathur to prepare the social science textbooks for Rajasthan, training materials for teachers and a book on the desert .

Subsequently, fellowships were also awarded to Dr Sarada Balagopalan to prepare a book on street children's experiences with literacy programmes, Dr Amman Madan to study how adults understand the concept of the State or Sarkar; and Dr Subrata Patnaik and Dr Pramod Mohanty to set up an institution - Shiksha - in Orissa to intervene in the state's educational development in the formal system.

Dr Arvind Gupte reviewed the science textbooks of Class 9 and 10 as an initial step by Eklavya to find ways to intervene in the high school curriculum in science. This has been a long-standing objective. Dr Gupte also explored the possibility of

introducing the Eklavya approach in CBSE schools. This has opened out a new avenue in our attempt to spread our work through a demand-based model. The work with the Sahodaya group of schools in Indore, where the HSTP and social science programmes are being adopted, is detailed in the section on resource agency.

Margaret K.T. completed a draft manuscript on the core group teachers' interactions and shared it with Eklavya. The group reviewed the manuscript and suggested ways in which it could be revised and reorganised. This work is continuing.

Prakash Burte completed a review of the maths, Marathi and general science textbooks of Maharashtra for Class 1 to 5. His report was discussed and a final draft readied by February 2001. This was submitted to the Government of Maharashtra. He also worked on preparing science teaching modules which were introduced to some schools in Mumbai. He subsequently submitted a fresh proposal for a review of Class 6, 7 and 8 textbooks. He also initiated a science curricular reform programme with Don Bosco school in Mumbai on the basis of HSTP materials.

Dr Sarada Balagopalan wrote sections of her book as well as two articles for publication. Sections of her paper entitled 'Recovering lost childhoods: the politics of educating street children' were submitted for publication in the *Anthropology and Education Quarterly*. She wrote another article on vocational education for street children (another chapter in her book) and commenced work on the next chapter dealing with the process whereby poor children get classified as street children. She helped the Dewas centre prepare a teachers' guide for the adolescent girls programme. She also wrote a review of the NCERT curriculum, focusing on the Class 9 and 10 textbooks and suggesting an alternative civics curriculum. She contributed to the development of the new edition of Eklavya's social science books for Rajasthan as well as to the teacher training programme in Pisangan block.

After helping to prepare the social science textbook for Class 7, Dr H.S. Mathur could not continue with the work on the Class 8 book because the Lok Jumbish decided not to use the Eklavya-based textbooks in Rajasthan in the session beginning from June 2000. He, however, continued working on his book on the desert.

Dr Amman Madan, who joined the fellowship programme in February 2000, also helped Eklavya establish its e-mail network among its field centres and wider resource group and trained staff members in Internet use. He did his field work for the research on adult's understanding of the concept of State in Jasalpur village in Hoshangabad district and also began interacting with the local community to set up a library. He has written a review of literature on the research theme and is finalising it on the basis of comments. He has joined the staff of Eklavya and is continuing his association with the library programme and the social science programme.

Dr Subrata Patnaik spent about two months in Eklavya after joining the fellowship programme in October '99 to study the group, its structure and work organisation. On his return to Orissa in December, he took up a teaching job with Bhubaneswar University and continued his work in setting up the new organisation Shiksha.

Dr Pramod Mohanty, who had resigned his job in Hyderabad to work with the Orissa group, joined the fellowship programme in June 2000. He worked on finalising the registration process of the Shiksha group and also organised several meetings of the group which was considering an intervention into the primary education sector in Orissa on the basis of Eklavya's work in Prashika. She also wrote a review of the NCERT curriculum for Eklavya, focusing on the textbooks for Class 9 and 10 and suggesting an alternative civics curriculum. Meetings were also held with NGOs, educationists and academicians in Orissa. A draft project proposal has been developed for funding the work envisaged by Shiksha.

BUILDING A CORPUS

As Eklavya grew and survived over the years, the perspective for sustaining the group in the long run came under scrutiny. Ensuring the availability of project-based support every three or five years for a growing and consolidating organisation engaged in fundamental long-term agendas of educational and social change was clearly an uncertain strategy. For years, we had no material resources we could call our own. Then slowly, some small savings were accumulated from the sale of publications, especially *Chakmak*. However, this money was more often than not blocked as a rolling fund to meet urgent expenses when government grants were delayed or government payment of bills for magazines and books were inordinately held up.

When Eklavya neared its 10th year, the Department of Science and Technology (DST), which had supported the group with a core grant, made it clear that, as a matter of policy aimed at making organisations self sustaining, it would stop the core grant after the 10-12 year period. That left us with the Ministry For Human Resource Development (MHRD) as the only major grant-giving agency.

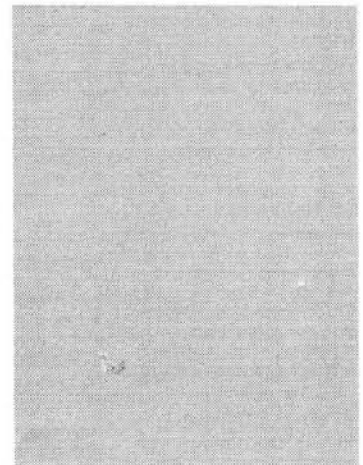
By this time, the programmes had expanded to a level where sole dependence on one agency was not a viable proposition. Even retaining funding support from one agency was difficult if we could not demonstrate that the organisation had a broad and diversified funding base and was, thus, not going to be forever dependent on any one agency. At this juncture, we began exploring private sector funding for our projects. We also began to understand and appreciate the importance of building up a corpus fund of our own.

The idea had been talked about for many years within the group. There were some persistent anxieties, such as :

- The care of large permanent assets may take away the group's focus from its programmatic agenda.
- In the event of any reorganisation of the group in future, the division of assets may create difficult problems.
- Permanent assets may eventually lead to a sense of complacency and lack of accountability in the work culture of the group.
- They may also entail negative changes in the collective management style that prevails in the group.

The anxieties were there, but so was the reality of strengthening our support base. Besides, the success of the group in working together for almost 15 years, tiding over difficult junctures, planning and proceeding, debating and understanding each other, gave a sense of confidence that implied that future difficulties could also be taken care of just as past ones had.

A commitment to the objective of raising a corpus that would give a measure of sustainability settled down within the group. Thus when discussions first began with the Sir Ratan Tata Trust (SRTT) in 1996 to explore ways in which the Trust could support Eklavya, we broached the subject of a corpus donation. At that early juncture, a corpus donation was not on the Trust's agenda. We proceeded with a project proposal to the Trust. Within a year, another project proposal was being developed to support the newly growing area of work with panchayats for



participatory planning and rural development. This was being explored with the Sir Dorabji Tata Trust (SDTT).

In this way, our experience with the corporate sector first evolved by way of project-based support. In 1997, a fresh context was created to address the task when SRTT invited a proposal from us for building up a corpus and other forms of support to strengthen the organisation. We welcomed this opportunity and developed the proposal broadly titled 'Strengthening the Organisation'.

Back to basics: strengthening the organisation

As the proposal was developed, it became clear that it was time to address some truly basic organisational issues:

- financial stability
- infrastructural facilities
- growth of the team, its wider resource group, and the norms, processes and structures of organisational functioning.

Regarding financial stability it was decided that we should target building up a corpus of Rs 3 crore, such that its interest income of about Rs 30 lakh per year would cover one third of Eklavya's annual budget. One third was a broad ratio, sizeable enough to enable us to hold the fort, and not too large to make us carefree! "If you can, you don't have to stop at Rs 3 crores, do you?" people asked us in amusement at this self imposed target. There was not much point answering this question as we found even the Rs 3 crore target to be quite an unknown challenge.

Apart from providing stability, the corpus was visualised as a fund that would enable us to

- actualise many new ideas and initiate new programmes,
- institute study fellowships for Eklavya members, resource persons and teachers,
- support our ventures in publications and toys, and
- support staff welfare measures.

Regarding infrastructural facilities, we decided to work towards setting up office-cum-training centre facilities at Bhopal and Hoshangabad. The overcrowding in the present rented premises and the uncertainty of retaining these over a period of time had made this necessary. Even small trainings and workshops had to be organised in rented space. Thus a budget for the purchase of land and for constructing two campuses was prepared.

Regarding the third objective of strengthening the team, the resource group and the management of the organisation, we planned a process of devolving the functions of the Academic Council to a number of sub-committees. This would ensure timely attention to tasks as well as enable greater involvement of all members of the AC in organisational responsibilities. Besides, it was decided to pay special attention to giving team members the opportunity to get training and exposure to other experiences related to their work.

Another cherished and much valued aim was to strengthen the resource group. Our group has always valued the voluntary involvement and contributions of people from colleges, universities and other areas in our programmes. It was important to renew old contacts and build new links with people across the country. We looked forward to the opportunity to do this and to the exciting interactions that would doubtless result from a drive aimed at enlarging our resource group.

Support from Sir Ratan Tata Trust

The proposal 'Strengthening the organisation' was first submitted to SRTT. In March, 1998, the Trust sanctioned a corpus grant of Rs 90 lakh on the condition that we raise a matching grant of Rs 1 crore in two years i.e. by December 1999. If we failed to do so the Trust was free to take back its funds with interest. It also sanctioned Rs 10 lakh to enable us to raise this matching grant. Further, it sanctioned Rs 25 lakh towards strengthening infrastructural facilities. This fund was, however, not to be used for acquiring land.

We debated the advisability of accepting the conditional sanction made by SRTT. We felt we could treat it not so much as a condition but as a facilitating opportunity to help us realise our objectives of building a Rs 3 crore corpus. We finally decided to accept SRTT's conditional corpus sanction. Thus we began the year 1998 with a Rs 90 lakh corpus grant and a target of raising Rs 1 crore by December 1999.

The first steps: reaching out to friends

The first step that occurred to us was to contact all friends and supporters by letter, phone and personal meetings. Each one of us in the group reached out to all those we thought would be able to help. As word spread and the idea was discussed, a strong suggestion emerged. People suggested that we reach out to NRIs in our efforts to raise funds. In fact, there was some scepticism if the target could be reached only from Indian sources.

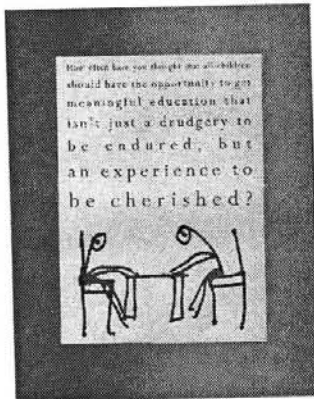
This advice of friends and supporters threw open a fundamental policy debate in Eklavya. How was it possible to consider other kinds of funds when we had not even begun the exercise of seriously raising individual and corporate funds in India? It had been an article of faith in the group that it is extremely important to build conviction and commitment within the people in the country for the objectives being pursued by Eklavya. Thus, we felt that if other funding sources were opened up at this stage, the likelihood of more easily available funds from these sources could dilute the hard work required to raise funds from Indian sources. In any case the Indian fund-raising drive first needed to be given its due and just trial. So we decided to concentrate on Indian sources for meeting the corpus target.

In parallel, we began feeling our way towards an appropriate corporate approach. Our well wishers initially advised us to go in for brief presentations and brochures. Nobody in the corporate sector has the time to read anything long, they said. Thus considerable time was spent during 1998-99 in preparing appropriate material for the corpus raising drive. Three different kinds of brochures were developed with the help of SOMAC, the social marketing wing of Lintas, Vani Subramaniam, a professional designer based in Delhi, and Karen Haydock from Chandigarh.

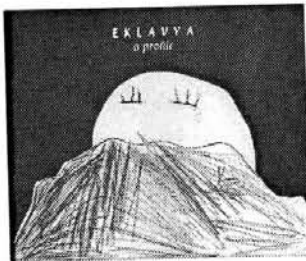
The campaign gathers strength: 1999-2000

Trusts and industries: Visits and personal meetings with friends were initially held at Mumbai, Delhi, Indore and, later, Bangalore. Each person had her/his own circle of contacts with trusts and corporate groups who could possibly contribute. Appointments were secured and meetings with potential donors took place. Apart from this effort, the more systematic route was also explored by collecting directories of trusts and charitable corporate houses in Mumbai, Delhi and Ahmedabad. Visits were made to many of these and Eklavya material was presented to them.

However, we soon realised that this approach yielded results only when there was some kind of personal link or historical bond. People to whom we had no introductions found it too sudden and distant to relate to our work and consider



Covers of brochures on Eklavya designed by Vani Subramaniam of Delhi (above) and in-house (below).



requests for support. Besides, as we had found with even bigger Trusts, it was more comfortable to start a new relationship with concrete project support. In fact, even before the corpus raising gathered strength, we were made to reckon with the idea of formulating specific requirements - such as, do we need computers or almirahs or support to bring out a book or provide teaching aids to children? This initially disoriented us but, eventually, we got used to the idea and, in fact, were able to identify suitable areas of specific support that actually proved very useful.

BPCL's social welfare wing contributed Rs 96,000 to reprint our publication *Beti Kare Sawal* in 1999 and another Rs 1 lakh in 2000 to bring out three issues of *Sandarbh*. We had no project support for *Sandarbh* in 1999-2000 and the BPCL grant enabled us to tide over a difficult spot.

We also realised we had no real estimation of what to expect from people. Contributions surprised us from both ends - of being much more or less than our expectations. Just as our introduction or presentation must have had a role in the contributions we raised, the donor's own preparedness was also as important. We realised that many corporates had no well worked out policy and, in fact, this inhibited their attitude. Or, the older policy of charity in their backyards was prevalent as the safest and most justifiable. They were also groping with the issue of rating the credibility of NGOs. This was important for justifying contributions to be made.

National developments affected the drive too. Recession in early 1999, the Orissa cyclone and the Kargil war were the other concerns that naturally took precedence over a cause such as Eklavya's.

During our efforts, we came across a group of young business entrepreneurs based in Mumbai - Shri Nakul Jagjivan, Shri Rajiv Bhatia and Shri Ketan Gandhi - and held a meeting with them. The discussion focused on their larger concerns about universalisation of quality education and led to a trip to Eklavya centres by Shri Bhatia. They committed as a group to mobilise support and resources for Eklavya.

Persons representing ICICI, BPCL, CII, Azim Premji Foundation and IC Trust also visited Eklavya. We attended two meetings organised by CII on Corporate Social Responsibility at Mumbai and the Social Summit held in Delhi. At the Delhi summit Eklavya presented a paper on primary education. Efforts were also made to approach industries in the Bhopal-Mandideep area for raising support for Eklavya. Major corporate donors for the matching effort have been ICICI, HDFC, Yatish Trading Company, Manoobhai Dungarsee Charity Trust and BPCL.

Individual supporters: The response from individual sympathisers has been extremely warm and effusive. Thanks to their efforts and emphatic communication of their regard for Eklavya's work to others, many more people have become a part of our larger support group today. For example, the resource group of six persons from the Tata Institute of Fundamental Research took it upon themselves to launch a campaign within the institute to mobilise support from faculty members as well as research students. They managed to mobilise contributions from almost 40 members amounting to more than Rs1 lakh.

Similarly, J.B. Petit Girls Higher Secondary School, Mumbai, where one of Eklavya's team members had studied, was contacted and was very keen to support our efforts for raising a corpus fund. The school took up Eklavya's cause for their fund raising campaign of 1999 and launched a drive through the students. The students of Class 5, 6 and 7 managed to collect contributions to the tune of Rs 1 lakh.

All donations to Eklavya are exempt under section 80(G) of the income tax act.

The efforts of Dr A.R. Vasavi in Bangalore, Prof Rama Kant Agnihotri in Delhi, Dr Hridayakant Dewan in Udaipur, Mukul Manglik and Anne Ninan in Delhi, Prof

Bharat Poorey, Dr Jayashree Sikka, Kirti Sikka and Renu Mittal in Indore, Pradeep Bhai Shah, Kiran Bhai Shah, Arvind Krishnaswamy, Dr R. Nagaraj, Dr Urjit Yajnik and Prakash Burte in Mumbai and Probir Sen in Bhopal helped us reach many people. Rajiv Joshi was deputed by Eklavya to coordinate the corpus raising effort in Mumbai and Richa Poorey provided ground support in Bhopal. Writer Arundhati Roy contributed Rs 2 lakh. Rakesh Capoor contributed Rs 1 lakh for children's libraries and Rs 1 lakh for acquiring land in Hoshangabad, in memory of his brother, the late Shri Sanjay Capoor.

Events: The Comet Media Foundation organises Bal Vividha, an annual event for teachers and children in Mumbai. Eklavya participates in these and when the corpus drive started, it was also hoped that such events would provide opportunities for strengthening our presence in Mumbai. We put up stalls for display and sale of our publications and a children's activity corner. Eklavya's presence in these events facilitated the Mumbai support group in gearing up its efforts to raise funds, fix up meetings with potential donors and so on.

On the suggestion of our auditor in Mumbai, we got in touch with *santoor* player Shri Snehal Mazumdar, who takes interest in organising fund raising events for some cause every year. A music concert was organised in Mumbai. It included a *santoor* recital by Snehal Mazoomdar, *dhrupad* recital by Gundecha brothers (Ramakant and Umakant) and *rudra veena* by Bahauddin Dagar. Sponsorship of the programme was organised through Max Touch. A souvenir was published for which advertisements were mobilised from 26 agencies in Mumbai, Delhi and Bhopal. We had barely a week to collect ads and could manage to raise slightly more than Rs 1 lakh through this effort. Very little funds were raised through ticket-based contributions. The Gundecha brothers, Snehal Mazoomdar and Bahauddin Dagar graciously volunteered to perform in the concert without charging any fee.

Royalty: Prof Rama Kant Agnihotri, Prof Nirmalangshu Mukherjee and Prof Bibudhendra Narayan Patnaik have edited a book, *The Architecture of Language*, based on the lectures delivered by linguist Prof Noam Chomsky in Delhi. It has been published by OUP. The editors and Prof Chomsky decided to commit the royalty from the sale of the book to Eklavya.

Give Online: Eklavya joined a website called Give Online, sponsored by ICICI to help NGOs raise funds through the Internet.

Eklavya and its staff: Members of the Eklavya team came forth with substantial contributions to their organisation's corpus. Many offered a monthly deduction from their salaries and many gave their contributions at one go. In all, Eklavya staff contributed Rs 1.5 lakh to the corpus. We also took the decision to transfer Rs 5 lakh from our accumulated savings to the corpus. In 2000 we were asked by UNICEF to provide 6,080 reprints of *Chakmak*, *Sandarbh* and *Srote* for resource teachers and trainers in two districts of Bihar. Eklavya transferred Rs 4 lakh from the proceeds of this sale to the corpus fund.

The target seems within reach

These efforts enabled us to move close to our target but it was a time consuming process. In fact, the drive actually picked up momentum only in the beginning of 1999. Thus, by December 1999, we had raised only Rs 65 lakh against the target of Rs 1 crore. SRTT agreed to our request to extend the deadline by a year. Thus it was that by December 2000, we succeeded in raising Rs 1,00,14,723. The initial endowment of SRTT, along with its interest, stood at Rs 1,02,97,806.

The immediate target was met. The larger target of a Rs 3 crore corpus seemed realisable, although it requires fairly sustained effort. More than everything else,

acquaintances and communications have been built with people in different domains. We wish to thank everyone for the support they have given. Immensely strengthened by this network, we, as a group, look forward to contributing effectively to the challenging processes of educational and social change. (List of donors on Page 83 and 84)

A plot of land to build a campus

Ever since the proposal for Strengthening the Organisation was evolved, the team at Hoshangabad had been making all possible efforts to identify and acquire a suitable piece of land for the office-cum-training centre campus. Initial efforts to acquire land on lease from the government or from some other agency proved fruitless and the team finally began to look for private land.

On January 1, 2001, these efforts culminated in the purchase of a plot of approximately 37,000 square feet on the outskirts of Hoshangabad. Part of the corpus fund was invested in the purchase of this land. Of this, Rs 3 lakh had been contributed by I.C.Trust Delhi, specifically for land purchase and, as mentioned earlier, Shri Rakesh Capoor had also committed Rs 1 lakh for land. Subsequently in March, 2001, SRTT sanctioned Rs 25 lakh for construction of the campus. Efforts to acquire land in Bhopal have also gathered pace in the last one year.

Eklavya's corpus and its composition

1. Institutional contributions	Rs	155.00 lakh
2. Individual contributions	Rs	17.00 lakh
3. Interest accrued	Rs	22.00 lakh
4. Eklavya's contribution	Rs	09.00 lakh
5. Music concert in Mumbai	Rs	1.25 lakh
Total	Rs	204.25 lakh

Investing the corpus

Along with building a corpus fund, we had to work out a policy of investing the fund. It was decided to spread investments over four to five institutions. We have invested the corpus fund with the following financial institutions:

1. State Bank of India
2. Housing Development and Finance Corporation (HDFC)
3. Bharat Petroleum Corporation Ltd. (BPCL)
4. Industrial Credit and Investment Corporation of India (ICICI)

It should be mentioned here that Shri Pankaj Patel, a financial consultant based in Mumbai, not only advised us on investments but also returned the entire amount of brokerage due to him on the HDFC and BPCL investments. ICICI and HDFC have also given the brokerage on investments directly to Eklavya.

FOCUSING ON

HUMAN RESOURCES

We now describe the main developments related to efforts to improve organisational functioning and attend to the growth needs of people in Eklavya during the past three years.

Proposed reorganisation of the institute: Deliberations for a broad reorganisation of Eklavya's structure have been going on for the past four years. In order to decentralise and focus the management of the wide range of activities, we decided to group all our programmes under two heads - the School Education and Publication Programmes and the Planning and Development Programmes. The day-to-day management of each of these was delegated to two committees, viz the School Education and Publication Committee (SE&PC) and the Planning and Development Committee (PC).

The decisions of these two committees are subject to review and ratification by the Academic Council of Eklavya. This system has been functioning for the past three years. Based on the experience of this partial decentralisation and autonomous functioning, we are in the process of reviewing afresh the structure of organisation that will be most constructive for Eklavya today. Two autonomous institutes may be created under the Foundation in the coming years or a separate society may be registered to carry forward the growing work of planning and development.

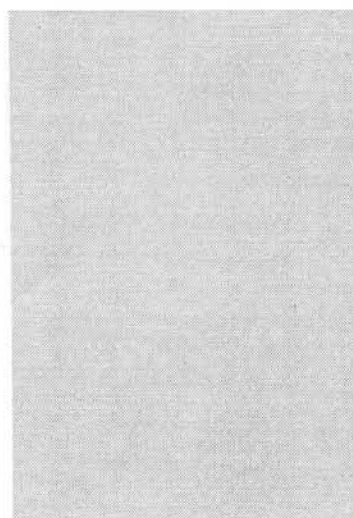
New members in the committees: In the 1996-97 period, new members had been inducted into both the Programme Committees. Thus, in the past three years, more people have been taking part in the decision-making processes of the organisation. The committees are able to spend more time in cohesive and purposeful deliberations related to their direct programmes. A fresh round of inducting two new members took place in the School Education and Publication Committee in early 2000.

Organisational functioning: The PC has a total of seven members. Of these, five are comparatively new. The committee shares organisational responsibilities among its members on a task-to-task basis. The overall planning of all task areas is done by the seven-member committee as a whole.

The SE&PC has 19 members, seven of whom are comparatively new. In this committee, organisational task areas have been assigned to six sub-committees for improved handling. Every SE&PC member was assigned to one or two of these. Overlaps were kept at a minimum, though they could not be completely avoided.

SE&PC sub-committees

1. The Directorate
2. The Finance Sub-Committee
3. The Committee Secretariat
4. The Staff Welfare Sub-Committee
5. The HRD Sub-Committee
6. The Executive Sub-Committee



The SE&PC reviewed the work of these sub-committees in February 2000. The main issues in the review were as follows:

- All the tasks emerging in this period were routed to the respective sub-committees responsible for the issues. Unlike in the past, case-to-case allocation of tasks, as they came up, was done away with.
- New members were encouraged to participate in the execution of responsibilities. This succeeded to varying degrees in different committees.
- New methods were evolved for achieving effectiveness in organisational matters. For example, the Committee Secretariat made efforts to prepare agenda notes prior to committee meetings. Timely communication of decisions of the committee to all concerned also improved.
- **Execution of decisions:** The Executive Sub-Committee, the Directorate and the Finance Sub-Committee had many overlaps in functions in practice. The tasks they handled required regular, if not daily, attention but the members of these sub-committees were located at different centres and met once in a while for short durations. Many tasks had to be done at Bhopal but there was no rationalised team at Bhopal to take care of things in an integrated manner.
- Many legal tasks had emerged which were not clearly recognised as the domain of any sub-committee.
- Within the Directorate and the EC, the major responsibilities were not very clearly demarcated among the members.

Following this review, it has been decided to form an integrated Organisational Secretariat in Bhopal. This secretariat is required to act as a constant clearing-house for organisational matters. The directorate as a separate sub-committee has been dissolved. Members of the organisational secretariat have been given responsibilities that require their presence in Bhopal. Some of their other responsibilities have been re-allocated to persons located at the field centres. Clearer demarcation of responsibilities has been done as well. However, further efforts still need to be made on many counts. These have been reviewed and reiterated.

Participation in the SE&PC: To enable a larger number of people to understand the process of organisational decision-making it had been decided to draw up a panel of colleagues, two of whom would be invited to the SE&PC meetings as special invitees, for three consecutive meetings. This procedure has been implemented from February 1999.

It had also been decided to allow members to opt out of the SE&PC after a period of at least three years. The first such 'retirement' was effected in February 2000. Discussions on other members requesting retirement has also been initiated.

Personnel welfare: The sub-committee dealing with this aspect of the organisation is in the process of evolving and defining its functions. Notwithstanding this, the Academic Council has acted on a proposal made to it by the PC and instituted a Vehicle Loan Scheme from March 1999. This was considered necessary to improve the effectiveness of staff members in general and also to make the field-based work more effective. A fund has been created out of Eklavya's own resources for purchase of two-wheelers by staff members and disbursement guidelines have been drawn up.

Secondly, in order to comply with the legal requirement, steps have been taken for setting up a Gratuity Fund for Eklavya employees with the Life Insurance Corporation.

HRD and personnel management: The sub-committee dealing with this aspect has held discussions at the field centres on members' needs for training, change in work definition etc and compiled the requirements that were expressed to them. With the formation of the sub-committee there has been greater awareness and dialogue on this aspect of organisational functioning. In addition to training needs, the sub-committee has also been attending to issues related to work satisfaction among staff members and facilitating dialogues among concerned people in the field centres.

Still, a more active plan with regard to human development is yet to evolve for the organisation. During the last three years, many members from both the Programme Committees of Eklavya were sent for various trainings and courses. The training fee and some additional expenses were borne by Eklavya.

Trainings/workshops attended by Eklavya persons

1. On publishing organised by the National Book Trust in Delhi for four weeks.
2. On accounting software in Bhopal for four weeks.
3. On theoretical physics at the Raman Research Institute in Bangalore.
4. On women's SHGs organised by Samarthan and Pradan.
5. On making organic manure organised by CAPART in Chennai.
6. On leather technology organised by CLRI in Ahmedabad.
7. On documentation and report writing organised by Samarthan in Bhopal.
8. On participatory rural appraisal at Sehore.
9. On governance in organisations, organised by PRIA in Delhi.
10. On development journalism.
11. On creating and setting up web-sites, organised by the British Library, Bhopal.
12. On design and child development, organised by the National Institute of Design, Ahmedabad.

Orientation visits: Besides trainings, members also visited other successful programmes such as the work of Pradan on Self Help Groups and Natural Resource Management in Alwar and the community-based school construction programme of Lok Jumbish in Rajasthan.

Financial and accounting practices: Two major developments have added to the strength of the accounting systems in Eklavya. These are :

1. Concurrent audit of accounts has been started with Shashi Bansal and Associates, a firm in Bhopal, since November, 1999.
2. Complete computerisation of accounts in Bhopal is under way.

Eklavya has added to its organisational strength considerably by building up completely new relationships with corporate houses, trusts and public sector groups. It has enhanced and deepened its relationship with many professionals and other individuals interested in education and development. Processes for better organisational functioning have been nurtured and promoted.

Steps for improving infrastructural facilities have been taken and plans to build the campus in Hoshangabad, to begin with, are actively under way.

It will be important to steadfastly pursue the powerful steps taken in this period. Infrastructure development will need greater attention. The norms for use of corpus interest will need to be fine-tuned. The interest generated in our work among so many people will need to be further nurtured in a meaningful way.

Eklavya Foundation

Statement of Accounts

BALANCE SHEET AS ON 31ST MARCH 1999, 2000 AND 2001

	31.3.1999 (Rs. in lakhs)	31.3.2000 (Rs. in lakhs)	31.3.2001 (Rs. in lakhs)
ASSETS:			
Project Equipment (Net)	17.13	14.22	13.13
Land at Sandalpur	00.55	00.55	00.55
Land at Hoshangabad	-	-	11.12
Corpus Investments	109.40	165.81	194.32
Govt. & Other grants (Receivable)	-	56.37	23.71
Current Assets (Receivable)	10.58	07.82	08.51
Loans & Advances	00.84	01.86	01.71
Deposits	00.42	00.48	00.47
Cash & Bank Balances	32.68	14.73	25.95
TOTAL	171.60	261.84	279.47
LIABILITIES:			
Capital Fund (Awards)	01.75	01.75	01.75
Corpus Fund	113.72	168.50	205.57
Chakmak Life Membership	00.70	01.01	01.08
Sandarbh Life Membership	-	-	00.10
Grants for Equipment	17.13	14.22	13.13
Govt. & Other Grants (Refundable)	- 03.26	-	-
Loans	-	08.75	-
Current Liabilities & Provisions	15.49	38.62	27.63
Income Expenditure A/C	26.07	28.99	30.21
TOTAL	171.60	261.84	279.47

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 1999, 2000 AND 2001

	1998-1999 (Rs. in lakhs)	1999-2000 (Rs. in lakhs)	2000-2001 (Rs. in lakhs)
INCOME			
Government & Other Grants	112.61	115.73	141.21
Subscription / Sale	08.52	01.06	27.96
Interest	01.17	00.72	00.62
Other Receipts	00.20	03.08	00.48
Sundry balances written back (net)	00.46	-	-
Total	122.96	120.59	170.27
EXPENDITURE			
Expenditure on the Objects of the society			
A. Educational Projects	101.13	108.88	129.56
B. Expenses of Publications	19.67	08.62	29.06
C. Others	- 00.32	00.14	05.70
Interest paid on Loans	-	-	00.63
Sundry balances written off (net)	-	00.04	00.10
Excess of Income over Expenditure	02.48	02.91	05.22
Total	122.96	120.59	170.27

CHANDRAKANT AND SEVANTILAL
CHARTERED ACCOUNTANTS, Mumbai

Organisations that gave financial assistance during 1998-2001

Project Support

Department of Education, Ministry of Human Resource Development, Govt. of India
 NCSTC, Department of Science and Technology, Govt. of India
 Sir Ratan Tata Trust, Mumbai
 Sir Dorabji Tata Trust, Mumbai
 Bharat Petroleum Corporation Ltd., Mumbai
 National Book Trust, Delhi
 Centre for Technology and Development, Delhi
 Unicef, Bhopal
 Centre for Science, Education and Communication, Delhi
 Give Foundation, Ahmedabad
 M.P. Council of Science and Technology, Bhopal
 National Leather Technology Mission, Delhi
 Society for Promotion of Wastelands Development

Event Sponsors

State Bank of Indore, Bhopal
 State Bank of India, Bhopal
 HDFC, Bhopal
 ICICI Bank Ltd., Bhopal

Corpus Support

	(in Rs.)
Adarsh Printers & Publishers, Bhopal	10000
Anirudh Minerals & Chemicals, Dehradun	5100
Bharat Petroleum Corporation Ltd., Mumbai	500000
Champaben Sheth Charitable, Mumbai	5000
Chunilal Hargovandas Ch. Trust, Mumbai	15000
Don Bosco Higher Sec. School, Matunga, Mumbai	1000
Durga Das Ahuja Charitable Trust, New Delhi	5000
Gandhi Securities & Investment Pvt. Ltd., Mumbai	200000
Gautam Bhailal Doshi Foundation, Mumbai	50000
Gayatri Education Medical Research Foundation, Mumbai	50000
Gharda Foundation, Mumbai	10000
Housing Development Finance Corporation, Mumbai	1000000
I.C. Trust, New Delhi	100000
Industrial Credit and Investment Corporation of India (ICICI), Mumbai	2500000
Indore Development Society, Indore	5000
Information Products, Mumbai	51000
Infosys Foundation, Bangalore	100000
J. B. Petit School, Mumbai	98551
Jai Singh Thakur & Sons, Shimla	11000
Jamshedji Nowroji Modi Trust, Mumbai	2000
Karan Power and Control Pvt.Ltd., Delhi	5000
Lifting Equipment Accessories Ltd., Delhi	5000
M. G. Charitable Trust, Mumbai	5000
Mahesh Bhogilal Memorial Charitable Trust, Mumbai	25000
Manoobhai Doongursee Charity Trust, Mumbai	500000
Meenakshi Enterprises, Delhi	2100
Mittal Jan Sewa Nidhi, Indore	2000
Neptune Exploration & Industries Ltd., Delhi	51000
Pirojsha Godrej Foundation, Mumbai	100000
Smt. Jaishree S. Lashkari Public Charitable Trust, Indore	3001
Ravji Ramji Charitable Trust, Mumbai	11000
RSM and Co. Foundation, Mumbai	50000
Sameer Charity Trust, Indore	2500
Sidhu Leasing & Financing Co. Ltd., Delhi	50000
Sudit K. Parikh & Company, Mumbai	5000
Sushila & Chamanlal Sheth Charitable Foundation, Mumbai	1000
T.S. Gandhi Seva Trust, Indore	1000
Thakkar and Gadhia Chartered Accountants, Mumbai	2000
The Himalaya Drug Company, Bangalore	25000
Vaish Associates, New Delhi	10000
Varaiya Foundation, Mumbai	5000
Videsh Sanchar Nigam Ltd., Mumbai	40000
Yatish Trading Co. Pvt. Ltd., Mumbai	800000

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Arvind Nair	Hemal Ved	Neha Arora	Rashmi Pant	Sunit Ranjan Das
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C. V. Viswanathan	K. Sridhar	Pankaj Patel	Sandip Ghosh	Vijay Mahajan
C. V. Sundaram	K. Subramaniam	Partap K. Aggarwal	Sangeeta Vaidya	Vikram S. Mehta
Chaitali Purkayastha	K. N. Minwalla	Parveen Sinclair	Sanjay Jain	Vineet Aggarwal
Chand Bhardwaj	Kanan Jhingran	Poonam	Sanjeev Bhardwaj	Vinish Kathuria
Chhaya Sawhney	Kapil H. Paranjape	Poonam Batra	Sanjib Sabhapandit	Vipasha Agnihotri
Chiranjib Mitra	Kinjal Desai	Promod Upadhyay	Santanu Ghosh	Vishpala Parthasarthy
Chitra Joshi	Kishore Chandan	Pramodini Veena	Santosh Malhotra	Vishwa Vijya Singh
Chitra Viswanathan	Kishore Pawar	Pranab Sen	Santosh Vadawale	Vrinda Sarup
D. N. Chaudhri	Krishna Banerjee	Preeti Sharma	Satish Tibrewala	Yogesh Mantri
D. N. Kapoor	Kulwant Madan	Prem Lata	Satyaki Bhattacharya	
D. Narsimhan	Kumkum Roy	Prem Lata Panta	Savita Ladage	
Daksha Lohiya	Kunal Chakravarti	Prem Singh	Savita Mahajan	

Eklavya : the people

Bhopal

Anil Lokhande
Anjali Noronha
Anwar Jafri
Ashok Rokde
Arvind Jain
Chandra Prakash Kada
Indu Sreekumar
Johnny Kutty
Kamal Singh
Kavita Suresh
Kartik Sharma
Lal Bahadur Ojha
Laxmi Phelomena
Manohar Sharma
Manoj Nigam
Mohd. Shafiq
Pradeep P. N.
Prakash Jadhav
R. K. Bhatnagar
Rajesh Utsahi
Rakesh Khatri
S. N. Chatterjee
Sajan Paul
Shashi Sablok
Shobha Chaubey
Suresh Mishra
Sushil Shukla
T. C. Kotwani
Tultul Biswas
V. N. Tripathi
Veena Bhatia
Vinod Raina (on leave)

Dewas

Alex M. George
Anu Gupta
Arvind Sardana
Dinesh Chandra Sharma
Dinesh Kumar Patel
Leena Chouhan
Ram Narayan Syag
Ravikant Mishra
Ram Moorti Sharma
Shobha Shingne
Vimal Dhande

Hoshangabad

Ajay Sharma
Anil Patel
Amlan Das
Amman Madan
B. P. Maithil
Brajesh Singh
C. N. Subramaniam
Gautam Pandey
Jyoti Diwan
Madhav Kelkar
Mahesh Basedia
Mahesh Sharma
Pramod Maithil
Rajesh Khindri
Ram Bharose
Rashmi Paliwal
Sanjay Tiwari
Snigdha Mitra
Venu Aindley
Yemuna Sonny

Harda

Hariom Kushwaha
Kalidas Banerjee
Madhusudan Dubey
Rajesh Dale
Rajesh Verma
Ram Jeevan Nagle
Santosh Kumar Mehta

Ujjain

Bahadur Jadhav
Chhaya Dubey
K. R. Sharma
Kailash Dhawale
Prem Kumar Manmauji

Pipariya

A. B. Khare
Gopal Rathi
Kamal Mahendroo
Kamlesh Bhargava
M. P. Tiwari

Shahpur

Anil Sargar
Ghanshyam Tiwari
Hemraj Malviya
Neelesh Malviya
Pradeep Chaubey
Smriti Joseph

Charua

Anup Kumar
Alok Singh
Ashok Kevat
Rajesh Bishnoi
Rajeshree Mandloi
Sunder Singh

Khategaon

Chandan Yadav
Dhuleshwar Rawat
Rajendra Bandhu
Rajesh Bhadoria
Shakir Pathan

Parasia

Lakhan Vadiwa

Harangaon

Gajanand Yadav
Neelesh Kumar

Ajnaas

Kalavati Kumhar

Chandpura

Maya Gaur

Fellowships/Contracts

Arvind Gupte
Prakash Burte
Pramod Mohanty

(as on 31.3.2001)

the governing body

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Delhi University
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National Human Rights
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Sidhu finance and
Leasing Co., Delhi
9. Dr. Anwar Jafri
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Eklavya Institute
10. Ms. Rashmi Paliwal
Representative,
Academic Council
11. Dr. Ram Narayan Syag
Representative,
Academic Council



NEVLA AUR BAAZ (Acrylic on paper). This painting by the late Jangad Singh Shyam was exhibited at the Anadi exhibition early in 2001. Jangad was an old friend of Eklavya, from the days he first came to Bharat Bhavan in Bhopal under the late J. Swaminathan's drive to focus attention on India's tribal art. Jangad designed the cover of the inaugural issue of Chakmak and had been a regular contributor to the magazine. He also introduced us to other tribal artists whose paintings and illustrations gave Chakmak its unique look. Jangad bid farewell to the world in a cold and lonely hotel room in distant Japan, where he had gone to fulfil a contractual obligation. We still don't know why he took this extreme step, but we will miss him sorely. Adieu Jangad and may you always be happy in the land to which you have gone...