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CONTENTS

EDITOR'S NOTE

It is widely acknowledge that health is influenced by biological, social, economic, cultural and political forces. Health is a critical input for overal development of the child and it influences enrolment, retention and school completion rates significantly. NCERT's National Curriculum Framework - 2005 and the National Focus Group's position paper on 'Health and Physical Education' deliberate upon the need and strategies of Health and Physical Education in schools. NCERT is also in the process of finalising syllabus of this subject area for the entire stage of school education.

Recently, NCERT has organised a Memorial Lecture where T. Sundararaman delivered a lecture entitled "The Educational Institution as a Health Facility". This issue carries the written text of the lecture for our readers. In this lecture he emphasises the need of more and more educational institutions developed as health centres in India.

There is a growing realisation that the health needs of adolescents require to be addressed. An article by Saroj Yadav, "Parenting: Preparing the Adolescents" takes up this issue and underlines the role of parents in this area. Disability is another concern which needs our serious attention and efforts towards inclusive education. The present issue carries two articles first, by Aakansha Agarwal and another by Shivani Bindal and Sushma Sharma which deal in this area.

We also in this issue carry three articles related to different aspects of elementary education. The first by — Sandeeep Kumar, Manju Rani and Ravendra Sharma, presents an appraisal of elementary education in Uttarakhand. Authors discuss that a newly constituted Indian State-Uttarakhand consisting of hilly districts has relatively higher literary rate as compared to country as a whole. It further explores various efforts of the State towards achieving the goal of Universalisation of Elementary Education. The second article by B.K. Panda focuses on the Mid-day Meal programme in residential primary shcools opened for Scheduled Tribes in Chhattisgarh. He relates School Feeding Programme to the enrolment of children in school and also discusses its other benefits for the school going children. The third article by Sudhanshu Shekhar Patra and Diptanshu Bhusan Pati lucidly compares the educational structures and schemes of two states — Orissa which is an educationally backward State and Kerala, an educationally progressive State.

Technology helps dissemination of ideas generated on one forum to masses. Its cost effective and easy reach motivates various stakeholders for its use. This issue also carries articles related to the use of technology for in-service teacher training. Rajendra Pal and Pratima Pallai highlight different

aspects of tele-conferencing including its history and researches in this area. The other aricle by Madhulika S. Patel and Meenakshi Khar shares experinces of video-conferencing organised for teachers to orient them on English textbooks developed by NCERT.

For about two decades we have been making efforts towards reforming our examination system. Debates about grading system have been continued at various platforms but still the system is not ready to adopt it. An article on "Grading System for Schools" by Avtar Singh discusses the advantage of grading system in schools.

JIE is a forum which often includes diverse issues related to different stages of school, higher and teacher education. In the context of school education JIE provides space for pre-school to senior secondary stage. This issue also carries an article on pre-schools of Guwahati written by Kaberi Saha and Ananya Changkakati. This article presents a comparative study of selected Assamese and English medium schools in Guwahati city of Assam.

Whenever we talk about our national concerns in Education, Environmental Education takes the priority. An article related to Environmental Education by Jyoti Prakash Bagchi touches the concern regarding developing ecological virtues by reinventing nature. It is a fact that children learn more in the company of others. When they learn together they find themselvess more engaged and interactive. Nitin Banerjee's article "Learning Together, Why and How?" focusses this aspect and outlines the need of various approaches of learning together.

In its end pages JIE carries a reportage by Kirti Kapur which highlights the need of interactive programme and workshops for teachers.

We are now in a better position to attend the needs and queries of our subcribers and contributors. We also invite your feedbacks on articles, research papers, reports and bookreviews. We hope like other issues, the present issues will also be helpful in enriching knowledge of our readers on various aspects of education.

Academic Editor
JIE

The Educational Institution as a Health Facility*

T. SUNDARARAMAN**

Introduction

The child of school going age and the adolescent of college going age represent almost 30 per cent of the population. Of the approximately 19.39 crore children in the elementary education age group about 14.71 crore are enrolled in schools. Including the child attending the pre-school the number is nearer 22 crore with an attendance of 15.6 crore. Though there is an unfinished agenda of achieving universal schooling, as access to schools and retention improves, we now need to bring more focus on improving the quality of schooling.

The main challenge in quality is educational attainment. There has been increasing concern about the high degree of 'wastage within schools' – large numbers of children who pass out from the elementary school without even acquiring fluent literacy or an adequate level of numeracy. This is not only a problem of the elementary school. At every level, the educational system is challenged to ensure that students acquire the knowledge, skills and confidence needed for them to become useful citizens and develop their own lalent abilities and creative potential to the maximum.

However, the focus on educational concerns has tended to marginalise the other dimensions of quality. One of these dimensions is health and hygiene. "Children's health is an important concern for all societies since it contributes to their overall development. Health, nutrition and education are important for the overall development of the child and these three inputs need to be addressed in a comprehensive manner. While the relationship between health and education is seen more in terms of the role that the latter plays in creating health awareness and health status improvements, what is not adequately represented in the debates is the reciprocal relationship between health and education, especially when it comes to children. Studies have shown that poor health and nutritional status

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* This article was presented during the Savitribai Phule First Memorial Lecture, organised by NCERT in collaboration with Maniben Nanavati Women's College Mumbai on 12 December 2008 and published by NCERT.

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of children is a barrier to attendance and educational attainment and therefore plays a crucial role in enrolment, retention, and completion of school education."

The school and the college represent a unique opportunity for all aspects of health – preventive, promotive and curative. Further, here is a field where one can address health in the spirit of the Alma Ata declaration as "a state of complete physical, mental and social well being and not merely as the absence of disease or infirmity."

In practice, though schools have always had some focus on health and physical education, this focus has been rather limited in both conception and implementation. Often it becomes reduced to one more subject in the syllabus, or a few chapters in a textbook. One of the reasons for this is the difficulty that governments face in building convergence across departments and sectors. This presentation argues for the recognition of every educational institution as a site for primary health care. The school should be charged with not only producing an educated child, but a healthy child as well.

Another responsibility of the educational institution is to prepare the student for citizenship – building a democratic and secular spirit in the future citizen of the nation. One could call these as part of social health.

Historical Introduction

One of the earliest landmarks in the history of school health in India is in the 'Report of the health survey and development committee' a committee set up just before independence and whose report presented in 1946, was to influence not only Indian public health planning but international public health as well. This Report commonly referred to as the Bhore Committee Report after its chairperson, Sir Joseph Bhore, clearly spelt out the scope of a school health programme, and till today is one of the most holistic views of this programme. According to the committee, the duties of a school health service are:

(i) Health measures, preventive and curative, which includes:
- the detection and treatment of defects and diseases,
- the creation and maintenance of a hygienic environment in and around the school.

(ii) measures for promoting positive health which should include:
- the provision of supplementary food to improve the nutritional state of the child;
- physical culture through games, sports and gymnastic exercises and through corporate recreational activities;
- health education through formal instruction and practice of the hygienic mode of life.

In 1958, the school health division was established in the ministry of family welfare, and it was to serve as a resource centre to NCERT and to the Department of Adult Education and the Department of Elementary Education. This stress on coordination was soon lost and each department was acting relatively independent of the other. In 1960 a governmental committee examined the

issue of the health of school children and made a number of recommendations but there was little follow up. A few states set up vibrant programmes, but most did not sustain this effort. During the nineties in most states school health had become a token programme of occasional health check-ups in the schools. The states of the north with the poorest health indicators were often the states with the weakest school health programmes as well.

One major positive development was that in 1995 the Government of India took up support to the school mid day meal programme. Till then only Tamil Nadu had a consistent school mid day meal programme and most other states had very small programmes or none at all. But even this central intervention in school health remained on a relatively low level of coverage and intensity. It took a public interest litigation and a Supreme Court ruling (28 November 2001) before it became mandatory for every school to provide the mid-day meal and for the centre to bear the costs of this programme.

During the last two decades, several national health programmes like the Reproductive and Child Health Programme and its Adolescent and Sexual Health Component or HIV/AIDS Control Programme or Tuberculosis or Mental Health or Tobacco Control Programme have been emphasising health education. In this context school children are viewed as a potential 'target group' for preventive and promotive activities. Though the recognition of the importance of reaching the schools is welcome, each of these programmes are operationalised independent of one another. Each programme has its own targets of coverage and is poorly integrated with the rest of school health. Another concern with many programme-specific health education campaigns is that the focus is on disseminating information, which is by itself insufficient to change behaviour and promote better health.

One important development of the late nineties and the current period is the emergence of adolescent reproductive and sexual health as a priority. A large part of this is due to the AIDS pandemic. But part of this increased attention to adolescent health is due to the growing understanding we now have about the special health problems of this age and the lack of programmes to address it. With adolescent health becoming a priority, there has been a rise in interest in the higher secondary schools and the college as a site of health care and health promotion. However, as of today, adolescent health care in schools and colleges has not gained the minimum attention it needs and there is a long haul ahead on this issue.

The last two years have seen a spate of initiatives in the most recent of government efforts in school health. One of these is the launch of the National School Health Programme, under the National Rural Health Mission, which tries to learn from the past experiences and build on them. In parallel with this, under the National Curriculum Framework there has been a major thrust led by NCERT to revise and put in place an approach to Health and Physical Education which also approaches the whole issue from the holistic framework. The National AIDS

Control Programme has also launched a major initiative in adolescent and sexual health which is coordinated with the efforts of the education department. Further the school mid-day meal programme, now a massive effort covering all government schools and government aided schools has also built in a health programme with a focus on correction of malnutrition and anaemia and micronutrient deficiency.

It is in this historical and contemporary context that we review below the potential of specific strategies through which the educational institution could become a site of comprehensive primary health care, producing educated and healthy citizens.

The School as a Curative Facility

School health programmes are perceived by many to be almost synonymous with an annual medical check-up by a doctor in the school and the occasional immunisation. This check-up is followed in most instances of any health complaint by a referral. This 'medical inspection' is highly unsatisfactory for a number of reasons. As far back as 1961, the government committee examining the issue of school health observed that: "We are of the opinion that the facilities available at present for school health in different states are not satisfactory although the system of school medical inspection has been in vogue for a number of years in many states. The carrying out of medical inspection in a perfunctory manner, the non-availability of remedial facilities, lack of follow up even in the cases of those declared to have defects and the lack of cooperation between the school authorities and parents are some of the factors which have contributed to unsatisfactory results in the school health services. We feel therefore, that unless the present system is considerably improved, it would be a mere waste of time and money to continue it."

The best practices in developing the school as a health facility can be seen in a number of state programmes, namely Kerala, Tamil Nadu, Gujarat and West Bengal, as well as in a number of NGOs led programmes like that of Naandi Foundation in Hyderabad and in Udaipur.

Extracting from these best practices a comprehensive list of activities that would constitute the provision of health care services in the school would include the following–

- *Health Screening*: Annual or once in six months check-up for all children in a school. Given the huge load of children who would have to be screened, the ideal solution is to use trained nurses and paramedics for this task, supplemented by trained teachers, reserving the doctor's visit for those children who are suspected to be having health problems. Training of such nurses, paramedics and teachers for this would be a massive task in itself but in terms of health outcomes, it would be a very sensible and cost effective and feasible input to provide.
- *Nutritional Status:* Weight and height recording with computation of BMI and identification of underweight or overweight children. This could be done by the teachers themselves.

We can expect the under nourished child to have greater difficulty in learning. Over 40 per cent of children are today underweight in most states. This compares with about 6 to 20 per cent in comparable third world countries. Unfortunately in parallel with such high levels of child malnutrition, obesity in about 10 to 15 per cent is also rapidly emerging as a problem and this too needs attention. Malnourished children need counselling. Support is needed to the under-nourished child to ensure that adequate food is being accessed. Medical examination would be needed in severe or persistent malnutrition to rule out secondary causes of malnutrition.

- *Clinical/Laboratory Assessment of Anaemia*: Over 70 per cent of children are anaemic by NHFS figures. In severe anaemia, we also need to note response to treatment. Those that fail to respond should be explored for non dietary causes of anaemia–like sickle cell anaemia. Most, however, are due to dietary gaps and due to worms and could be treated in the school setting itself. De-worming tablets like albendazole and a course of 120 tablets of iron, one tablet daily, are given annually to every child in Gujarat in two six monthly packages. Other states in line with WHO's guidelines are trying one tablet of iron once a week, given under supervision. Anaemia has an added concern in adolescent girls, many of who in the Indian rural setting would be getting married soon and probably getting pregnant soon after. Ideally anaemia should be corrected before onset of pregnancy as it is much more difficult to correct it adequately afterwards. The school can potentially do more to reduce anaemia than any other institution and the positive impact on school performance including performance in sports would be visible.
- *Eye Examination* : Refractory errors, night blindness, trachoma, conjunctivitis are the common problems to be screened for. These problems admit of easy detection and often easy correction. Refractory eye problems are a major source of learning problems. The national blindness control programme has a scheme for free spectacles to children with refractory errors. But without teachers assisting in the detection of refractory errors and its correction this objective cannot be universally achieved. Screening for refractive errors is something that any teacher can be taught in minutes and there is really no reason why it is not part of the annual school routine.
- *Ear Discharge and Hearing Problems:* Repeated ear discharge can lead to deafness. Many times deafness remains unnoticed but contributes to poor scholastic performance. Screening proformas designed under national programme would be used for those students who have any such suspicion during annual health screening.

- *Common Dental Conditions:* Dental caries and periodontal disease: This is one of the commonest of ailments and, detected early, further progression can be prevented. More intractable dental conditions could be referred. A dental assistant is desirable, but not essential for such screening. A school nurse could do as well.
- *Common Skin Diseases:* Scabies and Pyoderma, lice, etc. are the common problems. These spread amongst school children and identification of all those affected with simultaneous treatment is the best way to cut down the spread. These illnesses are a source of considerable discomfort to children and interfere with learning.
- *Heart Defects – Rheumatic and Congenital* : Screening by trained nurses can detect this, but it would require a high degree of medical follow up to establish the diagnosis and eventually costly surgery. Some states, notably Gujarat, provides for this.
- *Disabilities – Visual, Hearing, Locomotor, Others*: Children with disabilities have special needs to be able to keep up with the class. Equipment, as well as support and guidance could help them. The point is in first identifying them as such and working out to what extent the school itself is disabled-friendly and what are the steps needed to make it so. Teacher counselling would be essential.
- *Learning Disorders, Problem Behaviours etc.*: Teachers need to be sensitised to identify children with such problems and send them for appropriate referral centres. This may not be detected in the screening camp, but a trained teacher would notice it during the course of her teaching. Similarly, mental health problems would require a sensitive teacher to detect, plus a medical/psychiatric social worker or child psychologist to refer to.
- *Psychological Disorders* : Psycho-social assessment and assistance for the child from broken families or from communities in conflict, in disastrous situations or other difficult stressful environments and for children who are victims of abuse would also be needed.

In addition to all of the above general health and hygiene of the child would be observed for follow up subsequently.

Cure in the School

Many of the conditions above can be managed within the school. In the Madhya Pradesh a sample study data from two districts showed that 14 per cent had anaemia, a high 6-8 per cent had vitamin A deficiency, 17-31 per cent had symptoms of worm infestation, 8-30 per cent had skin infestations/infections, about 5 per cent had dental problems, about 4-8 per cent had ENT problems and about the same amount had eye problems. In Dadra and Nagar Haveli, about 35 per cent of children have a dental problem, 8 per cent have a skin problem and about 3-4 per cent have an eye or ENT problem. Tamil Nadu mentions 45 per cent to be having dental problems. (These studies are reported in the state programme implementation

plans submitted by the states, and based on the data generated within the department).

Also every school has its share of child injuries and emergencies. A trained first aid worker, or a trained nurse on hand and a dispensary is valuable and large schools have such a facility. However, the focus should be on every school having such a facility. Where schools are small, they could share a nurse between themselves.

The Referral Back Up

About one per cent of children in most screening programmes would have a health problem that cannot be managed by a trained nurse and would require a visit to a doctor, often a specialist. And even smaller percentage would require a costly intervention. Though these are few, in absolute numbers there would be a very large number requiring assistance and few parents who are able to afford it. But without it the programme loses much of its credibility. Referrals therefore need special arrangements. Ideally it could be the child and the parent taken along by the school to visit the specialist, but at least a follow up to ensure that the child did make the visit and get quality medical advice. School health insurance has also been tried–but it adds little cost savings, though where public services are limited it could improve access to private facilities. Yet another approach, applicable for specialised specialist services like hearing loss, could be a voucher scheme, where the voucher provides access to cashless service to the child and the service provider is reimbursed by the government. For conditions like hearing loss or cardiac illness or epilepsy or victims of sexual abuse or children needing aids for disability this could be very useful–for service providers are few and difficult to arrange for in the vicinity of the school, and sometimes even in the district.

School Health Records

One of the best examples is what Kerala is trying – called the minus two to plus two health record. Each child has a health card made for it from pre-school, carrying forward the immunisation card that covers the first three years. This card carried details of growth and development annually, health screening records and records of serious illness or disability. It also has immunisation details. The school keeps the record and is transferred along with the transfer certificate and the family too can have a copy. Often we know that the child got an injection in the school, but parents have no way of knowing or remembering what happened. Many states have simpler versions of this. The basic principle is documentation of the health history is a valuable aid to good health in itself.

Preventive Care in the Educational Facility

Most communicable diseases, especially those that are food or water borne or that which is spread by droplets through respiratory tracts, spread within schools. Simple rules of hygiene would reduce disease burdens considerably. Safe drinking water and clean toilets with safe disposal of faeces would also make a huge difference. Unfortunately as of today

approximately 45 per cent schools at the primary level lack toilet facilities in 2005-06 and 15 per cent lack drinking water facilities. These are urgent priorities.

The observance of good hygienic practices like handwashing or not spitting, etc. prevent disease not only at school but by setting example and communicating knowledge also prevent disease in communities.

Immunisation is another major school related preventive health activity. Keeping the environment of the school hygienic and free of child hazards is also an important contribution that can be made. Recently there has been a spate of media coverage of children who fell down open bore-well holes and died after days of suffering. But this is only a small sample of the wide range of tragedies and disasters that visit the child at school or on its way to school and back home. As many over-crowded private schools mushroom in unsafe buildings in densely populated urban localities, such hazards multiply manifolds. School safety regulation is yet another urgent priority for social action.

Health Promotion in the Educational

Facility: Nutrition in the School

Approximately 40 per cent of the children in this age group are malnourished and about 60 per cent are anaemic. The school with the mid-day meal, now universalised, has the potential to address this problem more effectively than any other route currently available. The implementation of this programme is still varied with some states lagging far behind. In states where it is being implemented, one finds that children are being served a cooked meal for lunch. "The evidence suggests that the mid-day meals have enhanced school attendance and retention. It is definitely a motivating factor for children to attend schools more regularly. For poor children this programme does help in at least partially addressing classroom hunger and has helped in averting in the intensification of child under nutrition in drought affected areas. Apart from addressing under nutrition, the mid-day meal programme also creates opportunities and conditions for greater social interaction across castes."

Many states have improved impact on nutrition by improving quality of the mid-day meal – the addition of the egg in Tamil Nadu for example or the addition of a glass of milk. The programme is still slow to integrate the mid-day meal with systematic weight and anaemia monitoring and with support to the malnourished child with better attention to recurrent illnesses and better nutritional counselling addressed to family. In the absence of this too often supplementary meal becomes a substitute meal. Though there is some advantage in increasing food availability in the family as a whole it would be inadequate to impact on malnutrition. There is therefore a need to make an impact on such children coming from seriously affected families by providing a second meal before school or after school. This could also be used for addressing the child with severe malnutrition.

It is difficult to understand why this programme had to take over 60 years to

really get going when it was mooted as early as the 1940s. One reason is that the 'free' school meal was seen as charity or even as creating dependency. One needs to note that almost all industrialised nations, including the United States, have a school lunch which is charged minimally or not at all, and provided free of charge to all children from poorer socio-economic status. The social integration and mutual binding effect of eating together is so powerful, that even without the nutritional goals, the school meal would be of major use.

Micro-nutrient fortification of the locally cooked hot meal, by the use of sprinkles or fortified salt for example could also impact positively on the problem of micro-nutrient deficiency especially where iodine deficiency or calcium or iron deficiency is a problem. However, the need for micro-nutrients should not be used as a reason for arguing for pre-prepared and packaged foods. The experience with centrally cooked and distributed meals, is that it is costlier, reduces the potential for local employment and opens the doors for large scale corruption without any significant increase in either the quality of food or hygiene.

Health Promotion in the Educational Facility : Health Education in the School

The educational institution as a centre for health education could make a much larger contribution to preventive and promotive health than any other social institution. Health education takes two forms–those parts which are included into the formal curricula and those which are part of informal teaching learning processes.

In the formal health curriculum, the gains of health education have been limited by its pedagogy. Information is given largely as a list of 'do's and don'ts' in matters related to hygiene, food intake, water and sanitation. The messages are universal and do not factor in the varied socio-economic and cultural contexts in which children live. Often health education content tends to blame the victims for their illness, attributing disease causation to individual behaviours, rather than explain the social aspects that determine health. The ability to follow best practices on hygiene is also related to access to better quality of shelter and clothing and water and sanitation and this in turn is related to caste and class issues. There is an ongoing effort to change this but it would take time to percolate to all states.

Some states are experimenting with special series of school health sessions organised across seven or eight themes and organised across the years. These health education sessions are not linked to the marks given in examinations, are imparted by trained teachers and monitored closely to make sure that it takes place with quality. Such an approach is potentially more promising, but it would need more investment.

Even more important than the formal curriculum is how the educational facility promotes better life styles and hygienic practices–by making facilities available, by peer education, by support and encouragement and positive reinforcement of good practices and structures against practices that are harmful to themselves and others.

Personal hygiene, handwashing, waste disposal, use of toilets, avoidance of addictions are some of the key areas where an impact could be made. These are formative years and the impact made now would last a lifetime. And wrong habits acquired would be difficult to eliminate later.

Health Promotion in the Educational Facility: Physical Education and Social Health in the School

Physical education is closely related to sports, or ought to be, and is another neglected area. This is also an area which offers considerable avenues for innovative teaching. The teaching of yoga is also a part of this discussion. This is not only about physical development but also about mental and social health–for such education promotes a number of values–team spirit, friendship, leadership, dignity of labour, confidence in oneself. Physical education also helps reduce anxieties and stress. Pedagogy in physical education is important as also the importance of role models. A physical education teacher who is supportive and inspiring and encouraging and who acts as friend and counsellor would help a child gain a very balanced personality. A teacher who is negative, supporting only high achievers who can bring glory to the school team, and ignoring the rest, could be damaging to the majority of children. Team sports and team activities in the Indian context, like eating together, also helps weaken social barriers and build a democratic and secular spirit.

Paradoxically even as sports gets more and more prominence in the media, actual access to sports continues to worsen, both due to lack of facilities and due to lack of support and very competitive school leaving examination pressures. Yet no other single activity at any stage of life could be more aptly called promotive health than physical education and sports in this age group.

Another challenge and opportunity for school health are the health and social needs of marginalised sections within the school–the handicapped child, the child from the poor or broken home, the child from marginalised communities. Positive attitudes and interaction with the child with special challenges helps to inculcate the spirit of caring and an understanding of equity in all children. Thus it is important for healthy children to be supportive of the child with disabilities, the poor learner, the child with problems at home, the child who is 'the other' whether this means a migrant family or a minority institution or caste group, or a child with HIV. Unfortunately we often hear of school authorities who refuse permission for a child with HIV infection to join their school and who are able to get away with such behaviour. Teaching values of caring and values of respect and tolerance for different cultures and ways of living is a challenge which school health programmes should be designed to help.

Health Promotion in the Educational Facility: Health Education in the Institutions of Higher Education

The problems of the student in high school and higher secondary schools

and college students are more varied. They are the problems of adolescence. The presence of concentrations of adolescents in educational institutions is an opportunity to reach out to them with meaningful health programmes.

Adolescence is a critical period of physical growth. This period requires a large amount of nutrients, the highest in absolute terms for any period of life. In India both under-nutrition and obesity are significant problems and both could get accelerated in this period. Anaemia in this age also gets worse in girls as they come of age. Anaemia in adolescent girls in our context should be recognised as a contributory factor to maternal mortality in the young woman.

Adolescence is the time for physiological changes that change their own perception of themselves and the way others perceive them. Mentally this is the period for the development of self identity. They are treated as children where they would want to be treated as adults and as adults where they would like to be treated as children. There is a need for them to learn negotiating the social and psychological demands of being young adults. There are high degrees of intimacy, and peer group dependence.

Both males and females are forced to conform to some stereotypes – typically in India, the girl has to enter into a culture of silence and restriction and constriction of physical and social space whereas the male into a cult of exaggerated assertion on manhood. To girls it means restriction from outdoor activities and physical activities, which is injurious to health. To males there are pressures to be associated with violent and peer dictated negative stereotypes like smoking, and drug abuse. A clear understanding of the dangers of such behaviour, alternatives for forming intimate groups and a much clearer understanding of themselves and their cultural contexts is essential. Thus, for example, more than 90 per cent of those who smoke pick up the habit at this period. Smoking is the single most important preventable determinant of non communicable disease and yet without an intervention that is centred in the educational facility, little then can be made in this problem.

This is the age for the development of a variety of reproductive and sexual health needs. These needs are related often to sexuality. Sexuality is an area where the media gives the adolescent an image which is far from the reality and where there are no opportunities for them to get more culture specific and appropriate information. Myths and stereotypes abound. The risk of sexually transmitted diseases, especially of HIV infection, increases.

On one hand it is understood by most enlightened groups that education in life skills is essential and this should include education on responsible and caring sexual behaviour. On the other hand the dominant patriarchal culture and the way political leaderships pander to this, leads to political resistance to introduce these lessons.

One of the most important pedagogic tools in this area of adolescent and sexual health education is a number of peer education approaches and these needs to be backed by informal and discreet

access to both information and counselling. Both of these are not present in most of our educational institutions.

Another important area that needs to be developed is an educational institution based mental health programme. These are times of high stress. Suicides and violence and addictions in this age group are in the rise. Such a programme has to be accessible and include interaction with families and community organisations. Given on one hand the gap between soaring aspirations modelled on what they see in the media and the reality of their own futures in the jobless growth and financial meltdowns, given the rising inequities, given also the barriers to a healthy social including sexual life style, this age group is prey to campaigns of hate and violence. While it is important to directly counter all hate campaigns and all divisive forces, merely responding to attacks and breakdowns limits peoples actions to a terrain chosen by the divisive force. In contrast, schools and educational institutions can, by state policy and by conscious choice, be shaped to become centres where children and young people experience the joy of growing up in a positive and supportive and creative environment. In the long run, this would be a more effective way to counter to growing inequalities and hate in our society. Thus, it is not only sports that provide for health promotion. Cultural activities too, provide an important space for psycho-social development and for developing healthy and responsible relationships across the gender divide and across caste and ethnic divides.

It is important to note that in all these areas there is almost nothing that the health sector can contribute by itself. Indeed almost all of health promotion in such domains occurs in the educational institution. The health sector needs to forge links so that it can back up the promotion efforts with adolescent-friendly access to appropriate curative services.

Conclusion

The notion of the educational institution as a health centre therefore needs to be developed. And for this, health needs to be understood in the spirit of Alma Ata declaration– as attainment of the highest possible level of physical, mental and social well being, and not merely the absence of disease or infirmity. With the launch of the National Rural Health Mission and the renewed emphasis on building up a comprehensive public health system, such a potential space is emerging. But much more work would need to go into developing an integrated approach to school health as part of a comprehensive policy of attaining health and education for all.

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Parenting: Preparing the Adolescents

SAROJ YADAV*

Abstract

Parenting can be the most rewarding work of adult life. Nothing brings more joy and pride than a happy, productive, and loving child. Each age and stage of a child's development has specific goals and tasks. For infants, it is to eat, sleep, and explore their world. For adolescents, it is to become their own person with their own group of friends. The world is shrinking. The effect of globalisation, modernisation and the media boom has made the life of adolescent, their expectations and values very different from those of older generation. This is more so in respect of reproductive and sexual health. Understanding adolescence empathetically and helping them to develop life skills to deal with the conflicting situations occurring due to oneself, peer, society and parents is not only the responsibility of schools but also of the parents themselves.

Adolescence has been described as a phase of life beginning in biology and ending in society. Indeed, adolescence may be defined as the period within the life span when most of a person's biological, cognitive, psychological, and social characteristics are changing from what is typically considered child-like to what is considered adult-like. For the adolescent, this period is a dramatic challenge, one requiring adjustment to changes in the self, in the family and in the peer group. In order to help them to grow as a responsible person, parents can play an importance role. (Robin 1998).

In order to be a good parent, there is a need to understand the profile of adolescents and this period of life.

Profile of adolescents

Adolescents in India constitute about 22 per cent of the total population of 1.028 billion, their number being over 220 million, males outnumber the females. This number of adolescent is still growing and India in near future may be the youngest nation in the world (Govt. of India 2000). The most important concern is the adverse sex ratio, which is 882 adolescent females per 1000 adolescent males, lower than the overall

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sex ratio of 933 females per thousand males and lowest among adolescents of 15-19 years i.e. 858. The phenomenon of gender differentials in mortality rates during adolescence is a matter of great concern. Nearly 20 per cent of the 1.5 million girls under the age of 15 years are already mothers (Census 2001). The pervasive gender discrimination, lower nutritional status, illiteracy, early marriage, complications during adolescent pregnancy and child birth contribute to high rates of female mortality in India. If we see the health profile of adolescents, more than 70 per cent girls in the age group of 10-19 years suffer from severe or moderate anemia National Family Health Survey (NFHS-2, 1998).

AIDS is the most critical concerns in view of the high vulnerability of adolescents to HIV infection (Govt. of India 2000a). Over 35 per cent of all reported AIDS cases occur among young people in the age-group 15-24 years. (UN 2006). More than 50 per cent of all new infections in young people 15-25 years (NFHS-2, 1998-99). Disability in adolescents also needs to be recognised (NFHS-3, 2007).

Substance (drug) abuse is another fast emerging as a problem. Twenty-four per cent of the drug users were in the age group of 12-18 years. The most worrying is that the age group taking drug is decreasing.

Crimes against adolescents are also increasing (Govt. of India 2007). Most of the rape victims are in the age-group of 14-18 years. In about 82 per cent of rape cases, the victims knew the offenders and in 32 per cent cases they were neighbours (NCRB 2001). The enhancement of the gap between puberty and the age at marriage, peer pressure, increasing mobility make adolescents vulnerable to premarital and unprotected sex.

Understanding Adolescence

Knowing about the changes that occur during adolescence will help us to understand and manage teenager more effectively. We can see these changes in the way teenagers behave, express their feelings and the way they interact with their families (NCERT 2005, 2006). Parents need to adapt their parenting style to suit the changing needs of their children. These are biological, psychological and social in nature.

Biological Changes

Adolescence is a period of rapid change. The amount and speed of physical growth and change in adolescents is greater than in any other time in a person's life. These changes in terms of physical appearance varies from individual to individual. Often referred to as 'puberty', these changes can start in children as young as 8 or 9 years of age, but generally occur between the ages of 10 and 19 years. Growth patterns are often uneven and unpredictable and making adolescents look gangly and out of proportion for a time (Barkely 1995).

This uneven pattern of growth also occurs in facial features. A young person can't even rely on both sides of their body growing at the same rate. These changes in physical appearance can make adolescents feel a little insecure and unsure of themselves. Our society places a high value on physical attractiveness,

so it's not surprising that teenagers can become preoccupied with how they look and feel about body image. Parent and teacher's attitudes and reaction during this period influence the formation of body image.

Adolescent bodies also undergo other kinds of physical changes that are not visible. For example, there is a huge increase in the production of hormones associated with sexual development. There is a frequent mood changes reflecting feeling of anger, fear, guilt and love.

The suddenness and rapid pace with which the changes take place in the body and mind of adolescents, generate a number of problems and special needs which adolescents find difficult to understand on their own. Although they observe and experience the changes occurring in them, they are mostly unable to understand these developments. So far there is no authentic source readily available to them, through which they can get scientific knowledge regarding these changes. Since they need information regarding the changes and developments in them, they fall back upon the peer group that itself is ill-informed or cheap literature, which leads them astray. Being misinformed they fall prey to myths and misconceptions which adversely affect the process of personality development in them and leads them quite often to risky and irresponsible behaviour (NCERT 2007).

The psychological challenge

Children during adolescence become more critical and questioning. They can see new possibilities, and are less likely to accept things the way they are or to believe in something just because an adult says so.

However, despite enormous developments in thinking ability, adolescents can make inaccurate and unhelpful assumptions. For instance, adolescents can make the mistake of one estimating the amount of influence they have on what happens around them. As a result, they can take things too personally and blame themselves unnecessarily when things do not go according to plan.

Adolescents may also fall into the trap of 'mind-reading'. Innocent actions of others may be taken as personal criticisms as the adolescent jumps to conclusions about what others are thinking and feeling.

This does not work in reverse. Adolescents often refuse to believe that anybody, particularly their parents, can understand the new and intense feelings they are experiencing (Robin 1998).

They also assume that they are invincible and that nothing bad will happen to them. This is one reason why adolescents engage in risk taking. They might know about the consequences of risky behaviour, but will assume that these consequences will not happen to them. They tend to give more weightage to immediate rather than long-term consequences. Take the issue of smoking as an example. An adolescent is more likely to be impressed by the possibility of looking cool, than the possibility of getting diseases. Adolescents need help to develop life skills from their parents and teachers to make decisions that have long term implications and risks (NCERT 2007).

Finally, adolescents aspire to be more independent and try to establish their own identity. They are driven to have more say in what they do, and to make more of their own decisions. This is a natural part of growing up into a responsible and independent adult.

Social Relationships

The most critical dimension of the process of growing up during adolescence relates to social relationships. Adolescents develop socially mainly by expanding and redefining their relationships with parents, peer group and members of the opposite sex. Although every child experiences different kinds of social relationships, during childhood its social environment usually centres on the home. Children almost wholly depend on their parents and grow under their care, protection, guidance and control. However, when they enter into the phase of adolescence, the physical, emotional and psychological developments, which take place in them trigger a marked change in the patterns of inter-personal relationship between adolescents and their parents, the peer group and the opposite sex.

Changing Relations with Parents

In our country, although adolescents leave their childhood behind, most of the parents want and continue to treat them as children to be cared, watched, protected, guided and controlled. Adolescents, on the other hand start defining their personal identity and assert their independence. They begin to shift from close parental care. While at home, they often prefer being alone. Those preferences are normal but they may not seem so to parents. Adolescents may often have increasing conflicts with their parents over the amount of freedom they think they deserve. There are other minor issues of conflict and arguments in families with adolescents. These are like home work, household chores, dresses, life style, peers and televisions. These arguments in a way are a sign that the adolescent is doing their job of growing up, seeking independence and developing confidence for taking responsibilities. After all, arguing in family situations teaches young people how to express and assert themselves in a safe environment, before they assert themselves in the outside world. Parents treat these changes among growing children as a threat to their authority and opposed to parental code of conduct. Instead of accepting the youngster for what he/she is, they try to impose on him/her their views about what he/she should be and do. It is, therefore, not unlikely that stress and strain on adolescents are the product of the anxiety generated in parents. Under these circumstances parenting adolescents are characterised by increasing conflict between adolescents and parents. This is probably true in individual homes or in cultures where there is a tradition of marked parental domination (Stone 2007).

Social development is easier for those adolescents who feel that their parents love and trust them. Adolescents need to be given increasing opportunities for freedom and self-direction. Restrictions on them are required to be imposed only when needed and, that too, with due

consideration of their commitments and desires. Parents may display trust by granting their children the freedom they require.

> Love – unconditional love – is the most important ingredient in any relationship. It is in accepting all aspects of the other person without judgment, and at all times acting in the best interests of the long-term happiness of all concerned. To live without judgment means to be fully content with yourself to recognise the special uniqueness of every other person you ever meet, to acknowledge their role in society, to respect them, to honour and to allow them the freedom of choice. And to do this, you must have respect for yourself.

An over-protected adolescent is likely to have greater difficulty in learning to act independently. A greater degree of separation shows more independence from, and affection towards, their parents. There is no strong evidence that adolescence is commonly a period of rebellion against parents. In fact, one of the latest surveys came out with the findings that in India a substantial majority of adolescents regard their parents as role models.

Adolescence is also a time when relationships with families and peers also undergo significant change. One of the most common concerns for parents is the influence of the peer group. It's unfortunate that the term 'peer' has negative associations, and the role of friends in an adolescent's life tends to be viewed with suspicion. Contrary to popular opinion, however, friends provide a lot of positives for adolescents; they act as a kind of self-help group and provide important social support. Being part of a group of friends also helps a young person form a clearer sense of who they are and what kind of person they want to become.

In any case, adolescents tend to select friends who are like themselves. It is unlikely that a young person, particularly one with a trouble-free past, will develop persistent social problems purely from being in contact with friends who do have problems. What influence peers have is strongest in early adolescence, that is, up until around 14 years of age? After this period, peer influence begins to diminish considerably.

Despite children becoming more focused on their friends during adolescence, families remain an important influence. Ultimately, adolescents tend to follow their parent's lead, and end up being more similar than dissimilar to parents in their values, beliefs and behaviour. For example, adolescents tend to copy their parents' attitudes and behaviour in relation to alcohol and drug use.

During adolescence, some basic changes occur in defining relationship, particularly in the area of heterosexual relations. Adolescents suddenly discover their special interest in the opposite sex. Invariably they find it difficult to distinguish between *attractions*, *infatuation* and *love* with or without sexual orientation and *lust*. They tend to feel sex urge for physical pleasure and satisfaction and do not generally appreciate its sublime orientation.

Starting early the best way

Parents as well as teachers can prepare themselves and adolescents for a smoother transition and greater success in achieving the tasks of development during adolescence by:

- Providing a safe and loving home environment.
- Creating an atmosphere of honesty, mutual trust, and respect.
- Teaching basic responsibility for household chores.
- Teaching the importance of accepting limits.
- Teaching the importance of thinking before acting.
- Allowing age appropriate independence and assertiveness. Developing a relationship that encourages your child to talk to you the ability to talk openly about problems is one of the most important aspects of the parent and child relationship. Meal times, story telling, reading, playing games, outings, vacations, and celebrations are important opportunities for parents to spend time with their child. Parents should also try to spend some individual time with each child, particularly when talking about difficult or upsetting things.

These processes occur gradually and start during infancy. A teenager's adolescent years will be less stressful when parents including teachers and child have worked together on these tasks throughout the developmental period.

We judge our children harshly and make them feel inferior when they make a mistake, or choose to do something differently. If a visiting friend accidentally carries mud into the house on the soles of her/his shoes or breaks any glass, we would no doubt brush it off, saying, "It's just a little mud! Don't worry about it" or "it happened accidentally." But if our own precious child makes the same mistake, we would react with anger: "Look what you have done? You can't see things properly etc." Why are we so thoughtless in case of our own children?

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Alienation of the Disabled: Causative Factors, Mechanisms, and Patterns of Reaction Responses

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Abstract

The human society has, in general, always tended to isolate and segregate people with disabilities. Not just in India, across the world, individuals with disabilities are a discrete and insular minority, and subjected to unequal treatment. The prejudices they endure are generally based on characteristics that are beyond their control and result from stereotypical assumptions and biases in the society. Relegated to a position of psychosocial, cultural, economic and political powerlessness, the disquiet of social discrimination severely affects their self-belief, esteem, and social behaviour. Diverse patterns of alienation reactions emerge, dominated by a sense of meaninglessness, normlessness and severe isolation. As a result, they neither realise their potential nor get an opportunity to participate and contribute to the society.

The present essay, in its first part, uncovers the causative factors which produce alienation in people with disabilities, and in its latter part, portrays the effects of social discrimination on their psychosocial, cultural, economic and political well-being.

Each human being is a microcosm of their social macrocosm. A person's self-belief, esteem, norms, behaviour and attitudes are born out of their experiences in life. Each individual converts or adapts to the needs of society and, in the process, becomes socialised. The sum functioning of a person is a derivation of multiple factors; yet, the values, purpose, goals and the role he envisages for himself in the society are a produce of his social interactions, experiences and groupings.

All human beings have a strong emotional need to be a part of social group. From early childhood, they

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continually strive to be accepted as a member of social groups in diverse sociological settings. This is a way for them to achieve a sense of security. Their position in the family, their adjustments with their peer group, their heterosexual development, each reflects a desire to belong to these groups and occupy a sought after status in each setting. If a situation threatens their position in the social system, it produces anxiety, may cause a disorganisation within the person, and provoke a reaction of alienation.

Historically, the human society has however always tended to segregate and isolate persons with disabilities. Despite some initiatives, social discrimination of people with disabilities continues to be a serious and pervasive global problem. Even in developed countries, people with disabilities are a discrete and insular minority, subjected to biases and prejudices, unequal treatment, and relegated to a position of socio-economic, political and cultural powerlessness in the social fabric. This social discrimination is based on differences beyond their control and spawn from stereotypical assumptions and prejudicial behaviour of the members of the society.

Collative data from different parts of the world establishes that people with disabilities occupy a low status in the society, and are severely disadvantaged in terms of educational, vocational, economic, and social status. The biases and prejudices are severe and the crass inequity affects them in critical life areas as education, employment, public accommodation, transportation, communication, recreation, health services, voting, and access to public services. They suffer due to a host of factors—architectural, transportation, and communication barriers, failure to bring changes in social norms and practices which produce social isolation, the set norms and criteria which are exclusionary in nature or relegates them to a lowly position in different spheres of life.

The present essay, in its first part, uncovers the factors which produce alienation in people with disabilities and, in its latter part, portrays the effects this social discrimination has on their psychosocial, cultural, economic and political well-being.

Causative Factors

People with disabilities continually live under the shadow of social biases and prejudices. Their quality of life is largely governed by beliefs, attitudes and behaviour of other people who have little or no patience to recognise their needs. The discriminatory behaviour is widely prevalent all over the world, in all cultures, strata of society, and afflicts even the most educated.

Such preconceived notions that no step, however generous or large, can help the lot of people with disabilities further queer the pitch. Be it the man on the street, be it political, social or religious leaders, or be it national and international agencies, suffer such prejudices and biases, and percolate discriminatory social behaviour without making suitable amendments in the legislations, policies and practices.

Cultural Notions of Disability

The human society is plagued with a number of myths, misconceptions and superstitions with regard to disability. This generates aversion, neglect, abuse, fear, ostracism, and segregation of people with disabilities. Three levels of cognitive factors play a role in this social alienation:

- *Cultural beliefs*: Crass beliefs in a population, which operate at a fairly general level of culture, associate disabilities with cosmic events, religious dogmas, and in some cultures with the "misdeeds" of the past life.
- *Attitudes*: Some people develop beliefs and attitudes about people with disabilities based on a one-off experience or individual perceptions. These attitudes carry a strong emotional component.
- *Explanatory models*: Explanatory models are tied to specific cases. They represent the process of recognition of the disabling symptoms, a labelling of these and a value judgement about the future of the disabled person. A number of social and political factors, general beliefs and attitudes of the people shape this process. Such a model may be shared by a community, which reaches a consensus regarding a specific disability.

Discriminatory Behaviour

A community's thinking, approach and behaviour with regard to people with disabilities is governed by its cultural beliefs, attitudes and explanatory models. Studies which enquire into such discriminatory behaviours are scarce, and further, these behaviours vary also between different communities.

The sight of a person who appears different or functions in a different manner evokes different kind of reactions in different people. While some people experience discomfort, the 'discrepancy' may generate petrifaction, pain, or fear, and produce an attitude of avoidance, stigmatism, distancing, denigration and stereotyping. These reactions and subsequent behaviour are guided by the desire of avoiding visual and physical contact with people with disabilities and maintaining the least possible communication with them.

In some parts of the world, discrimination against people with disabilities is so severe that the civilised world must hang its head in shame. Newborn babies with any visible impairment are put to death, and mothers who do not conform are threatened with severe sanctions. Equally, in many families, children with disabilities are kept hidden from the public eye. Parental and familial neglect is extremely common. Such harsh behaviours are widely prevalent, though not much talked about. Disability surveys published from a large number of countries bear this out.

The mortality rates in mentally retarded children and among the born deaf have been found to be far higher than in other children, though neither condition is a forerunner of premature fatality. In several countries, census of children with cerebral palsy has found that few survived till 15 years of age, yet

children living with similar disability in other parts of the world live much longer.

Similar biases exist when surveys are conducted in children with physical differences. The incidence of poliomyelitis-a crippling disease caused by a virus- among girls and boys is about equal. Yet, number of boys paralysed by the disease outnumbers the girls by two to three times. These numbers indicate gross neglect of the crippled girl child in the society and in no way, a higher survivor instinct among boys.

Effect of Public Beliefs on Polity and Policymakers

Very few economically weak and developing countries possess a clear set of policies for people with disabilities. This is a reflection of general system of societal beliefs. If the general public holds people with disabilities as 'useless' and carries the view that whatever may be done for them, they will remain so; no attempt is made by the policy makers to change the legislations, policies and practices.

Politicians, legislators and governments remain a prisoner of such harsh traditional beliefs and biases and do not work for policies which provide equity and a level playing field to people with differences. If a change has to be brought, thrust to educate the politicians, legislators and governments must also be made to bring about a change in their thinking and approach.

Violation of Basic Human Rights

Due to widespread general beliefs and negative attitude of the people and polity, people with disabilities suffer crass neglect and violation of basic human rights. This negativism is visible in each and every sphere of human life: be it the right to education, public service, and work, be it the right to quality living, be it the right to property, or be it the right to equality in law, people with disabilities suffer in comparison to those who are not disabled.

Patterns of Reaction Responses

The effect of a disability on a person has multiple dimensions and is cumulative. It may bring functional limitations, with a detrimental effect on their personal and social life. However, the effect of a disability on a person's behaviour is often more indirect than direct. It is to a large extent controlled by social evaluation and behaviour, and the response of the person towards this cultural judgement.

The relationship between disability and handicap is not concordant. Physical disability is simply a deviation from the socially accepted norms of bodily characteristics. It consists of objectively defined impairment of structure and function. Though the deviation is physical, its repercussions are far more severe. A person with disability is not allowed to fulfil many of the 'normal' tasks and responsibilities. In effect, physical deviation leads to deviant behaviour. This person must make adjustments to cope with social expectations and behaviour. This generates sense of inadequacy, anxiety, insecurity and frustration and may produce extreme modes of behaviour, such as withdrawal, introversion, and aggressiveness. Parental, familial and social attitude and behaviour is largely

responsible for such sentiments, behaviour and personality disorders.

Bearing on the self-concept

Each human being's aspirations are intimately tied to their self-concept. The kind of a person they consider themselves to be, is an important determinant of what they think they are capable of doing, what they expect themselves to do, and what they set out to achieve.

People's self-concept is, however, largely a product of other people's evaluation of them. A person's social culture, people who she/he attaches significance to, and other people with whom the 'developing self' is in contact, shape the self-concept.

People with disabilities can be more handicapped by their self-concept rather than by the disability itself. Their social influences affect their self-concept, since this mirrors other people's evaluations of them. People come to conceive of themselves as adequate or inadequate as they see themselves reflected in other people's social behaviour.

The complexities, however, do not end at this point. Establishment of realistic aspiration levels in a social setting, which requires educational and occupational attainment and calls for personal adjustments, is certainly complicated. This involves not only the person, particularly his/her self-concept but also their family, school and community-indeed their entire society.

Since the lives of people with disabilities tend to mostly revolve around their disabilities rather than abilities, their self-concept about themselves is generally extremely low. As a result, their self-expectation, motivational levels, and aspiration levels suffer severely.

Recognising this, some cultures try to encourage and motivate people with disabilities. When an entire culture places premium on a given ideal state, behavioural reinforcements help cover and minimise the deviations. Striving to act and compete like the others may then become the ideal pattern in a person's life.

Social isolation

The 'self-feeling' related to a sense of inadequacy operates a vicious cycle. A person who is chronically anxious about his/her role tends to be inadequate in their performance, which further accentuates their anxiety.

People with disabilities often tend to get isolated. For each human being, their social status in the family, neighbourhood and work group are vital. Yet, for people with disabilities, this possibility stands grossly impaired.

A person feels isolated if s/he is not a part of the social group. This isolation produces deep social disorganisation. An isolated person suffers a deep void of primary, personal and emotional relationships. Impersonal and rational relationships may exist but they fail to provide the satisfaction, which is critical for personal stability.

Social isolation and personality disorganisation feed on each other. A maladjusted person suffers more severe social isolation. No person can live in a social vacuum. A person unable to assume their roles properly sets off a chain reaction of social disorganisation.

Each person interacts with several others, particularly the other members of their family and their other immediate associates.

Personality disorganisation

Human beings are socialised in the course of their growth and development. Life's experiences help them convert or adapt to the needs of society. A person's life organisation may be defined as the pattern of norms, values, attitudes, purpose, goals and roles which she/he sets for him/herself and which grow out of their social experience. Through these norms, values and rules, a person consciously, or unconsciously, hopes to make his/her life meaningful.

When a person deviates from the norms of a social group, she/he undergoes a disorganisation of the self. At the same time, it also weakens the norms and inter-personal ties in the group and causes social disorganisation.

When personal disorganisation becomes intense, it causes acute anxiety, which may lead to certain undesirable behaviour.

Sufferance of limitations in life

A person with disability is likely to engage in far fewer and simpler activities and suffer from functional limitations. These disadvantages when combined with high levels of anxiety often result in a decreased flexibility of behaviour and ideation and a less coherent approach to life situations. Such restrictions are partially dictated by the extent of disability, yet social attitudes and cultural expectations have a close bearing.

When a child has many things done for him/her, when she/he does not use his/her own initiative, and when his/her social relationships are few and stereotyped, she/he gets little opportunity for free and adventuresome ideation and activity. When a child, disabled or not, becomes used to a more simple and easier approaches to life's problems, she/he is not motivated enough to master the complexities of a more expanded world. Considerable evidence exists that the compensatory and restrictive social and personal mechanisms encumber a disabled child. The abilities and potential of these children is often either underestimated or neglected. This results in secondary handicaps, which are far greater than the primary disability.

If people with disabilities have equal opportunities to experience and experiment with life, it is a good measure of the index to which a society has endeavoured to provide for them.

Deviant behaviour

People with disabilities are more vulnerable to anxiety than other people. They feel threatened by the ordinary demands of their culture. This generates a high level of anxiety and reduces their ability to cope with their social environment. This may produce impulsive, compulsive, rigid, constricted, and/or fragmentary reaction responses.

These reactions may generate self-defeating, blind alley, and socially inapt behaviour. Such individuals may sport defences, which may restrict their activity unnecessarily, plummet their aspirations, and induce minimal

self-definition. The defence mechanisms are an attempt to minimise failure and reduce anxiety.

A person with disability may try to 'pass' as normal. She/he may withdraw from the field of competition as part of a defensive posturing, or become unduly aggressive particularly with regard to personal stigmatic characteristics. These reaction patterns are accompanied by considerable anxiety.

Disability, Deviation and Society

Deviancy is not a problem restricted to an individual; rather it is an event that occurs in a given family, community, subculture and society. Deviancy can be understood only with reference to the social reactions it evokes and its meaning to the individual deviant. Just as people with different stigmas must face similar problems and adjust to them in similar ways, the problems of a family with a disabled is an instance of a universal experience, i.e. how the family copes with unexpected disappointment and trauma. Family crises, frustrated ambition, and occasional high levels of stress are experiences common to most families. The behaviour of the deviant is shaped by the actions and attitudes of others. The adjustments of the family of a disabled child can either limit and distort or encourage and facilitate the child's potentiality for growth.

Dominant cultural patterns of a society, the sub-culture to which a person belongs, and the community where s/he resides-all have a close impact on the person with disability.

The non-disabled majority tends to maintain a certain social distance, often treating the disabled as outsiders. Many normal people feel uncomfortable in the presence of a disabled individual. They find it difficult to accept and mingle with the disabled as they do with other people, and since they have a greater prestige and power, they end up restricting the opportunities of people with disabilities. The handicapped are often forced either to associate with each other or become socially isolated. They are frequently segregated-physically, psychologically and socially. The disabled person, sensing social discrimination gravitates to his own kind who can accept him without reservation. However, people with disabilities resent this group identification.

Social stigmatism

People with disabilities endure social prejudices, discrimination, segregation and stigmatisation.

Prejudice is a pattern of hostile attitude. It places an individual in a particular category and judges them accordingly.

Discrimination refers to overt acts committed against individuals and minority groups because of the prejudice of the dominant minority.

Segregation is a special form of discrimination whereby the minority group is denied access to such institutional facilities of the larger society as schools, hotels, restaurants, recreational facilities and transportation.

While prejudice is essentially a state of mind, discrimination and segregation are specific acts or series of acts. Prejudice is the root of discrimination

and segregation and provides the major motivating force for stigmatism.

Economic and Social discrimination

Discrimination implies a denial of opportunity, unequal treatment, and exclusion from the main channels of economic and social life. Economic discrimination is a serious issue, which dents their socio-economic security. It is an observed fact that people with disabilities who are economically independent are better accepted in the society than those who are dependent. While some vocations may need to be circumscribed for people with disabilities, restrictions are often extended to areas where the limitations are not inherently confining. This closes the doors of employment to many people with disabilities.

People with disabilities often suffer social discrimination. The social effects of physical disability tend to create a social distance between the disabled and their families and the community. This distancing is often expressed by the non-acceptance of the people with disabilities in social functions, religious service, educational programmes, work places, and marital relationships. This causes a social and economic isolation, and may result in the development of a non-social or anti-social attitude in people with disabilities.

Subjected to constant prejudices and humiliation, people with disabilities tend to feel discouraged, frustrated and estranged from the society. They may consider ways to bring fundamental changes in the social system. They may strongly want to disregard the set of values that classifies them as deviants and marginal human beings and at best, accords them a status of second-class citizens.

However, a new value system that serves to ease the frustrations of people with disabilities is not easy to propose. The laws of the land are penned by a privileged few; they are the keepers of the prevailing value system. They set up rules that forces out the others. However, by defining people with disabilities as deviants, the society contributes to the very phenomenon that they see as the problem: underperformance, dependency and segregation.

Conclusion

People with disabilities inhabit and inherit a cultural, political and intellectual world which is not of their making. Their relevance in this psychosocial, cultural, economic and political environment is generally restricted to being considered as problem cases. Scientific knowledge, including sociology, is frequently used only to reinforce and justify this exclusion. However, the new sociology of disablement needs to challenge this 'objectivity' and 'truth' and replace it with knowledge which arises from the position of the oppressed and seeks to understand that oppression. Enactment of legislations which ensure a level playing field, their keen enforcement, and a revolutionary change in the attitudes of the people and polity towards people with special needs is basic to bringing a civilised change in the society which at this time is heavily at odds against people with disabilities.

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Inclusive Education in Indian Context

SHIVANI BINDAL* and SUSHMA SHARMA**

Abstract

Inclusive education lays the foundation to an inclusive society accepting, respecting and celebrating diversity. The present paper traces the concept of inclusive education in Indian context. The paper throws light on the International and National level Policy frameworks and Legislations in inclusive education. The paper critically reviews need of inclusive education in India and role of schools in inclusive education.

Introduction

Inclusive education means including children with disabilities in regular classrooms that have been designed *for children without disabilities* (Kugelmass, 2004). It refers to an education system that accommodates all children regardless of their physical, intellectual, social, emotional, linguistic or other conditions. The range of challenges confronting the school system while including children with diverse abilities and from diverse backgrounds have to be met by creating child centered pedagogy capable of successfully educating all children. It leads to the development of social skills and better social interactions because learners are exposed to real environment in which they have to interact with other learners each one having unique characteristics, interests and abilities. The non-disabled peers adopt positive attitudes and actions towards learners with disabilities as a result of studying together in an inclusive classroom.

The inevitable presence of differences among students mean that school needs to become more comfortable with building inclusive communities that value diversity. In Barton's words, "difference is now to be viewed as a challenge, a means of generating change and an encouragement for people to question unfounded generalisations, prejudice and discrimination" (Barton, 1997). So a reconstruction in school organisation and curriculum is required so that the school becomes a supportive community to educate all children. This changing paradigm assumes a different set of beliefs and assumptions that demand different practices in schools (Carrington, 1999). Inclusion involves all

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students having the right to be truly included, to actively participate with others in the learning experiences provided, to be valued as the members of school community and to have access to a system that delivers a quality education that is best suited to their unique competencies, skills and attributes. (Ainscow 2000, Farrell, 2000; Fisher, D., Roach, V. and Frey, N., 2002).

Inclusive education is about listening to the voices in a school community and empowering all members to develop an approach to schooling that is committed to identifying and dismantling actual and potential sources of exclusion (Slee, 2003a). Moreover, it is about a philosophy of acceptance where all people are valued and treated with respect (Carrington, 2000). Indeed, Ballard (1995) argues that inclusion is unending, so that there is no such thing as an inclusive school.

The concept of inclusion has developed from a long history of educational innovation and represents school improvements on many levels for all students (Skrtic, T.M., Sailor, W. and Gee, K., 1996). The several theories dealing with the democratic community (Dewey, 1916) provide opportunities to rethink how one can improve acceptance of differences and create communities inclusive of all members of society (Turner and Louis, 1996). An inclusive learning society should foster collaboration, problem solving, self-directed learning and critical discourse (Skrtic, T.M., Sailor, W. and Gee, K., 1996). Stereotypic differences create divisions and status systems that detract from the democratic nature of society and the dignity of the individual (Gillies and Carrington, 2004). Communities in inclusive schools cooperate and collaborate for the common good of all (Apple and Beane, 1995). In inclusive schools difference is recognised, respected and represented (Slee, 2001b). In essence, inclusive education is about the 'politics of representation' (Slee, 2001a) or how students can be given a voice in the construction of their own unique identities (Trueba et al., 1997).

The inclusive schools demand reconstructed educational thinking and practice in regular schools for the benefit of all students (Slee, 2001b). This involves reconstructing and realigning the whole system and the entire component parts so that "assessment, curriculum, instruction, professional development, program evaluation and accountability… work synergistically to ensure meaningful and sustained school improvement" (Smith, 1998).

Concept of Inclusive Education

In schools throughout the world, 'inclusion' has been used to refer to the placement of students with disabilities in ordinary classrooms alongside their peers (Kugelmass, 2004). Inclusive education has become well rooted in the general education reform agenda (Roach, 1991) because both areas incorporate school change and improvement (Fisher, Sax, Rodifer and Pumpian, 1999).

Inclusive Education is a process of increasing the participation of all students in school, including those with disabilities (Ainscow 2000). It is about restructuring the cultures, policies and practices in schools so that they respond

to the diversity of students in their locality. In its broadest and all encompassing meaning, inclusive education, as an approach, seeks to address the learning needs of all children, youth and adults with a specific focus on those who are vulnerable to marginalisation and exclusion. It implies all learners, young people - with or without disabilities being able to learn together through access to common pre-school provisions, schools and community educational setting with an appropriate network of support services. This is possible only in a flexible education system that assimilates the needs of a diverse range of learners and adapts itself to meet these needs. It aims at all stakeholders in the system (learners, parents, and community, teachers, and administrators, policy makers) to be comfortable with diversity and see it as a challenge rather than a problem. Inclusive education is about all children learning together even if they differ from each other in styles and pace of learning. It is a dynamic process because it addresses all aspects of child development-emotional, physical, intellectual, creative, social etc. It is about celebrating diversity and changing the rigid school system in order to meet the needs of all children. In an inclusive class all children appear to be happy and participating.

Inclusion can be viewed from three perspectives in Indian context:

- Physical inclusion
- Social inclusion
- Cognitive inclusion

Physical inclusion receives consistent promotion, support and facilitation from the government. All the policies and regulations have made education free and compulsory for all children. No institution can deny admission to a child with disability on account of his/her disability. The Universalisation of Elementary Education (UEE) focuses on enrolment, retention and achievement of all children.

Social inclusion is only happening in sections of the society. In the lower socio-economic strata, research studies have revealed that there is greater acceptance of persons with disabilities (PWD) with minimum expectations from them, whereas people from economically upper and affluent class of society have high expectations from PWD and for acceptance they do not move beyond denial (Bhan, S., Mehta, D. and Chhaproo, Y., et al., 1998). Gradually the efforts are being made by educating people through direct instruction and media to bring attitudinal changes in the society.

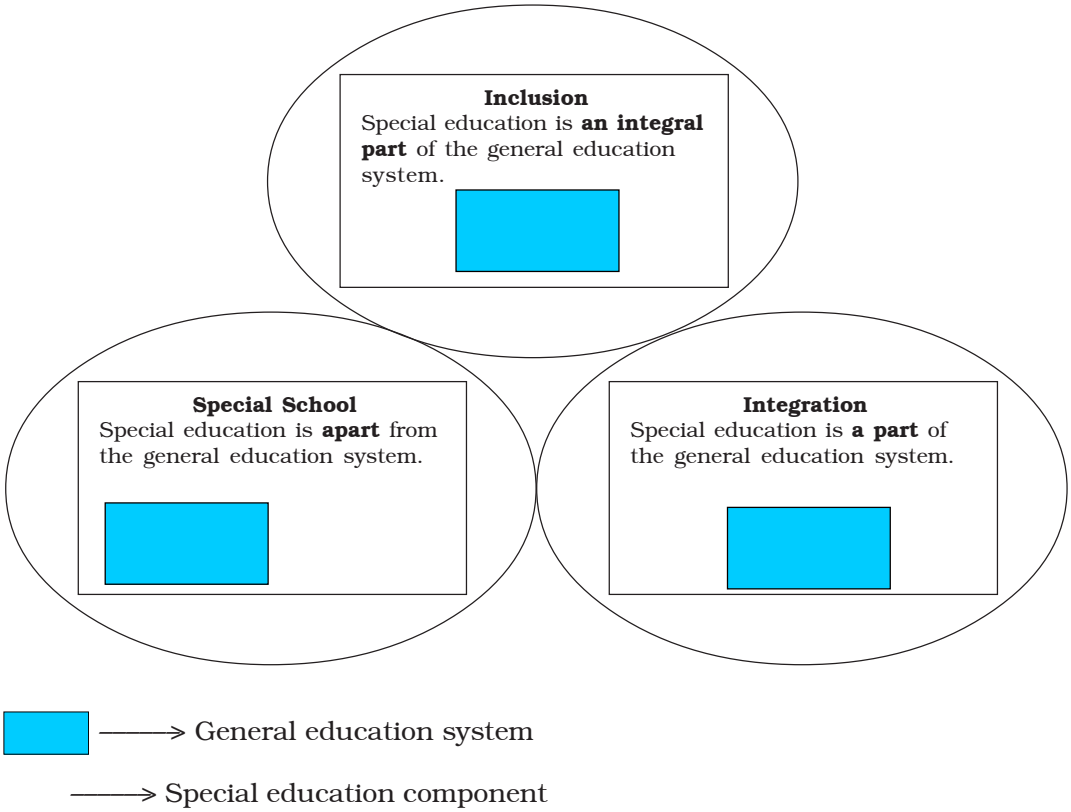
The educational institutions try out ***cognitive inclusion*** by allowing the children with special educational needs to study in general classrooms with non-disabled children. Cognitive inclusion is possible only if the subject matter is broken down into smaller learning units and teacher makes sure that all the children to the expected level of mastery learn each of the micro units of a lesson. Each child is given equal opportunity to learn, understand, retain and reproduce the information at an appropriate time and in appropriate manner.

How is Inclusion different from Integration?

In current times, the terms 'integration' and 'inclusion' are still confused and it

is necessary to differentiate between the two terms. Integration is described as "the process of moving children from special education settings into regular classrooms where they undertake most, if not all of their schooling" (Ashman and Elkins, 1998). With integration there is focus on helping students with disabilities fit in to the regular classrooms and that is why the emphasis is on teaching the normal curriculum (Carrington and Holm, 2005). In contrast, inclusion aims at empowering members in a school community to identify and dismantle actual and potential sources of exclusion that limit opportunities and outcomes for all students (Slee, 2003). Inclusive education is striving to achieve a way of life in schools where people are valued and treated with respect for their varied knowledge and experiences (Carrington, 1999; Carrington and Robinson, 2004; Moss, 2003).

In special school concept, the special education component is APART from the general education system, whereas in integrated approach, it is A PART of the general education. Inclusive education goes one step further. In this approach, the special education is an INTEGRAL PART of the general education system.



Therefore, the transition from "Special School Concept" to "Inclusive Education" can be treated as an evolutionary process in the services for children with disabilities.

Principles of Inclusion

The UNESCO Salamanca Statement and Framework for Action on Special Needs Education (1994) articulated the underlying principles on which inclusive education is based. These are that:

- Every child has a fundamental right to education;
- Every child has unique characteristics, abilities, interests and learning needs;
- Education systems need to accommodate this diversity in student population;
- Those with special education needs must have access to regular schools;
- Regular schools with an inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all.

Moreover, it is argued that inclusive schools provide an effective education for children and improve the efficiency and ultimately the cost effectiveness of the entire education system (Gillies and Carrington, 2004).

Characteristics of Inclusive Education

The characteristics of inclusive education are as follows: -

- Acknowledges that all children can learn
- Acknowledges and respects differences in children: age, gender, ethnicity, language, disability, HIV and TB status etc.
- Enables education structures, systems and methodologies to meet the needs of all children
- Is part of a wider strategy to promote an inclusive society
- Is a dynamic process that is constantly evolving

What is the need for Inclusion in India?

In addressing the issue of "why inclusion", the reality in Indian context should be reviewed. Some of the important facts in the Indian scenario are as follows:

1. More than 90% of disabled children are found in the rural areas in India. The special schools as well as integrated education programmes are only a few in numbers and cannot serve all disabled children. Therefore, inclusive education is needed to provide equal educational opportunities to all disabled children in their own locations.
2. As far as the standardised models of integration are concerned, one specialist teacher serves 8 to 10 disabled children of the same category. This approach is not practical in rural areas. In most villages of the country, disabled children of different categories are present. Therefore, the disabled child has to depend on the general school for education. As a result, inclusion is inevitable for these children from rural areas.

3. The extent of disability in each category ranges from mild to severe and profound cases. The mild and moderate cases are more in number than the severe and profound cases and they depend on the general education system. This calls for the involvement of general education so that the children who are currently left out of schools or those who are at risk can be served.

Therefore, the reality in India focuses the need for inclusive education. However, the general education system is yet to be fully sensitised to the educational needs of children with disabilities and therefore, the general system needs the assistance of specialist teachers for occasional help to make inclusive education work. With the inclusion of special education inputs in general teacher preparation, the pre-service teachers in the future are likely to be equipped with skills to teach children with disabilities too in addition to their general classroom teaching. Therefore, presence of a specialist teacher in the inclusive setting in Indian context would be vital for another decade.

Policy and Legislative Frameworks

In this section the main International and National level Policy frameworks and Legislations are explained that are relevant to education and to children with disabilities.

The Constitution of India (26 November, 1949) clearly states in the Preamble that everyone has the right to equality of status and of opportunity. The Article 41 of the Directive Principles of the Indian Constitution supports the right to work, to education and to public assistance in certain cases including disablement. Further, Article 45 commits to the provision of free and compulsory education for all children up to the age of 14 years. Based on this, the Constitution (86th Amendment) Act 2002, has been enacted by the parliament making education a fundamental right of all children in the age group of 6-14 years.

The National Policy on Education, 1986 (NPE, 1986), and the **Programme of Action (1992)**, stress the need for integrating children with special needs with other groups. The objective to be achieved as stated in the NPE, 1986 is "to integrate the physically and mentally handicapped with general community as equal partners, to prepare them for normal growth and to enable them to face life with courage and confidence"

Integrated Education for the Disabled Children In the 1970s, the government launched the Centrally Sponsored Scheme of IEDC. The scheme aimed to provide educational opportunities to learners with disabilities in regular schools and to facilitate their achievement and retention. Under the scheme, hundred percent financial assistance is provided to for setting up resource centers, surveys and assessment of disabled children with disabilities, purchase and production of instruction materials and training and orientation of teachers.

The Salamanca Statement and Framework for Action on Special Needs Education (1994) emerged as a result of deliberations held by more than 300 participants representing 92

governments including India and 25 International Organisations in June1994. For furthering the objectives of Education for all, it considered the fundamentalpolicy shifts required promoting inclusive education. It emphasises that schools should accommodate all children regardless of their physical, intellectual, social, emotional, linguistic or other conditions. The term Special Educational Needs refers to all those children and youth whose needs arise from disabilities or learning difficulties. The Statement affirms: *"those with special educational needs must have access to regularschools, which should accommodate them within a child, centered pedagogy capable of meeting these needs".*

The "**Standard Rules on the Equalisation of Opportunities for Persons with Disabilities**" (1993) was an important resolution for improving the educational conditions of persons with disabilities. This had major implications for the Indian situation in the form of three legislative acts—**The Rehabilitation Council of India Act, 1992** (RCI, 1992) **The Persons with Disabilities (Equal Opportunities, Protections of Rights and Full Participation) Act, 1995** (PWD Act, 1995), and **The National Trust for Welfare of Persons with autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999.** While the RCI Act was solely concerned with manpower development for the rehabilitation of persons with disabilities, The National Trust Act aims to provide total care to persons with mental retardation and cerebral palsy and also manage the properties bequeathed to the Trust.

The Persons with Disabilities (Equal Opportunities, Protections of Rights and Full Participation) Act, 1995 stresses the need to provide free of cost education to all children in an appropriate environment till they are 18 years old and further emphasise their right to measures like:

(a) Transport facilities to the students with disabilities or alternative financial incentives to parents or guardians to enable their students with disabilities toattend schools.

(b) The removal of architectural barriers from schools, colleges or other institutionsimparting vocational and professional training.

(c) The supply of books, uniforms and other materials to students with disabilities attending school

(d) The grant of scholarship to students with disabilities.

(e) Setting up of appropriate foray for the redressal of grievances of parents regarding the placement of their students with disabilities.

(f) Suitable modification in the examination system to eliminate purely mathematical questions for the benefit of blind students and students with low vision.

(g) Restructuring of curriculum for the benefit of students with disabilities.

(h) Restructuring the curriculum for benefit of students with hearing impairment to facilitate them to take only one language as part of their curriculum.

The Tenth Plan (2002-2007) aims to provide Universal Elementary Education by the end of the plan. It also aims to provide basic education for the unreached segments and special groups. The special interventions and strategies like pedagogic improvement and adoption of child centered practices are focused on the groups like the girls, scheduled castes and scheduled tribes, working children, children with disabilities, urban deprived children, children from minority groups, children below poverty line, migratory children and in the hardest to reach groups.

District Primary Education Programme (DPEP) was launched to achieve the objective of education for all. The DPEP had a powerful impact on integrating disabled children. The scheme was initially launched in select clusters and blocks. It has now been expanded to more blocks and districts in the country. The advantage of this scheme is that it takes care of all areas from identification, assessment, enrolment and provision of appliances to total integration of disabled children in schools with resource support, teacher training and parental counselling. Many other schemes like Janshala, the joint programme of the Government of India and five U.N. agencies, have included the interventions of DPEP.

The *Sarva Shiksha Abhiyan* was launched to achieve the goal of Universalisation of Elementary Education. This adopts a ZERO rejection policy and uses an approach of converging various schemes and programmes. It covers the following components under education for children with special needs:

- Early detection and identification
- Functional and formal assessment
- Educational Placement
- Aids and appliances
- Support services
- Teacher training
- Resource support
- Individual Educational Plan (IEP)
- Parental training and community mobilisation
- Planning and management
- Strengthening of special schools
- Removal of Architectural barriers
- Research
- Monitoring and evaluation
- Girls with disabilities

Role of Schools in Inclusive Education

Schools are being challenged to avoid traditional labels attached to specific groups (such as learning disabled, slow learner) or as Biklen (2000) observes, resist static understandings of categories and recognise that there is a wide diversity in the student population and there are different patterns of achievement and social contributions that fit the various cultural, ethnic and gender differences that students bring to schools. In formal terms, schools are being asked to move away from a deficit model where the problem essentially was located within the individual to a social model that recognises that disability is created through social institutions that have discriminatory and disabling practices (Mittler, 2000; Lindsay, 2003).

Schools are being challenged towards developing pedagogy of inclusion that Ainscow (1997) believes is "not about making marginal adjustments but rather

about asking fundamental questions concerning the way in which the organisation is currently structured". The aim is to transform mainstream schools in ways that will increase their capacities to respond to all learners and not just children with special education needs (Gillies and Carrington, 2004). It is really about creating and finding contexts that will enable children to experience success and feel competent (Biklen, 2000).

Schools have to be more flexible in the way they are organised so that teachers can work together in teams and in this way teachers can learn to construct the meaning of inclusion for themselves, learn to adopt new ways of teaching and interacting with students as a part of the overall transformation of their schools (Clark et al., 1999; Ainscow, 2000; Peters, 2002). An inclusive approach to schooling requires that "the perspective must be enlarged to all teachers, all policies, and all strategies for student assessment and so on" (Ferguson, 1998). By developing an inclusive pedagogy, teachers are able to connect individual learners and their own way of learning to the curriculum and the wider school community (Corbett, 2001).

Students too need to feel accepted and valued within their school. When they feel they are part of the school community, they are less likely to become alienated and are more likely to want to participate and be included (Finn, 1989). When teachers are willing to connect on a personal level with students who are potentially at risk of dropping out or becoming alienated, they can make a difference in reversing this trend and preventing student failure (Schlosser, 1992).

Teaching in Inclusive Classrooms

In any rural setting there may be just one or two teachers in a primary school. These teachers may find their work extremely challenging. To be a good teacher means reacting to the interests of different children and building teaching on what the children already know, which may sometimes prove to be difficult. As mentioned earlier, inclusion basically is an attitude of acceptance of diversities. For teaching in an inclusive classroom, a teacher needs to possess competencies that help him/her to plan and implement strategies that provide students wider access to regular curriculum. Research says that the teachers in an inclusive classroom should have the:

- Ability to problem-solve, to be able to informally assess the skills a student needs (Rather than relying solely on standardised curriculum).
- Ability to take advantage of children's individual interests and use their internal motivation for developing needed skills.
- Ability to set high but alternative expectations that are suitable for the students. This means developing alternative assessments.
- Ability to make appropriate expectations for each student, regardless of the student's capabilities. If teachers can do this, it allows all students to be included in a class and school.

- Ability to learn how to value all kinds of skills that students bring to a class, not just the academic skills. In doing this, teachers will make it explicit that in their classrooms they value all skills.

Also the teachers must be able to:

- Recognise and respond to the diversity of students in their classrooms.
- Accommodate to students different learning styles and rates of learning by employing a range of teaching methods, including cooperative group.
- Learning, peer tutoring, team teaching and individualised instruction.
- Be aware of the rights of students with education support needs.
- Locate appropriate material, equipment or specialists.
- Identify and overcome barriers to learning.
- Consult with and develop partnerships with parents/ caregivers and colleagues.
- Use appropriate forms of assessment.
- Adapt their instruction to the prior knowledge and beliefs of students.
- Create an inclusive community that extends beyond the walls of the school.
- Seek to enhance the self-esteem of all students.

CONCLUSION

The equal importance of cognitive and procedural components to any professional development for inclusive education needs to be addressed for enduring change in the school and the classroom. Rethinking and planning for inclusive schooling often represents a substantial departure from teachers' prior experience, established beliefs and present practice. Indeed, 'they are encouraged to provide conditions of learning for children that the teachers themselves have rarely experienced' (Little 1993). Out of small number of studies conducted in the area of inclusive education only one thing emerges i.e. the beginning has been made but the researches are either at the awareness level or exploratory in nature. More specific, precise and scientific researches are needed to make inclusive education a reality in practice on a much larger scale. More teaching training modules need to be developed so that not only pre-service but also in-service teachers also could be trained in inclusive practices. The administrative and management aspects of inclusive education need to be studied at the micro and macro levels both in rural and urban settings so that the models thus developed could be replicated in varied situations. To conclude, including children with disabilities in education is a challenging task. It involves providing appropriate responses to wide spectrum of learning needs in both formal and non-formal settings.

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Elementary Education in Uttrakhand

An Appraisal

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Abstract

The article 45 of Indian constitution has provision of free and compulsory education for all children upto the age of 14 years. Systematic and planned efforts were made by Government to achieve and fulfill this commitment. In the year 1986 a new education policy was adopted and efforts were made through successive five year plans to achieve the target of 100 % literacy through compulsory and free education for the children of age group 6-14. After the District Primary Education Programme (DPEP) of 1994, the govt. has now launched the ***"Sarva Shiksha Abhiyan"*** *or* ***SSA*** *in 2001 to universalise and improve the quality of elementary education in India through community ownership of elementary education. However, even after sixty two years of India's independence the goal of universal elementary education has not been achieved so far. About 10 million children of school going age are not attending elementary schools due to various reasons.*

This paper discusses the scenario of elementary education in Uttrakhand keeping in view the Government efforts for universalising the elementary education. The data for this paper are accumulated from different sources such as 7th All India School Education Survey 2002, survey conducted by NCERT, and State Report Cards prepared by NUEPA, Delhi etc. Educational parameter at district level are discussed and analysed to draw the attention of researchers, policy makers, administrators, and educationist for achieving the target of SSA in the State.

After independence, systematic and planned efforts were made in our country to fulfill the national commitment enshrined under article 45 of the Constitution for providing free and compulsory education for children up to the age of 14 years. Efforts were made through successive five year plans to

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achieve the target of 100 per cent literacy through compulsory and free education for the children up to the age 14. The National Policy on Education 1986 and 1992 has given top priority for the achievement of goals of Universal Elementary Education (UEE). Various programmes and incentives were initiated for universalising and improving the quality of elementary education in India. However, even after sixty two years of India's independence the goal of universal elementary education has not been achieved so far. About 10 million children of school going ages are not attending elementary schools due to various reasons such as poverty, no access to schools, etc.

Government of India launched a scheme; known as ***Sarva Shiksha Abhiyan*** **(SSA)** in the year 2001-2002 in partnership with the state Governments and local self-governments. It is a comprehensive and integrated flagship programme of government of India to attain universal elementary education covering the entire country in a mission mode. The following are the main objectives of the scheme: (i) Enrolment of all children in school, Education Guarantee Centre, Alternate Schools, Back -to- School camp by 2003; (ii) All children complete five years of primary schooling by 2007; (iii) All children complete eight years of elementary schooling by 2010; (iv) Focus on elementary education of satisfactory quality with emphasis on education for life; (v) Bridge all gender and social category gaps at primary stage by 2007 and at elementary education level by 2010; (vi) Universal retention by 2010. Besides this, Government of India launched many other incentive schemes to retain the children in the schools which are given below: (1) Free text books; (2) Free uniforms, stationary, school bags etc; (3) Mid-day meal scheme; (4) Attendance scholarship for girls etc.

The present paper discusses the scenario of elementary education in the State of Uttrakhand keeping in view the Government efforts for Universalising the Elementary Education in the state. In this paper primary and upper primary stage education i.e. elementary education situation have been critically analysed. All India Education Surveys conducted by NCERT has been useful sources of data in educational planning and formulation of policies. Information from recently released report of 7th All India School Education Survey conducted by the NCERT has been exploited for the analyses.

The Uttrakhand is one of the newly constituted states of Indian Union. The State was curved out from merging the hilly districts of the Uttar Pradesh on 9th November 2000 as 27th States of India. Uttrakhand is located in the foothills of the Himalayas and it has international boundaries with (China) Tibet in the North and Nepal in the East. On its Northeast lies Himachal Pradesh while on the South is Uttar Pradesh. According to 2001 Census, the state has 13 districts with a total geographical area of 53,483 square kilometers. According to 2001 Census, Uttrakhand has total population 84, 89,349 (50.96 per cent males and 49.04 per cent females). The literacy is relatively higher in the state as compared to country as a whole, the total literacy rates was 71.6 per cent in 2001, 83.3 per cent for

males and 59.6 per cent for females. (Census, 2001).

Schooling facilities in habitations of the State

As per SSA norms there should be primary education facilities within one kilometer and upper primary within 3 km of every habitation. In Uttrakhand there are 25,495 habitations in 15768 villages with a rural population of about 64 lakh, i.e. 1.62 habitations per village. Out of 25,495 habitations, 81.44 per cent has primary stage education facilities within one km and 85.96 per cent has upper primary education facilities within 3 km (Table 1). This show that still 18.56 per cent and 14.04 per cent habitations are without primary and upper primary stage education facilities respectively. The proportion of habitations not having primary stage facilities within one kilometer was higher in hilly districts like Champawat (25.86%), Pithoragarh (21.49%), Tehri Garhwal (19.46%), Uttarkashi (18.20%), Chamoli (19.21%) and Almora (18.95%). On the other hand, only 6.31 per cent habitations in Haridwar district were not having primary school within one kilometer. Similarly, the proportion of habitations without any upper primary school within 3 kilometer was highest in Champawat district (26.24%) and minimum in Rudraprayag district (8.57%). Nearly one out of seven habitations did have any upper primary school with 3 Km in Champawat (26.24%), Haridwar (21.26%), Dehradun (19.90%), Uttarkashi (18.65%), Pithoragarh (17.26%), and Bageshwar (16.08%).

Table 1 : Numbers of Habitations and Percentage of Habitations not having Primary School and Upper Primary Schools as per SSA norms

S. No.	*Districts*	*Percentage of habitation have no*		*No. of Habitations*
		Primary School within 1 km	*Upper Primary within 3 km*	
1	Almora	18.95	13.47	3378
2	Bageshwar	17.66	16.58	1478
3	Chamoli	19.21	14.54	2056
4	Champawat	25.86	26.24	1311
5	Dehradun	18.48	19.90	1412
6	Garhwal	18.11	8.25	3877
7	Hardwar	6.31	21.26	602
8	Nainital	15.39	9.44	1897
9	Pithoragarh	21.49	17.26	3383
10	Rudraprayag	15.96	8.57	1178
11	Tehri Garhwal	19.46	12.02	2729
12	Udham Singh Nagar	14.30	9.96	1084
13	Uttarkashi	18.20	18.65	1110
	Uttrakhand	**18.56**	**14.04**	**25495**

Number of Primary and Upper Primary recognised Schools

As per 7th AISES there were 13,902 primary schools and 3,471 upper primary schools in Uttrakhand. It is important to notice that about 90 per cent primary schools and 85 per cent upper primary schools were running in rural areas. Most of the schools, both primary and upper primary in the state are government run schools (Table 2).

More than 80 per cent primary and 70 per cent Upper primary schools were purely government schools and less than 1 percent schools were running by local bodies. About 99 per cent primary and 80 per cent upper primary schools are co-education schools.

Table 2 : Schools According to Area, Type and Management

Management	*Primary*			*Upper Primary*		
	Rural	*Urban*	*Total*	*Rural*	*Urban*	*Total*
Government	10759	511	11270	2334	108	2442
Local Body	84	21	105	31	8	39
Private Aided	65	29	94	125	53	178
Private Unaided	1558	875	2433	462	350	812
Total	**12466**	**1436**	**13902**	**2952**	**519**	**3471**
Boys	73	16	89	257	47	304
Girls	25	17	42	348	66	414
Co-ed	12368	1403	13771	2347	406	2753

Table 3 : District-wise Number of Primary and Upper Primary Schools in Rural and Urban Areas

Sl. No.	*District*	*Primary*			*Upper Primary*		
		Rural (%)	*Urban (%)*	*Total*	*Rural (%)*	*Urban (%)*	*Total*
1	Almora	96.79	3.21	1466	95.59	4.41	227
2	Bageshwar	98.50	1.50	600	97.94	2.06	97
3	Chamoli	93.39	6.61	1013	90.17	9.83	234
4	Champawat	95.77	4.23	497	91.96	8.04	112
5	Dehradun	68.12	31.88	1396	62.19	37.81	447
6	Garhwal	96.37	3.63	1792	93.72	6.28	478
7	Hardwar	74.88	25.12	1031	65.87	34.13	252
8	Nainital	84.95	15.05	1116	81.87	18.13	342
9	Pithoragarh	95.82	4.18	1197	93.03	6.97	244
10	Rudraprayag	98.76	1.24	565	97.93	2.07	145
11	Tehri Garhwal	96.19	3.81	1468	94.67	5.33	394
12	Udham Singh Nagar	78.17	21.83	985	74.23	25.77	291
13	Uttarkashi	96.52	3.48	776	94.23	5.77	208
	Uttrakhand	**89.67**	**10.33**	**13902**	**85.05**	**14.95**	**3471**

About 90 per cent primary and 85 percent upper primary schools were located in rural areas. Only 10 and 15 per cent primary and upper primary schools were in urban areas respectively. But about 32 per cent primary schools were in urban areas in Dehradun district, followed by 25.12 per cent in Haridwar, 21.83 per cent in Udham Singh Nagar and 15.05 per cent in Nanital district. Similarly, about 38, 34, 26 and 18 per cent upper primary schools were in urban areas of these districts respectively.

School Infrastructure

In the 7th AISES survey information was also collected on school infrastructure, such as type of school building, etc. Out of 13,902 primary schools, 788 primary schools (5.7%) were running in non-pucca building (partly *pucca, kuchcha,* tent and open space) in the Uttrakhand state in year 2002. The remaining 13,114 schools (94.3%) were functiong in pucca building. Among 3471 upper primary schools, 3,200 (92.2%) were running in pucca building while 7.8 per cent in non-pucca building. Relatively more primary schools in Pithoragarh (9.0%), Dehradun (9.0%), Rudraprayag (8.0%) and Tehri Garhwal (7.8%) were running in non-pucca buildings, i.e. either in semi-pucca, kuchcha, Tent or in open space. But more than one-fourth upper primary schools in Tehri Garhwal district and more than 10 per cent in Rudraprayag, Uttarkashi, and Chamoli districts were running in non-*pucca* buildings.

Teachers in Schools

Teachers (including para teachers) are defined as persons whose professional activity involves the transmission of

Table 4 : Type of School Buildings of Primary and Upper Primary Schools

Sl. No.	*District*	*Primary*			*Upper Primary*		
		Rural (%)	*Urban (%)*	*Total*	*Rural (%)*	*Urban (%)*	*Total*
1	Almora	97.8	2.2	1466	96.5	3.5	227
2	Bageshwar	99.0	1.0	600	94.8	5.2	97
3	Chamoli	94.6	5.4	1013	89.7	10.3	234
4	Champawat	94.8	5.2	497	91.1	8.9	112
5	Dehradun	91.0	9.0	1396	91.1	8.9	447
6	Garhwal	93.2	6.8	1792	96.0	4.0	478
7	Hardwar	96.4	3.6	1031	97.6	2.4	252
8	Nainital	98.6	1.4	1116	98.2	1.8	342
9	Pithoragarh	91.0	9.0	1197	97.1	2.9	244
10	Rudraprayag	92.0	8.0	565	89.0	11.0	145
11	Tehri Garhwal	92.2	7.8	1468	73.4	26.6	394
12	Udham Singh Nagar	95.5	4.5	985	98.6	1.4	291
13	Uttarkashi	92.5	7.5	776	89.9	10.1	208
	Uttrakhand	**94.3**	**5.7**	**13902**	**92.2**	**7.8**	**3471**

Others: Partly *Pucca, Kuchcha,* Tents, Open Space

knowledge, attitudes and skill that are stipulated in a formal curriculum programme to students enrolled in the formal educational institutions. Of the total 79,722 teachers in the Uttrakhand state in year 2002; 37,068; 15,326, 6,354 and 20,973 teachers (46.50, 19.22, 7.97 and 26.31%) were respectively working in primary, upper primary, secondary and higher secondary schools.

Teacher School Ratio (TSR), i.e. number of full time teachers per school can be considered a good measure of quality of education. In Uttrakhand State on an average 2.5 teachers were teaching in primary schools and 4.4 teachers in a upper primary school. It is interesting to observe that on an average urban schools (both primary and upper primary) have higher teachers irrespective of type of managements. On average 5 teachers in primary and 5.9 in upper primary schools were posted in urban areas as compared to 2.2 and 4.1 teachers respectively in rural areas. Teacher School ratio (TSR) in was appreciably high in private aided and unaided schools as compared to Government schools (Table 5).

Teacher school ratio in primary schools was highest in Haridwar district (3.9 teachers per school), followed by Udham Singh Nagar (3.7) and Dehradun (3.5) and it was just about two teachers per primary school in Almora, Bageshwar, Chamoli, Garhwal and Pithoragarh districts. In case of upper primary school, the availability of teachers per upper primary school was less than 4 teachers in Pithoragrh (3.9) and Tehri Garhwal (3.6) districts, whereas it was about five teachers per school in Haridwar (5.1) and Nanital (4.9) districts (Table 6).

Out of total primary schools, 18 per cent were running in the hand of only one teacher whereas 1.1 per cent schools were not having any teacher. About half of the schools (48.32%) are running in the hand of 2 teachers. In rural areas 1.2 per cent primary schools were not having any teacher and about 72 per cent were having two or less teachers in rural schools. In urban areas all schools have atleast one teacher, and only 3.4 per cent were having only one teacher. More than 60 per cent urban schools were having 5 or more teachers (Fig 1).

According to 7th Educational survey, in Uttrakhand state more than half of the (55.63%) primary teachers were female. The ratio of primary female

Table 5 : Average Number of Full Time Teachers per School (TSR) in Primary and Upper primary Schools by Type of Management of Schools

Management	*Primary Schools*			*Upper Primary Schools*		
	Rural	*Urban*	*Total*	*Rural*	*Urban*	*Total*
Government	1.9	3.6	2.0	3.9	5.4	4.0
Local Body	1.9	4.1	2.3	4.3	6.5	4.8
Private Aided	3.6	7.5	4.8	5.1	6.8	5.6
Private Unaided	4.6	5.8	5.0	4.8	5.9	5.3
Total	**2.2**	**5.0**	**2.5**	**4.1**	**5.9**	**4.4**

Table 6 : Average Number of Full time Teachers per School (TSR) in Primary and Upper Primary Schools by Districts of the Uttrakhand

Sl. No.	*District*	*Teachers per School*	
		Primary	*Upper Primary*
1	Almora	2.1	4.3
2	Bageshwar	1.9	4.3
3	Chamoli	2.0	4.5
4	Champawat	1.8	4.0
5	Dehradun	3.5	4.7
6	Garhwal	2.0	4.4
7	Hardwar	3.9	5.1
8	Nainital	2.6	4.9
9	Pithoragarh	2.1	3.9
10	Rudraprayag	2.3	4.2
11	Tehri Garhwal	2.3	3.6
12	Udham Singh Nagar	3.7	4.5
13	Uttarkashi	2.2	4.1
	Uttrakhand	**2.5**	**4.4**

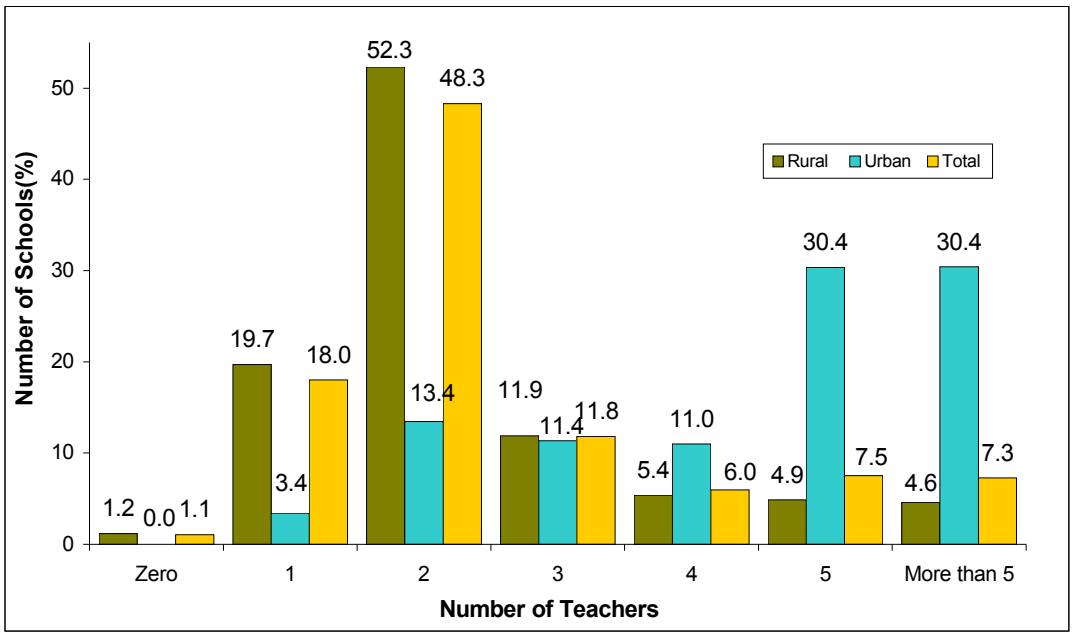

Fig. 1 : Primary Schools with Number of Full time Teachers

teachers to total primary teachers was much higher in urban areas as compared to rural areas. This ratio was highest in Dehradun district (80.03%) followed by Nainital district (70.63%). However, out of thirteen districts seven districts namely Almora, Bageshwar, Champawat, Rudraprayag, Tehri Garhwal, Udham Singh Nagar and Uttarkashi have less than 50 per cent female teachers (Table 7). But in case of upper primary schools, the proportion of female teacher was much lower as less than one-third of upper primary teachers were female teachers. The proportion of female upper primary teachers was much higher in urban areas as compared to rural areas. Similar to primary schools, in upper primary schools too the predominating districts like Dehradun, Haridwar and Nainital have relatively more female teachers (Table 7). This clearly indicates imbalanced distribution of female teachers among different districts of the state and their strong preference for posting in urban areas.

Pupil Teacher Ratio (PTR) in Schools

Pupil Teacher Ratio is one of the best educational parameter to measure the quality of education being provided to children. The PTR is used to measure the level of human resources input in terms of number of teachers in relation to the size of pupil population. According to SSA norms there should be one teacher for every **forty students** in primary schools and one teacher **for every section** in upper primary school. On the basis of the school enrolment and number of teachers, Pupil Teacher Ratio (PTR) had been computed.

Table 7 : Availability of Female Teachers in Primary and Upper Primary Schools in Uttrakhand

Sl. No.	*District*	*Female teeachers in primary schools (%)*			*Female teachers in upper primary schools (%)*		
		Rural	*Urban*	*Total*	*Rural*	*Urban*	*Total*
1	Almora	40.1	74.5	42.5	17.3	55.2	19.8
2	Bageshwar	37.4	66.0	38.6	13.7	63.6	15.0
3	Chamoli	52.4	61.9	53.5	11.5	33.1	14.5
4	Champawat	37.9	52.8	40.1	16.0	40.7	19.2
5	Dehradun	73.1	89.4	80.0	36.4	78.1	54.3
6	Garhwal	53.7	61.3	54.3	28.4	55.9	30.9
7	Hardwar	46.6	75.9	55.7	35.4	73.2	52.6
8	Nainital	67.9	78.4	70.6	28.9	70.5	38.4
9	Pithoragarh	54.4	64.6	55.6	19.2	43.4	21.9
10	Rudraprayag	45.4	51.4	45.6	13.5	23.5	13.8
11	Tehri Garhwal	47.1	61.7	48.3	21.5	42.2	23.3
12	Udham Singh Nagar	40.5	64.5	48.7	22.8	51.6	31.6
13	Uttarkashi	48.4	57.9	49.0	13.7	49.0	15.8
	Uttrakhand	**50.92**	**74.9**	**55.6**	**23.2**	**64.5**	**31.5**

In Uttrakhand, Pupil Teacher Ratio was 29 in primary schools and 19 in upper primary schools. Government primary schools have more students per teacher as compared to private aided and unaided schools. Pupil-teacher ratio was higher in rural schools (29) as compared to urban areas (27). PTR was 32 in government primary schools as compared to 29 in private aided and 22 private unaided schools. This ratio was much higher in urban primary school (41 students per teachers) as compared to rural schools (32 students per teacher). But contrary to above findings, in case of upper primary schools, PTR was relatively higher in urban areas (22) as compared to rural upper primary schools (19). Private Schools (either aided or unaided) have higher pupil-teacher ratio as compared to Government and local bodies schools (Table 8).

To study the district wise variation in pupil-teacher ratio (PTR), PTRs are computed for both primary and upper primary schools at district level. Districts Haridwar and Udhamsingh Nagar has maximum primary PTR of 43:1, while Pithoragarh district has minimum ratio of 22:1. In case of upper primary schools, pupil teacher ratio was more than 30 students per teacher in Udham Singh Nagar and Haridwar and it was less than 20 students per teacher in Chamoli, Garhwal, Dehradun, Nainital, Pithoragarh, Rudraprayag, Tehri Garhwal and Uttarkashi districts (Table 9). PTR in rural primary schools was higher as compared to urban schools in all districts, except Nanital, where PTR in urban primary school was 30 as compared to PTR of 27 in rural areas. In case of upper primary school PTR, it was higher in urban areas in most of the districts, except Almora, Dehradun and Hardwar districts.

Participation of Children in Schools

An important indicator of educational outcome, the Gross Enrolment Ratio is the ratio of children enrolled under child population of a particular age group. Gross Enrolment Ratio for primary stage is the ratio of children enrolled at primary stage under child population of age group 6-11 years. In Uttrakhand GER at primary stage was 104 (combined for Boys and Girls) in year 2002. The GER at primary stage was little bit higher for girls (105) as compared to boys (103), which is also true for rural areas. But in urban areas GER was 104 for boys as

Table 8 : Management-wise Pupil Teacher Ratio

Management	*Primary Schools*			*Upper Primary Schools*		
	Rural	*Urban*	*Total*	*Rural*	*Urban*	*Total*
Government	32	41	32	18	23	18
Local Body	30	26	28	15	24	18
Private Aided	25	32	29	26	24	25
Private Unaided	22	22	22	20	21	20
Total	**29**	**27**	**29**	**19**	**22**	**19**

Note: Pupil Teacher Ratio has been worked out by including the Para teachers.

Table 9 : District-wise Pupil Teacher Ratio in Primary and Upper Primary Schools

Sl. No.	*District*	*Primary*			*Upper Primary*		
		Rural	*Urban*	*Total*	*Rural*	*Urban*	*Total*
1	Almora	27	18	26	20	18	20
2	Bageshwar	28	27	28	21	22	21
3	Chamoli	24	18	23	16	18	16
4	Champawat	31	27	31	19	22	20
5	Dehradun	27	23	25	17	15	16
6	Garhwal	23	23	23	12	14	12
7	Hardwar	48	31	43	37	29	33
8	Nainital	27	30	27	17	22	18
9	Pithoragarh	22	20	22	18	24	19
10	Rudraprayag	26	19	25	16	25	16
11	Tehri Garhwal	27	22	26	17	19	17
12	Udham Singh Nagar	45	39	43	30	30	30
13	Uttarkashi	24	19	24	14	15	14
	Uttrakhand	**29**	**27**	**29**	**19**	**22**	**19**

Note: Pupil Teacher Ratio has been worked out by including the Para teachers.

compared to 99 for girl children (Table 10). GER more than 100 may be due to children enrolled are of over ages and/ or children from other states might have enrolled in Uttrakhand. This may be true as state Uttrakhand is well know for its good schooling, the state has many good school, particularly in districts like Dehradun, Nanital and Haridwar.

At upper primary stage combined (Girls + Boys) GER was 76 and it was 78 and 73 for Boys and Girls respectively. A GER of 76 at upper primary stage indicates that on average 24 per every 100 children of age group 11-14 are not enrolled at upper primary stage.

Discussion

In the post independence period a major concerns of the Union and states

Table 10 : Gross Enrolment Ratio in Primary and Upper Primary Schools

Stage	*Rural*			*Urban*			*Total*		
	Boys	*Girls*	*Total*	*Boys*	*Girls*	*Total*	*Boys*	*Girls*	*Total*
Primary Stage (I-V)	103	107	104	104	99	102	103	105	104
Upper Primary Stage (VI-VIII)	75	68	72	87	88	88	78	73	76
Combined for Primary & Upper Primary (I-VIII)	92	92	92	97	95	96	93	92	93

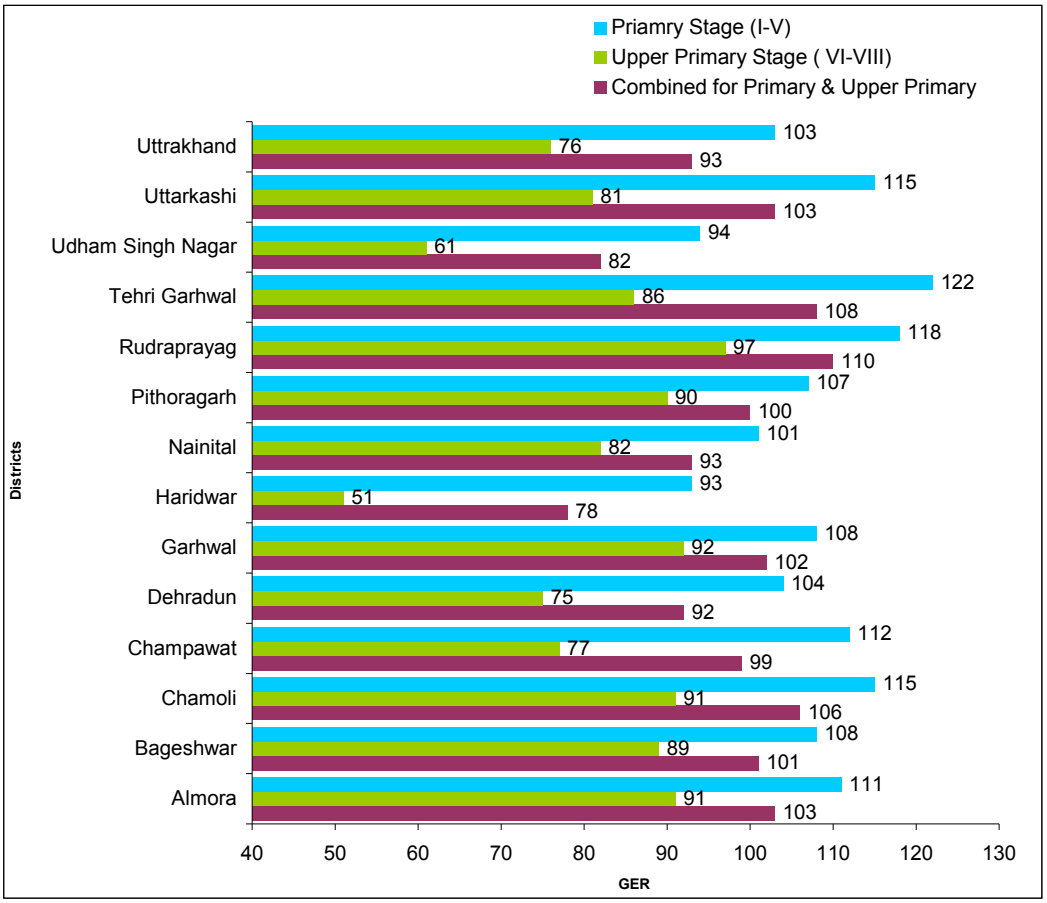

Fig. 2 : Gross Enrolment Ratio (GER) in Primary and Upper Primary Stages in Districts of Uttrakhand

Government has been to give increasing attention to education as a factor to national progress and security. After the District Primary Education Programme (DPEP) of 1994, the government has now launched the ***"Sarva Shiksha Abhiyan"***. *Sarva Shiksha Abhiyan* was launched in 2001 to universalise and improve the quality of elementary education in India through community ownership of elementary education. Uttarkhand is dominantly rural state and has a historical advantage in literacy in India and in the last many years considerable actions have been taken to bring education at school level to the rural precincts. Despite all the efforts, the universalisation of elementary

education in state remains a distant dream. Based on above captioned results based on the 7th All India School Education Survey, following observation emerged with regard to the elementary education in Uttrakhand state.

The analyses show that still 18.6 per cent and 14.0 per cent habitations are without primary and upper primary stage education facilities respectively. The proportion of inhabitations not having educational facilities within habitation's peripherals is higher in hilly districts like Champawat, Pithoragarh, Tehri Garhwal, Uttarkashi, and Chamoli. More than 80 per cent primary and 70 per cent upper primary schools were purely government schools and less than 1 per cent schools were run by local bodies. Though most of schools Uttrakhand have pucca buildings but still about seven to eight percent of primary and upper primary schools are running in non-pucca edifices. Most of the primary schools (72%) have only two teachers, i.e. on average two teachers are taking care of five classes (1st to 5th stages). More than half primary teachers and one-third upper primary teachers are female teachers. The proportion of female teachers in primary and upper primary schools was much higher in urban areas as compared to rural areas. The predominating districts like Dehradun, Haridwar and Nainital have relatively more female teachers. This clearly indicates imbalanced distribution of female teachers among different districts of the state and their strong preference for posting in urban areas.

In Uttrakhand GER at primary stage was 104 (combined for Boys and Girls) in year 2002. A GER of more than 100 is an enigma, but this may be due to: (a) children for higher ages are enrolled at lower stages, (b) children from other districts/states enrolled here, (c) some children may be enrolled in different schools. But overall the combined enrolment for primary and upper primary is less than 100 and enrollment at upper primary schools is far less than 100, this reflect a drop out of children from primary to upper primary, i.e. before completing the eight years elementary education.

Conclusion

Lot of efforts are being made to provide education to all but unless and until children get access to school, other efforts would not be much effective. Therefore, hard work are needed in the field of accessibility i.e. each habitation should have at least primary and upper primary stage facilities within 1 and 3 km. Government should also make sure that all schools should have their own pucca buildings. There is also a need to improve teacher-school ratio and improve the pupil-teacher ratio, particularly in government schools. The proportion of female teachers needs to be improved, especially in upper primary schools, and they should be uniformly posted in all districts.

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Achieving Universal Primary Education

Mid-day Meal Programme in Residential Schools for the Scheduled Tribes in Chhattisgarh

B. K. PANDA*

Abstract

School feeding programme is crucial for children who are attending schools in general and the hungry and malnourished children in particular. Timely provision of food packages in the schools in a variety of forms to the children in United States of America, Jamaica, Malawi, Burkina Faso, Brazil, Pakistan, Nepal and Bangladesh have taken care of under nourished children leading to good health that contributed substantially to the learning in schools. Studies have proved that food provisions have improved attendance, reduced drop outs and in some countries it proved to improve their learning abilities and arithmetic skills. India is no exception, where good results are being achieved due to the National Mid Day Meal Programme. The school feeding programme is not new to the Indian context and especially the residential schools functioning in the Tribal Areas of the country. These residential schools had this provision from a long time, in fact these schools provided the food for the entire day to the Scheduled Tribe Children to ensure proper health and overcome malnutrition among these children. This article has made an attempt to focus on various issues relating to the package of mid-day meal programme and its positive affects/impact in achieving universal primary education especially in the residential schools of Chhattisgarh.

There is growing concern for increasing food security and reducing malnutrition among the world population, the picture is gloomy to find that there is still an estimated population of one billion in the world who are suffering from hunger and malnutrition. About 24,000 people die every day from hunger-related causes.

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The number of people in 70 of the world's lower income countries is facing "food insecure" syndrome and live with persistent hunger and consume less than 2,100 calories of food daily (US Department of Agriculture Reports).

The provision of cooked food in the schools in India existed during early 19th century, where food was provided to the school age children. The mid-day meal scheme for school children was officially introduced in Tamilnadu as early as 1925 by the Corporation of Madras, but became a state-wide scheme in 1956 under then chief minister the late Thiru K. Kamaraj who introduced it in Adi Dravida community schools as the 'Poor Feeding' programme. In 1961, the government started receiving American aid for the programme and it was expanded to all corporation and government schools in urban areas.

But it was only in July 1982 under the leadership of the legendary chief minister the late M.G. Ramachandran that the 'Puratchi Thalaivar MGR Nutritious Meal Programme' (PTMGR NMP) was introduced in a phased manner in child welfare centres in rural areas for pre-school children in the age group two-five years and for primary school children in the age group five-nine years. Subsequently on September 15 the same year, despite widespread criticism from economists and financial experts, MGR presciently extended the scheme to Nutritious Meal Centres in urban areas. It was further extended to school students between 10-15 years in 1984. The successful introduction of Tamilnadu's NMP prompted the creation of a National Programme of Nutritional Support to primary education (popularly known as the mid-day meal scheme) in 1995. Under this programme the Union HRD ministry made provision of free food grains to primary school children at the rate of 100 gm per child for ten months in the year.

In India the primary school children (6-14 years) form about 20 per cent of the total population. Free and compulsory education up to the age group of 14 years is the constitutional commitment. It is estimated that about 40% of children dropout of primary school. A survey conducted by the National Nutrition Monitoring Bureau (NNMB- 2000-2001) indicated that about 70 per cent of these children are undernourished and there is about 30 per cent deficit in energy consumption and over 75 per cent of the children have dietary micronutrient deficit of about 50 per cent. Poor enrolment and high school dropout are attributed to the poor nutritional status of the children compounded by poor socio-economic conditions, child labor and lack of motivation etc.

Mid day meal programmes (MDM) aimed at improving the nutritional status of poor children and ensuring better school enrolment have been adapted in majority of the states of the country. This program although faced hurdles in some of the states due to various reasons due to absence of clear cut policies in managing the MDM, isolated bureaucratic operations and non-involvement of the community etc., is successful in some other states who have adapted innovative methods of making the mid-day meal available to the school children.

Despite several hurdles, this programme received impetus by the timely intervention of the Hon'ble Supreme Court's directive of November 28, 2001 to State Governments to introduce cooked mid day meals in schools, which renewed the interest in MDM in different states of the country. In the absence of such a directive, the Biscuit Barons of the country were wooing the government to supply fortified food to the school age children in the schools, which were found to be outdated and fungal infected and with expired dates of production in the market. The concept of providing hot cooked meal was very well received by the community, parents, teachers and the children in the schools. As the cooked meal was fresh and not stale and nutritious, the children enjoyed these kinds of cooked meals served in the schools.

The constitution of India has also an obligation for the (central and state) governments to fulfill the right to food of India's people, and despite the existence of number of such programmes focusing on issues related to food and malnutrition, there remained many constraints in achieving food security which is starving majority of the people with hunger. The Tenth Five-Year Plan 2002-07 prioritised utilisation and consumption issues with a focus on nutrition and health education, intensified health monitoring and elimination of micronutrient deficiency diseases. Studies undertaken in various countries have shown there is enough wheat, rice and other grains produced to provide every human being with at least 3,500 calories a day which doesn't count many other commonly eaten food items such as – vegetables, beans, nuts, root crops, fruits, grass-fed meat and fish. It is also found that enough food is available to provide at least 3.4 pounds of food per person a day world wide. Even the most "hungry countries" are having enough food for their people and do not have any critical shortage. In fact it is not the scarcity but the food entitlements of households derive from their own production, income, gathering of wild foods, community support (claims), assets, migration etc. all of which enable the human beings to survive (CARE, USA, 1998; PCD, 1998 a,b,c 1999 a,b,c). A recent article on food scarcity and malnutrition indicated that almost a third of the World's malnourished children are Indians, Over 10 years, at times of economic growth, India's malnourishment rate has fallen only by two per cent with still 40.4% of Indian Children suffering from malnourishment. India has remained very slow in containing with mal nourishment compared to other developing countries and there is a likelihood that it may miss the global target to reduce the malnourishment and hunger by 2015 (Hindustan Times; Sept.14, 08).

Impact of Provision of food in the Schools – Experiences across the World

The school feeding programmes is one of the several best strategies that address issues related to nutrition and health problems of school-age children. The programmes which are based on school-based nutrition and health programmes can be able to motivate not only the parents but also the children to take

active part in the schooling activities on a regular basis. If one looks at the back ground that has been given in the preceding paragraphs it will be observed that food insecurity, malnutrition and other health related problems affected health of the people and children and their basic needs of overcoming hunger. It is also observed that, people in order to survive find out various means and measures of survival. Majority of the countries lack proper planning and distribution systems of food and rations in the countries resulting in scarcity and food insecurity.

Proper food planning becomes an important factor for healthy human resources in a country, therefore, it is very important to address food and nutritional supplements for all and beginning can be made with the school going children. The children with hungry stomachs will not be able to learn and continue in the schooling system for a long, the school feeding programme in the world and the mid-day meal programme of India in particular have realised the importance of providing nutrition to the children and have initiated programmes to provide food with micronutrients which are essential for the development of growing children.

Children are prone to various kinds of diseases, such as parasitic worms infecting the intestines or the blood tends to be a major source of disease and malnutrition. It was also found that 320 million school-age children are estimated to have been infected with roundworms, 233 million with whipworms, and 239 million with hookworms, Schistomiasis also affected an estimated 200 million people throughout the world, approximately 88 million of whom are under 15 years old (Montresor et al, 1998; Walter et al, 1993). Poor health and nutrition among the school-age children contributes to the inefficiency of the educational system. Children with diminished cognitive abilities and sensory impairments naturally perform less well and more likely to repeat grades and to dropout of school. And it is a well known fact that unhealthy children are irregular in attending the school. The capacity of the parents belonging to lower economic strata and poverty ridden are unable to provide food to the school going children with the result the children who are hungry not able to concentrate in the learning activities of the school, even this kind of temporary hunger has to be addressed in order to enhance the ability of learning and retaining the school-age children in the schools. In many countries, the children have to work for the household in the morning and walk long distances to the schools with empty stomachs, this is more conspicuous with the girl child who has to fetch a helping hand to the mother and then attend the school. All these factors necessitate the provision of mid-day meal or the school feeding programme for the children. This has become a major concern of the UN organisations as well.

"Providing food and education is the single most important thing we can do for the development of the individual and his or her nation

–James T. Morris, Executive Director, UN World Food Programme".

School Feeding Programmes followed in Various Countries

Most of the countries have developed programmes for providing food for the

school children in the schools. These countries provide nutritious food which is ensured to contain all the requisite micro nutrients necessary for the development of the growth of the children and also takes care of their health aspects. The school feeding programmes (SFPs) are also followed in the highly advanced countries like USA and Europe. The fortified food is generally discouraged and cultural considerations of the societies are also taken into account while planning the school feeding programmes. The experiences of countries across the world showed concern for the school children and also studies as well as researches have proved that the provision of food in some or other kind has influenced the learning among the school children.

Table : Showing School Feeding Programmes followed in various countries and the advantages being attained

Country	*Type of SFPs*	*Benefits*	*Advantages*
1. USA	Breakfast was provided in the disadvantaged area schools	The test scores of the children having SFPs have been found to improve.	Attendance also improved.
2. Jamaica	Breakfast was provided in schools	Malnourished children benefitted.	Improvement in attendance and arithmetic scores.
3. Peru	Breakfast was provided with beverages	Disadvantaged children benefitted to a great extent.	Improvement in learning and performance.
4. Nepal	Providing food in school.	Improved nutritional status.	Attendance improved.
5. Ghana	SFPs provision in schools had a positive result.	Enrolment improved.	Attendance improved.
6. Burkina Faso	Provision of food in schools- school canteens.	Increased enrolment, reduced dropouts.	Attendance and success rates in schools improved.
7. Malawi	Provision SFPs in schools.	Increased enrolment.	Reduction in absenteeism.
8. Niger	(a) Three meals per day was provided in the schools to the children. (b) In addition take-home ration to girl child.	Participation in school increased. Increased girls' participation in schools.	Attendance improved in the children of nomad and transhumant families.

9.	Bangladesh	School-based food distribution was followed in schools.	Increased enrolment of the children.	There is decline in the absenteeism.
10.	Indonesia	In Indonesia, US $0.10 and US $ 0.15 per ration per day to village schools via a village Bank is provided, the ration should contain 300 K calories and 5 grams of protein. The food is provided three times a week and for nine months.	Enhanced Participation of Children in schools	Regularity in school children.
11.	South Africa	In South Africa, a national school breakfast program is provided with a recommended daily allowance (RDA) for calories is about US $0.30 per child per day.	It sufficed as additional food intake by the children.	Reduced malnutrition and health problems.
12.	Bolivia	Snacks program is being provided consisting of fortified bread and hot chocolate at an estimated cost of US $4.00 per child per year.	Increased Enrolment of the Children	Children were encouraged to attend school.
13.	Pakistan	Income transfer in the form of one or two tins of oil to the families whose girls attend the school for 20 days per month.	Enrolment improved by 76%.	Attendance increased by 95% among the children.

It will be observed from the above table that every country according to its own requirements has created food provision programmes in the schools in order to not only improve the enrolment of the children in the schools but also their regularity. Studies reveal that Asian countries like Bangladesh, Indonesia and Pakistan have further gone a step ahead in providing food support to the parents of the school going children to take care of food security of the families in the form of either distribution of food grains, oil or other such food items. While in the Latin American countries of Panama, Brazil and El-Salvador food baskets, milk and cakes are provided to the school age children belonging to the slums and the disadvantaged areas in order to improve the enrolment of the schools (Moore. EC, 1994; WFP,1993 a, b, c, f; Ahmed et al 1994;Glewwe et al, 1994; Jamison et al, 1993).Whereas USA has ensured the full participation of the children from the disadvantaged groups in the school by providing food packages, thus every country has considered the importance of food in improving the enrolment in the schools. Studies have showed indications of positive participation of children in schools in utilising conditional food supplies to the families of the school going children. A variety of school feeding interventions not only served the hunger of the child alone but also the entire families facing food insecurity due to poverty and adverse socio-economic conditions.

The Mid-day Meal Programme

The provision of nutritious food to the school children is an age old concept; this practice has helped the children overcome their hunger and enabled them to concentrate in their studies. The provision of food in the school was first introduced in a Japanese private school in the late 1800s, in Brazil in 1938, in fact in USA and European countries it was there during early 19th century as well as in some of the Asian countries like Japan and India also during the same period, these kind of food provision for the school children were found to have a variety of advantages, like supplementing nutritional value, peer interaction and participation, team working and on top of all regular attendance and attentive while learning. The school feeding programmes became more prominent during 1930s in countries like US and UK, where schemes of feeding school children was introduced with the sole objective of improving the growth of the children. For instance, in UK, milk was provided free to the children, such practices were witnessed in certain specific schools of South Africa in the early 1940s. This has gradually resulted in the provision of nutritious meals to the school going children (Richter, Griesel and Rose, 2000; Kruger. M, et al 1994). With evidently satisfactory results, both Japan and the US boast 100 per cent literacy and even Brazil which (like India) is classified as a medium income nation by the United Nations Development Programme has attained 87.3 per cent literacy according to UNDP's Human Development Report, 2003 as against India's 58 per cent.

However, the ultimate goal of school feeding programmes is in order to attain universal primary education while encompassing food insecurity and

health concerns. The low-income countries which are resource constrained suffer from poor health in the form of chronic protein-energy malnutrition, iron deficiency anemia, iodine deficiency or helminthes infections, which contributed significantly to poor educational outcomes (Del Rosso and Marek 1996 and 1999; and Bennett, 2003).

The school feeding programme further received a boost in 2000, the United Nations met in Dakar to commit itself to the eradication of hunger and the attainment of universal primary education. School feeding programmes (SFPs) are one of the main interventions used to address these challenges. School feeding falls squarely within the ambit of the UN declaration, and at least three of the Millennium Development Goals (MDG), namely MDG 1 (to eradicate extreme poverty and hunger), MDG 2 (to achieve universal primary education) and MDG 3 (to promote gender equality and empower women).

In India, the order of the Hon'ble Supreme Court has come as a boon for the school children by making the provision of mid-day meals compulsory in the schools. It clearly directed and specified the quantity and quality of food to be provided to every primary school child and specified the food contents with – a minimum content of 300 calories and 8-12 grams of protein each day of school for a minimum of 200 days. The schools as well as grassroots organisations rallied around the Hon'ble Supreme Court's orders and demanded that the states implement the Mid-Day Meal Scheme in its totality. Although many states were slow in the beginning, today implementation of the mid-day meal is almost universal across the country and successful and innovative methods have also been adopted.

Relevant Supreme Court Orders from Right to Food case concerning MDMS

1. "We direct the State Governments/ Union Territories to implement the Mid-Day Meal Scheme by providing every child in every Government and Government assisted Primary Schools with a prepared mid-day meal with a minimum content of 300 calories and 8-12 grams of protein each day of school for a minimum of 200 days." (Nov. 28, 2001 order)
2. The conversion costs for a cooked meal, under no circumstances, shall be recovered from the children or their parents.
3. In appointment of cooks and helpers, preference shall be given to Scheduled Castes and Scheduled Tribes.
4. The Central Government shall make provisions for construction of kitchen sheds and shall also allocate funds to meet with the conversion costs of food-grains into cooked mid-day meals. It shall also periodically monitor the low take off of the food grains.
5. In drought affected areas, mid-day meal shall be supplied even during summer vacations.
6. Attempts shall be made for better infrastructure, improved facilities (safe drinking water etc.), close monitoring (regular inspection etc.) and other quality safeguards as also

the improvement of the contents of the meal so as to provide nutritious meal to the children of the primary schools."(April 20, 2004 order)

The objectives of the mid-day meal scheme are

(i) Improving the nutritional status of children in Classes I – VIII in Government, Local Body and Government aided schools, and EGS and AIE centers.

(ii) Encouraging poor children, belonging to disadvantaged sections, to attend school more regularly and help them concentrate on classroom activities.

(iii) Providing nutritional support to children of primary stage in drought-affected areas during summer vacation.

Rationale of Providing Mid-day Meal

- ***Promoting school participation***: Mid day meals have big effects on school participation, not just in terms of getting more children enrolled in the registers but also in terms of regular pupil attendance on a daily basis.
- ***Preventing classroom hunger:*** Many children reach school on an empty stomach. Even children who have a meal before they leave for school get hungry by the afternoon and are not able to concentrate - especially children from families who cannot give them a lunch box or are staying a long distance away from the school. Mid day meal can help to overcome this problem by preventing "classroom hunger".
- ***Facilitating the healthy growth of children***: Mid day meal can also act as a regular source of "supplementary nutrition" for children, and facilitate their healthy growth.
- ***Intrinsic educational value:*** A well-organised mid day meal can be used as an opportunity to impart various good habits to children (such as washing one's hands before and after eating), and to educate them about the importance of clean water, good hygiene and other related matters.
- ***Fostering social equality:*** Mid day meal can help spread egalitarian values, as children from various social backgrounds learn to sit together and share a common meal. In particular, mid day meal can help to break the barriers of caste and class among school. Appointing cooks from Dalit communities is another way of teaching children to overcome caste prejudices.
- ***Enhancing gender equity:*** The gender gap in school participation tends to narrow, as the Mid Day Meal Scheme helps erode the barriers that prevent girls from going to school. Mid Day Meal Scheme also provide a useful source of employment for women, and helps liberate workingwomen from the burden of cooking at home during the day. In these and other ways, women and girl children have a special stake in Mid Day Meal Scheme.
- ***Psychological Benefits***: Physiological deprivation leads to low self-esteem, consequent

insecurity, anxiety and stress. The Mid Day Meal Scheme can help address this and facilitate cognitive, emotional and social development

Provision of Food Facilities in Ashram Schools of Chhattisgarh

The provision of whole day food facilities is not new to the charter of Ashram Schools. It has been practiced in these residential schools from a long time, and to be precise since the independence, special efforts were made to provide education of satisfactory quality to the Scheduled Tribes children residing in the interior and inaccessible habitations. In fact, Ashram Schools in the country which are managed by the Tribal Development Departments across the country have been following the provision of full day provision of meals to the Scheduled Tribe children in the tribal areas. Ashram Schools has remained a successful programme as it has taken into consideration the non-availability of facilities such as learning environment at home, proper nutritious food to the children, affordability of the parents to feed the children, educate the children by providing them all necessary teaching learning material and parental supervision in home studies. In addition, it has the element of the teachers and the taught staying together in the same campus, learning and participating in various extra-curricular activities and ensuring holistic development of the students in the Ashram Schools.

These schools provided proper nutritious food to the children as per the menu fixed for each day and adequate fresh cooked meal as per the local requirements were made available to the children.

Chhattisgarh is a state made up of 18 very large districts bound in the north by Uttar Pradesh and Jharkhand, in the east by Orissa, in the South by Andhra Pradesh and in the West by Madhya Pradesh and Maharashtra.

The state of Chhattisgarh has 887 residential ashram schools exclusively meant for the Scheduled Tribe children. There are 701primary schools, 186 middle schools with an intake capacity of 38,325 children at the primary stage and 13,460 at the middle stage.

The Ashram Schools of Chhattisgarh have the provision of providing food three times a day to the children and in addition, morning and evening snacks

Ashram Schools managed by Tribal Welfare Department of Chhattisgarh

Type of School	*Ashram Schools*				*Sanctioned Strength*			
	Boys	*Girls*	*Co-educational*	*Total*	*Boys*	*Girls*	*Co-educational*	*Total*
Primary School	330	180	191	701	14730	8440	15155	38325
Middle School	59	67	60	186	3345	4365	5750	13460
Total	389	247	251	887	18075	12805	20905	51785

Source : Annual Report 2006-07, Tribal Welfare Department, Chhattisgarh

are also provided. The hostels have very well organised kitchen with appointed cooks, dining space and grounds for developing kitchen gardens. The additional advantage these school have is in terms of the provision of designated cook, helper and water man for the purpose of providing timely meals and maintaining the kitchen hygienically. The cooking material is provided by the school warden/Principal and the day-to-day investment register is maintained by the school for inspection as well as release of money for providing food either on monthly or fortnightly basis. The unit cost per child per day per school varies from Rs. 6/- to Rs.8/-. The weekly menu is worked out by the teachers and the students and is displayed in the entrance of every school; in addition the available kitchen utensils and other items are also displayed on the board in the school entrance. The menu and the food items to be served vary from school to school and is planned in accordance to the requirement of the local needs and food habits.

The timing of the meals is decided in accordance of the food habits of the children residing in the Ashram Schools. In some of the schools, the children have their lunch in the morning by 08.30 hrs. and light snacks at 12.30 hrs. and snacks with tea at 17.00 hrs. and dinner at 19.30 hrs. These timings change during the winters and summers as well as during the period of examinations.

Regarding the facilities of the kitchen, these schools have a standard pattern of inventory of utensils which are provided to these schools and the schools depending upon their size, various kinds of utensils are provided, in some of the schools cooking gas is also utilised for cooking, while some of the schools located in the interior forest areas manage to get the dry forest wood for cooking. The menu of the schools generally has the following items:

The food items are adequately served to the children in the Ashram Schools, and as a part of discipline the children clean their meals plates and other utensils they use for their meals. The big vessels and the other utensils are washed and cleaned by the helper of the cook working in the schools, they also clean the dining hall before and after the meals are served and ensure the cleanliness of the dining hall, kitchen and the area where the provision of washing hands and drinking water facilities are made available. The management of the kitchen, dining area, procurement of food items and health of the children vests on the school

Menu of the Ashram Schools

Main Item	Dal/Lintels	Vegetables/Curry	Special items
Rice	Yellow Dal	Seasonal vegetables	Egg Curry (once in a week)
Roti (wheat)	Yellow Dal	Seasonal vegetables	*Khir* - Sweet Dish (once in a week)
Pulao (on Festivals)	One Local preferred vegetable (on Festivals)		Sweet Dish (on Festivals)

superintendent provided in every residential school.

Mid-day Meal Programme with a difference

The residential schools managed by the tribal development departments have paved way for the implementation of mid-day meal programme in the primary schools managed by the respective state education departments. The residential ashram schools serving the tribal although struggled in the initial stages in managing the feeding programme as the school children have to feed meals of the entire day it was a challenging task as the schools have to take into account the feeding habits of the newly entering tribal children to the schools, as well as the preference of their food items. The interior location of the schools always remained a major problem in receiving the ration for the schools and adequate care for nutrition, health and hygiene in providing food to children. On the other hand the residential schools have to face the challenges of training the newly admitted tribal children to the schools in various activities of the school including the dietary habits, as the children have different patterns of food which they consume at home and the timings as well as methods of preparation etc.

The residential schools had the task to suitably supplement with proper food making the tribal children healthy and attentive and fit to undertake their studies as the tribal parents lack awareness in providing adequate nutrition supplements in their food and understand various kinds of deficiencies which have affected the health of the children. These schools being located in the tribal areas utilise the forest resources such as water from the rivers, dry wood for cooking, freely available vegetables etc. In addition, some of the schools which have good cultivable land develop seasonal vegetables in the kitchen garden and utilise the vegetables in the daily menu of the schools. Unlike the schools managed by the education departments, these tribal residential schools had the advantage of having dedicated cook appointed for preparing the food for the children, and provision of a school superintendent lessened the burden of food preparation on the school teachers as well as the children so that they can concentrate in providing sufficient time for the teaching, learning and other co-curricular activities of the school. The records are also maintained by the school superintendent and submitted to the assistant tribal development officer every fortnight and the funds are also released for the procurement of food items on a regular basis. The food which is prepared for the school children are also shared by the teachers and the other school staff in the residential schools.

The Ashram Schools in majority feed adequately the children with reports of proper nutrition among these children and regular health checkups ensure there are no mal nutrition and health problems, and some basic health problems such as scurvies, worms and diseases due to local seasonal change are cured by the local health center Para-medicos. The processes of de-worming and vitamin deficient

medicines are provided to the students from time to time. Interesting observations are there from the teachers and staff of the school such as – when the children go for the long vacations and return to the schools, the children return weak and mal nourished and they take time to recover their health, which is a good indication of a good impact of the school feeding as well as the environment on the tribal children studying in the residential Ashram Schools.

However, some of the residential schools do face problems in managing the schools, and more particularly the states which have not opted the funding of tribal residential schools from the Ministry of Tribal Affairs face resource crunch in meeting a variety of demands of the residential schools as each and every item in the residential schools has to be taken care by the government including full day food for the children, and more particularly the schools which have low enrolments and located in isolated terrain tribal habitations are adversely affected. As the schools are inaccessible, the teachers develop a tendency to be irregular and the superintendents and the other staff are very casual in their approach, and the tribal parents don't confront the teachers the functioning of these schools are affected and the children are devoid of regular food in the schools and the schools don't function regularly. While some of the residential schools the menu of the food to be served is not strictly followed and the children do not get good quality as well as food and dropout or run away from the schools. The schools which don't provide items such as eggs, mutton and chicken once a while in the school also face resistance from the children and they skip their food and develop a tendency to drop out of the school. Although majority of the residential schools were able to provide cooked food regularly to the children and staff, the schools sometimes faced difficulties in getting the food in time as well as the worn out utensils replaced on regular basis which have spoiled due to regular usage, this was found to be a very common problem among the schools.

Concluding Observations

There is definitely a co-relation between the mid day meal and school feeding on enrolment in the schools, however, this programme can be more effective if the quality of food which is served in the schools is of satisfactory nature and the conducive environment can generate more retention in the schools. The catalytic role of the mid-day meal hence can't be undermined in overcoming the problem of enrolment and regularity in the attendance. The full day meal programme particularly in the schools served in the disadvantaged areas and economically backward areas lessen the burden of the parents particularly the mothers who have to plan for a breakfast, lunch for the children before they go to the schools (Dreze et al, 2003). A child whose stomach is full and is healthy can definitely concentrate better in the studies which can have a cumulative effect on learning, achievement, retention, and upward mobility to higher classes. When the schools take care of the food, health and nutritional security

of the children, the children to a great extent can be active learners in the schools. This in turn can enable the schools and the teachers to focus their attention in providing good learning inputs to the children effectively.

The Ashram Schools in general have addressed to a variety of issues related to – food security, day-to-day requirements of the children, residential facility, learning material, health, physical development, socialisation in the school, and nurturing confidence among the children as well as teaching them to live together and learn from each other the socially accepted values and ethos. The school feeding programme in these residential Ashram Schools has positive impact on learning to live together and eat together harmoniously and has also taken care the health of children in terms of the requisite nutritional needs and overcoming hunger in schools. In the absence of such arrangements, the residential schools could not most probably retain the children in the schools. The school feeding programme influenced the regularity of school children and minimised malnutrition. Thus it has resulted in putting an "end to hunger among the children by initiating learning in the schools". So learning in the Ashram Schools goes beyond the prescribed textual curriculum and carves out the desired values of the society among the children while ensuring regular feeding in the schools and good health of the children, which being one of the most necessary pre requites for effective learning to take place in the schools. In these residential schools, the teachers who also reside with the children and are having a major role in taking care of the learning, school feeding as well as other needs of the resident children also bound to be regular, otherwise the activities of the schools are adversely affected. The accountability on the part of the teachers and the staff of the Ashram Schools becomes very crucial, which ensures at least regularity both among the teachers and the taught. This can be considered as a positive influence of attaining retention among children and control over teacher absenteeism in the schools which have cumulative effect on the universalisation of primary education among the disadvantaged groups.

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Teacher Orientations through Satellite Communication

Some Experiences

RAJENDRA PAL* AND PRATIMA PALLAI**

Abstract

The teacher training through distance mode is now an established system in India, especially after launching of dedicated satellite for education "EduSat". National and state level agencies have been organising various training programs for teachers through EduSat. It has solved the problems of non availability of large number of competent resource persons, quality dilution and transmission loss during training and inability to cover large number of teachers at different locations. This paper is an attempt to review the history of teleconferencing in India and its various attempts with in the country including shift from one way video to two way video-conferencing through EduSat. The paper also highlights the research studies related to teleconferencing with special reference to programs and researches with EduSat. This paper is also an effort to describe the major programs conducted by CIET through EduSat for orientation of teachers of KVs, NVs and other CBSE affiliated schools for newly developed text books based on NCF, 2005.

Introduction

The level and quality of education is one of the most significant parameters for development. In our country the total literacy has gone up over the years but the quality needs tremendous improvement. The pivotal role of education as an instrument of social change by altering the human perspective and transforming the traditional mindset of society is well recognised. The universalisation of education has become the top priority, especially for the developing countries like India. However, the extension of quality education to remote and rural regions becomes a Herculean task for a large country like India with multi-lingual and multi-cultural population separated

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by vast geographical distances. Since independence, India has seen substantial increase in the number of educational institutions at primary, secondary and higher levels as well as the student enrolment. However, the lack of adequate rural educational infrastructure and non-availability of good teachers in sufficient numbers adversely affect the efforts made in education. In the conventional cascade model when large numbers of teachers have to be trained through face-to face mode, information loss is a major concern by the time information and skills are passed on to those for whom training was really meant.

Satellites can establish the connectivity between urban educational institutions with adequate infrastructure imparting quality education and the large number of rural and semi-urban educational institutions that lack the necessary infrastructure. Besides supporting formal education, a satellite system can facilitate the dissemination of knowledge to the rural and remote population about important aspects like health, hygiene and personality development and allow professionals to update their knowledge base as well. Thus, in spite of limited trained and skilled teachers, the aspirations of the growing student population at all levels can be met through the concept of tele-education.

The first attempt toward satellite instructions

The concept of beaming educational programs through satellites was effectively demonstrated for the first time in India in 1975-76 through the Satellite Instructional Television Experiment (SITE) conducted using the American Application Technology Satellite (ATS-6). During this unique experiment, which is hailed as the largest sociological experiment conducted anywhere in the world, programs pertaining to health, hygiene and family planning were telecast directly to about 2400 Indian villages spread over six states. Later, with the commissioning of INSAT system in 1983, varieties of educational programs are being telecast. In the 90s, Jhabua Developmental Communications Project (JDCP), Training and Developmental Communication Channel (TDCC) further demonstrated the efficacy of tele-education.

The History of Teleconferencing in India

The origin of teleconferencing can be traced back to the development of satellite technology by the Indian Space Research Organisation (ISRO). The most important development occurred in 1975, with the beginning of a project called Satellite Instructional Television Experiment (SITE), the first of its kind in the history of development communication. The SITE project was a joint effort of an Indo-US Agreement, under which the United States loaned its Application Technology Satellite-6

(ATS-6) to India for a period of one year. Except for the satellite, all the hardware ground system was the responsibility of the ISRO. The SITE programmes were received simultaneously in 2,400 villages for

target audiences who had no prior exposure to television. Apart from acquiring the technical competence of developing, testing, and managing satellite based television infrastructure, the major objectives of the project were to improve primary education, provide teacher training and create awareness in the areas of health and nutrition, population control, agriculture, general improvement in quality of life (Agarwal, 1978). The success of this experiment demonstrated the feasibility of satellite communication and opened new outlook for satellite application for education and development and interactive television ('teleconferencing' being one of them).Teleconferencing over the years has evolved as a unique delivery system to emancipate education from within the four walls of conventional classroom.

1979 - ISRO and the Post and Telegraph Department, Government of India jointly organised a national seminar in teleconferencing mode for professionals assembled at Ahmedabad, Delhi, Mumbai, Kolkata and Chennai during Satellite Telecommunication Experiment Project (STEP) using Franco-German satellite SYMPHONIE's transponder (Chaudhary, 1999).

1983 - Teleconferencing technology was tested exclusively for education with ISRO's course on satellite communications for engineering students using APPLE. Apart from testing the system efficacy, the experiment also investigated the impact of teleteaching in terms of knowledge gain, which was found to be significant (Agarwal and Pande, 1992).

1983 - Indian National Satellite System (INSAT), India's first geostationery satellite, was launched. The indigenous satellite facilitated broadcast of University Grants Commission's enrichment program for undergraduate level students (CWCR) and NCERT's programmes for children (ETV).

1991 – A three-day training program for trainers of adult education in Gujarat was conducted in collaboration with Gujarat Vidhyapeeth through INSAT-1B. Trainees from rural background viewed programmes through teleconferencing as an effective approach and used talk back facility with ease. UGC conducted talk-back experiment for undergraduate students in Science, Arts, and Commerce for a six-day period in the same year involving eight receiving ends: Ahmedabad, Kolkata, Hyderabad, Imphal, Jodhpur, Madurai, Patiala and Roorkee. The question-answer sessions conducted after each program were found to facilitate comprehension of the content. Many educational institutions showed enthusiasm to use the system (Agrawal and Pande, 1992).

1992 - Skill development training on maintenance engineering for the supervisory staff of the industries at eight locations, followed by Bhiwani Experiment for development functionaries, and Institution of Electronics and Telecommunication Engineers (IETE) experiment involving 11 locations were conducted. These experiments repeatedly endorsed the potential of teleconferencing as a "distance neutral" technology, which could be used to great advantage in formal and non-formal education (Agrawal and Pande, 1992).

1993 - The ten-day long first IGNOU-ISRO teleconferencing experiment covered 525 participants. The transmission was carried out for five hours every day. It became a major landmark in the extensive and continuous use of teleconferencing for distance education and provided useful insights in organisational, managerial and technical aspects involved in the teleconferencing system. Ten regional centres were chosen as receiving ends. The success of the experiment prompted the university to include teleconferencing as a regular component of IGNOU's student support system (Chaudhary, 1999).

1995 - The Training and Development Communication Channel (TDCC) of ISRO became operational using the transponder of INSAT 2-C earmarked for the purpose to implement one-way video and two-way audio teleconferencing network on a regular basis for IGNOU and other user agencies for tele-teaching, tele-counselling, tele-training, academic seminars, and other related activities. The teaching-end facilities including studio and uplink were provided at IGNOU campus at New Delhi and at Space Application Centre (SAC) campus in ISRO, Ahmedabad. Gradually several users such as AIMA, NCERT, NIPCCD, State governments of Gujarat, Karnataka, Madhya Pradesh, Orissa and Rajasthan, NGO's like SEWA joined in to take advantage of this powerful technology on a regular basis. Later, four more teaching ends were established in Bhopal, Mysore, Gandhi Nagar and Cuttack (DECU, 2003).

2001 – Initiation of *Gyan Darshan 2* (GD-2) at IGNOU, a digital channel devoted to one-way-video and two-way audio teleconferencing enabled the University to serve its teleconferencing needs more effectively. GD-2 also extends tele-conferencing service to other user agencies: NIEPA, ICAI, NCERT, RCI, National Trust, and other user agencies.

Various attempts of Tele-conferencing

In any ODL system, tele-teaching is a boon for its students who can see, listen and more importantly, interact with their teachers and other experts drawn from the field**.** For students of conventional colleges and universities, particularly those living in small towns, rural and remote areas, teleconferencing provides a rare opportunity to be benefited by the expertise drawn from different fields. Dr. B.R. Ambedkar Open University (BRAOU), Hyderabad, Andhra Pradesh, Yashwantrao Chauhan Maharashtra Open University, Nashik, Maharashtra; M.P. Bhoj (Open) University, Bhopal, Madhya Pradesh; Goa University and several other government and privately run institutions are delivering their courseware partially through teleconferencing mode. For IACI, and some other institutions, teleconferencing is an important mode for extending their reach to their enrolled students.

Jhabua Development Communication Project, a major initiative of ISRO was implemented in the tribal belt of Madhya Pradesh, from 1996 where even STD lines were not easily available. To facilitate talkback, a custom made computer called Demand Assigned Multiple Access (DAMA) was installed at each receiving node. DAMA used the

same satellite link for real time talk back. Further, it overcame some other barriers to communication, such as holding time of telephone call by registering a centre in the beginning and processing the sequential asking of questions later from each centre (Trivedi, 2004). TDCC's expansion as Gramsat Pilot Projects for different states in the country is a good example of effective use of teleconferencing for rural development. It is primarily concerned with establishment of communications networks at the state level connecting state capital to district and blocks in order to reach the villages, providing computer connectivity, data broadcasting and TV-broadcasting facilities for applications like e-governence, besides other utilities. The GPP networks are operational in Gujarat, Karnataka, Madhya Pradesh, Orissa, Rajasthan, Andaman and Nicobar, Goa, and Himachal Pradesh (DECU, 2003). GRASAT–Northeast Region has been the recent addition, run by North east Space Application Centre, Shillong for effective e-governance of seven states of the region characterised by its difficult terrain and tribal prominence.

For IGNOU, teleconferencing is a round the year activity for its academic programs, facilitated by a strong network of downlinks at its 57 Regional Centers 4, Sub-Regional Centers and about 1300 Study Centers, all over India. For MBA, CEMPA, MCA, Nursing, Health Care, Intellectual Property Rights, and other professional programs, teleconferencing has been integrated as a complementary component of the learning package. The induction programs for new students, important announcements, review meetings, orientation of staff at Regional Centers, and convocation are other major activities of IGNOU, which are carried out in teleconferencing mode.

The District Primary Education Project - Distance Education Program (DPEP-DEP), a comprehensive national program aimed at attaining Universal Elementary Education, is an ideal example of judicious mix of teleconferencing with other media and face-to-face components for the purpose of orientation, sensitisation and training. Teleconferencing played a pivotal role in successful implementation of the project in reaching out to more than 23,000 primary school teachers, teacher educators, and other functionaries associated with primary education in 18 states. In all, 112 teleconferences were organised at the national and state levels (DEP-DPEP, 2003). Presently DEP-SSA (Distance Education Program – Sarva Shiksha Abhiyan) is using teleconferencing as a cost effective intervention on a much larger scale. According to DEP-SSA annual report for the period 2004-2005, DRS (Direct Reception Sets) have been installed at all DIETs (District Institutes of Education and Training) and other concerned centers to provide maximum teleconferencing connectivity. During 2004-2005, 31 teleconferences at national level and state level have been organised. In a single teleconference, "Teaching of Science through experiments" conducted for SSA in Rajasthan, approximately 1800 teachers participated. This bears testimony to the magnitude of the tasks being

accomplished through this interactive technology in SSA program.

Research studies in Tele-conferencing

Research studies in the area of Teleconference indicate positive impact of this methodology used in training of in service teachers. Phalachandra (1997) narrates his experience of using tele-training methodology for special orientation program for in-service primary school teachers on the subject of hard spots in Mathematics. The evaluation of the program revealed not only significant gains in knowledge but also a high level of satisfaction and motivation among participants, who indicated their preference for interactive teleconferencing compared to conventional means.

Phutela (1998) underneath a pilot project experiment on the use of teleconference to orient 850 primary school teachers in the state of Karnataka in India. The evaluation indicated significant gains on the learning of concepts and practices relating to the large number of themes covered in the program. The teachers welcomed the technology, but bemoaned the lack of opportunities to interact with the experts because of limited telephone lines. The experiment demonstrated the potential of the technology in meeting the training requirements of large groups, such as teachers, at a distance.

Parkash and Lal (1998) studied presentation and production aspects in relation to the effectiveness of teleconferencing for orientation of primary school teachers. They found that language, presentation style, pace of presentation, clarity of graphs/charts/ text used and the teaching aids had a direct bearing on effectiveness of teleconferencing. They suggested that the design of the sessions should be learner oriented and spontaneous to ensure active participation of the learners, for which the experts/ presenters must be trained in teaching/ learning through interactive technologies.

Taleem Research Foundation (1999) assessed the effectiveness of the teleconferencing system of the Distance Education Program of District Primary Education Program (DEP-DPEP) in the state of Tamil Nadu. The study found that the participants were in favours of teleconferencing because of its novel nature and perceived benefits, technology was user-friendly in nature, and the interest level was high among the participants on the first day and kept on increasing day after day.

The problems and concerns discussed above are one way or the other linked with managerial and organisational issues. Trivedi (2004) identifies: ad-hoc planning, deficient management practices, and lack of training to facilitators, inadequate monitoring documentation and evaluation processes as factors impeding the optimum utilisation of such a powerful technology. Such issues can only be redressed at policy level before they manifest in a multitude of small problems creating chaos for small setup which have limited means. Smaller issues such as appropriate placement of telephone for students to ask questions need to be attended to; the onus of trouble shooting lies with the

management of respective learning ends. Attention to details in planning, facilitating comfortable viewing conditions, proper talk back links with the teaching-end enhances the quality and effectiveness of teleconferencing.

Shift from one-way video to two-way video-conferencing

After launching of Edusat, teleconferencing is in a state of rapid transition, from one-way video and two-way audio to two-way video and two-way audio mode. A learning-end can not only be heard but also be seen at the teaching-end as well as other learning-ends. This has induced equivalence between teaching-end and learning-ends.

Edusat objectives include providing support to formal and non formal education and teachers' training programs, increasing access to quality resource persons, enhancing community participation, taking education to remotest corner of the country, strengthening the distance education efforts initiated by various agencies, providing access to new technologies. Teleconferencing is the crucial means for implementation of Edusat objectives. Edusat has a great deal to offer to teleconferencing. In order to understand this, it is imperative that we look at some specific features of Edusat in operational terms. Edusat supported teaching-ends has connectivity with central repository and databases, through intranet and internet. These resources including multimedia teaching aids, VCD/DVD clippings/graphics, illustrations, charts would be at the disposal of teacher in off-line or on-line mode for self-learning and enhancing the quality of teaching. The teaching-end has also provided storage facility for live lectures to reuse and editing. At the learning-end, besides two-way teleconferencing, the satellite Interactive Terminals (SITs) has given immense control to the student for asynchronous learning through automatic local storage of live lecture for reuse. A student is able to access teaching-end in off-line mode also. That is, Edusat supported networks has provided access to content (lectures, supplementary materials etc.) on demand.

Edusat user-friendly technology has an inbuilt rectify mechanism for many of the existing interrelated problems that teleconferencing is confronted today. For instance, 'time' is not remain a constraint anymore with the off-line access to tele-lectures and other supplementary materials. Interactivity, sense of participation, immediacy has definitely improved because the participants are also visible. Moreover, since audio link is through Edusat, the chances of signal break and poor audibility is minimised. Presentation of the teleconferencing has easily enhanced since teaching-end has access to all resources that a teacher need to improve her/his tele-teaching, i.e. updated information, interesting examples, visuals, graphics and so on.

EDUSAT: The first dedicated satellite for education

With the success of the INSAT-based educational services, a need was felt to launch satellite dedicated for

educational service. To meet the above demand ISRO conceived the EduSat project in October 2002 and launched on 20 September 2004, from the launch pad of the Satish Dhawan Space Centre, Sriharikota, AP exclusively for the educational sector. .It has a C- band national beam, a Ku band National beam and Five Ku Band regional beams. It was a collaborative project of MHRD, IGNOU, and ISRO. EduSat is designed to provide service for seven years.

EDUSAT is a technology network comprising:

- Uplink station in selected national and state locations (to act as teaching end)
- Downlink stations or facilities in various educational institutions (as learning end)
- Satellite

Programs and researches with EduSat

After establishment of teaching end at CIET along with 100 nods as learning ends around 30 programs of various kind and nature are organised. The approximate number of days for which the programs were conducted is 175. These programs were conducted by various constituents units of NCERT viz. Pundit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE), Curriculum Group, Department of Teacher Education and Extension (DTE&E), Department of Women's Studies (DWS), Department of Educational Psychology & Foundations of Education (DEPFE), Department of Education of Groups with Special Needs (DEGSN), Department of Science and Mathematics (DESM) and CIET. However, the focus of this article is limited to the three major programs of DTE&E regarding orientation of teachers on the use of new textbooks published by NCERT based on New Curriculum Framework, 2005

The orientation program for the teachers of KVS, NVS and CBSE affiliated independent schools on use of new textbooks developed by the NCERT for I, III, VI, IX and XI standards was organised through videoconferencing during 6 July to 20 August 2006 in 25 learning centers operationalised in the States/UTs of Andhra Pradesh, Karnataka, Tamil Nadu, Kerala, Chandigarh, Chhattisgarh, Himachal Pradesh, Madhya Pradesh, Rajasthan, West Bengal, Orissa, Gujarat, Uttarakhand. Major themes of interaction includes highlights of National Curriculum Framework (NCF)-2005, syllabi and focus group reports, major changes in the textbooks, guidelines for using textbooks, suggested classroom activities and the evaluation strategies to be adopted by the teachers. The participants had opportunities to have live interaction with the experts to express their observations and to have experts' views on various queries from them. Over 10,000 teachers participated in the program extending a period of 36 days covering different subjects. This was the first time, when users (teachers) from all parts of the country interacted directly with the textbook writers/developers and experts in different subject areas and shared their, queries, observations and suggestions. Chairman, National Steering Committee (NCF-2005); Director, NCERT; Chief Advisors of various Textbook Committees, Chairman, CBSE;

Commissioner, KVS along with experts from Universities, other organisation, as well as faculty of NCERT and Commissioner NVS have also interacted with the teachers during the program and clarified many issues. This programme has been appreciated by our former President APJ Abdul Kalam and found spaced in his speech given on the eve of Independence day 14 August 2006.

Another orientation program was organised to orient the teachers of Kendriya Vidyalaya (KVs) Navodaya Vidyalaya (NVs) and CBSE affiliated schools. This program was organised for the teachers to orient them with the new textbooks of NCERT. The program was organised from 9th July to 21st August, 2007 by NCERT through two way video conferencing of EDUSAT network at CIET. The need to orient teachers on new textbooks of NCERT was generated with the development of the curriculum framework–2005 on school education. This time the books for Classes II, IV, VII, X and XII were published. This 36 days program was conducted in such a way that one textbook of a class was discussed with the teachers for one whole day. Around 15,000 teachers were oriented on 30 different centers of NCERT network across the country located at various SCERTs, RIEs, SIETs, KVs and other institutions. Approximately 30 teachers were invited to attend that program on each learning center. The teaching end was at CIET studio where panelists including textbook writers, coordinators, advisors and experts were present. The finding of the evaluation study (Pal Rajendra 2008) reveled that: (i) majority of respondents (29%) recommended that tele-conferencing program should be conducted three times a year; (ii) 31% experts observed that audio and video disturbances occurred during presentation; (iii) Some of the teacher respondents suggested that duration of the entire program should be increased; 65% of panelists expressed that they were getting advantage in answering question centre wise.

In the third Phase of EduSat training for textbook, NCERT has also organised orientation program for teachers of NVS, KVS and CBSE affiliated schools for newly published text books for Classes V and VIII. The program was organised for 11 days between 16th July to 2nd August, 2008. Around 25 centres were utilised to cover the teachers all over the country.

In the first phase the EduSat Project was implemented in all the primary schools and few selected secondary schools (Grade VIII) of Chamarajanagar districts and 14 schools of HD, kote of Mysore districts. The main objective of the program was to develop quality broadcast video materials in language and core subjects (Maths, EVS). RIE Mysore has taken of the evaluation component of this project. The four video films were identified for field testing and the finding shows that (i) though the topics had been taught in the schools, the initial level of performance was good. (ii) The increase in the mean achievement statistically significant with respect to two films of grade VI and one film of grade V. (iii) The achievement difference in Mathematics were not significant. This indicates that the films in Mathematics' should be handled with care (Phala Chandra 2006).

In a recent research review, Phalchandra (2007) found that the launch of EDUSAT has helped in providing quality instruction through video programs to students studying in the interior villages. The students have benefited from the video programs delivered through the Satellite. The benefit gained is in terms of gain in knowledge and understanding of the content, improvement in attendance and holding attention and interest in viewing programs. The teacher involvement during the broadcast as facilitator and conduct of Pre and Post broadcast activity is note worthy. A study of UGC, CEC, 2008 reveal that in some institutions, the numbers of viewers are more but in many, the number is very less. This in a way reflects under utilisations. One of major reasons for technology problem during telecast of lessons and in interactive sessions is low bandwidth. There is an urgent need to improve the quality of the telecast. In almost all centres EduSat program are looked after by faculty members who are given additional charges. This arrangement works well in some institutions and in some others due priority is not at all given. As it is an important program, it needs to be managed by persons dedicated for the work. Teaching aids, particularly PowerPoint is used in a limited way by most of the resource persons but the quality of which requires improvement.

A study of Haryana Government EduSat network, 2008 found that Majority of resource persons were of the opinion that presenters used PowerPoint presentations, photos and asked questions, video quality, largely, was found to be satisfactory or good but problems were experienced in audio. Around 61% of the coordinators opined that interaction was held during interaction. Most the resource persons found EduSat network effective for distance education.

Conclusion

It can be concluded that satellite communication for education in general and for teacher education with specific reference is very well established and utilised. It has contributed a lot to teacher education. Lots of teachers have been trained through EduSat. The launching of EDUSAT has already passed four years. We have experienced various activities and functions related to this network. However, the researchers feel that all the possible functions of EDUSAT network have not been fully explored for teacher education. Before the life span of EDUSAT expires, we should modify forthcoming programs on the basis of our experiences. All the possible ways to use this technologically innovative boon can be explored and tried for training, retraining and quality improvement of teacher education in the country.

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Addressing Teachers on the issues of new textbooks in English Language

An experience through video conference

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Abstract

This paper presents a brief report of a interactive session during videoconferencing programme organised for assessing and addressing teachers' understanding about new textbooks of English Language developed by NCERT for Classes I to XII on the basis of National Curriculum Framework-2005. The inputs received from a group of about 6070 English teachers through their direct interaction with experts on NCF-2005,new syllabi and textbooks is valuable towards undertaking exercise on continual improvement of textbooks and development of related educational materials for qualitative improvement of education in the country. All the reflections, views, observations, suggestions and also questions/queries on different aspects of curriculum framework, syllabi, textbooks made by the language teachers teaching English from Classes I to XII are analysed by the subject experts and interpretations were made. These are available with the NCERT for the use of teachers who are teaching English from Classes I to XII and have not attended the video conferencing on the use of new textbooks developed by NCERT.

The National Council of Educational Research and Training (NCERT), New Delhi is an apex organisation in the country which is concerned with curriculum development and production of teaching learning material for school level education. In line with the provisions of National Policy on Education, NPE 1986 concerning periodic review of implementation of various parameters of new policy, the NCERT has come out with a National Curriculum Framework (NCF-2005).The significant distinguishing features of NCF-2005 includes:

- The objectives of student learning and development are derived from the values enshrined in the

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Constitution and contemporary concern for strengthening unity and national identity in a multicultural context and enabling the nation to face the future challenges.

- It is recognised that knowledge is constructed by the child, which implies curricula, syllabi and textbooks should enable the teacher in organising classroom experiences in consonance with child's nature and environment and thus providing opportunity to all children to learn. The teaching should aim at enhancing childrens' natural desire and strategy to learn. The knowledge needs to be distinguished from information and teaching needs to be seen as professional activity, not as coaching for memorisation as transmission of facts.
- Emphasis on systemic reforms through availability of minimum infrastructure and material facilities for improved teacher performances, Strengthening the Panchayati Raj Institutions and encouraging community participation for enhancing accountability and ensuring quality education to all, Shift from content based testing to problem solving and competency based assessment, Locally planned, flexible school calendars and time tables and promotion of teaching as a profession by recasting Teacher Education Programme to reflect professionalism in the process of training and teaching. In all the four areas of school curriculum i.e. language, mathematics, science and social science significant changes are recommended with a view to alleviate the stress with which children are coping today. The NCF-2005 recommends softening of subject boundaries so that children can get a taste of integrated knowledge and the joy of understanding.
- Connecting knowledge to the life outside the school and enriching curriculum by making it less textbooks centred. The guiding principles of curriculum development being curriculum to be an inclusive space-the space that extends beyond conventional curricular realm of textbooks, shift of learning away from rote method, curriculum for overall development of child, making examinations more flexible and integrated with class room life and nurturing an overriding identity informed by caring concerns within the democratic polity of the country.

On the basis of NCF-2005 syllabi have been prepared and the textual material has been developed in a phased manner. The textbooks for Classes I to XII in all subjects have been developed and published during 2006, 2007 and 2008.

While the syllabi and textbooks were under preparation / publication it was realized that the training of teachers covering various aspects of NCF-2005, syllabi and the textbooks in different subject areas is extremely important as they are key to transact the new curriculum through the new textbooks

in line with the thinking embodied in the NCF-2005.In order to provide vast coverage to include large number of teachers for their orientation /training and also the feasibility of interaction of teachers with experts it was considered beneficial to utilise the facility of EDUSAT for the organisation of orientation/ training Programme through videoconferencing. In view of the above orientation programme for the teachers of Kendriya Vidyalaya Sanghathan, Navodaya Vidyalaya Samiti and CBSE affiliated independent schools on the use of new textbooks developed by the NCERT for Classes I to XII standard through videoconferencing were organised as per schedule given below.

Methodology

The videoconferencing extended over 88 days, followed by three sessions on each day and in each of the sessions the following activities were undertaken:

(i) Presentation by Experts/Resource Persons: (30 minutes)

(ii) Group work by the teachers on the theme of the previous session at learning centers: (30 minutes);

(iii) Live interaction of teachers with Experts/Textbook writers: (60 minutes).

In one day programme 90 minutes were devoted to the presentations by the experts;90 minutes to group work at the learning centers and 180 minutes were devoted on Live interaction of teachers with experts/resource persons.

During the videoconferencing the Experts' Presentations were made on (i) Textbooks with respect to the Salient features of New Textbooks *(Content, style, exercises and Illustrations etc.);* Reflection of NCF-2005 in Text books; Interconnection/continuum across subjects and levels (classes) of education and Guidelines for using Textbooks ; (ii). Teaching Strategies for selected topics in the subject areas and (III). Evaluation-with focus on-

Nature of students Activities/ Exercises with examples; Evaluation

Schedule of Video Conferencing

Phase/Year	*Dates*	*Classes*	*Subjects*
PHASE I 2006-07	July 6 to August 20, 2006	I,III,VI, IX,XI	I and III (Hindi, Eng., Maths., EVS) VI and IX (Hindi, English., Maths., Social Science Urdu, Sanskrit) XI (Hindi, English., Maths., Biology., Physics, Chemistry History., Geography, Economic, Business Study and Accountancy)
PHASE II 2007-08	July 9 to 21 August 2007	I,IV,X, and XII	II and IV I (Hindi, English Maths., EVS) VII and X (Hindi, English, Maths., Social Science, Urdu, Sanskrit) XII (Hindi, English., Maths., Biology., Physics., Chemistry, History Geography, Economic, Business Study and Accountancy)
PHASE III 2008-09	July16 to August2 2008	V and VIII	V-(Hindi, Eng., Maths., EVS) V VIII (Hindi, Eng., Maths., Sci., Soc.Sci. Urdu, Sanskrit)

strategies to be adopted by the teachers; internal evaluation and Model Question Papers.

This was the first time, when the teachers from different parts of the country interacted directly with the textbook writers/ developers, experts in different subject areas and the policy planners concerned with curriculum, syllabi and the textbooks. During these sessions (180 minutes) the participant teachers have put forward their, views, observations, suggestions, reflections and also questions/queries on different aspects of curriculum framework, syllabi, textbooks and practical aspects related to transaction of the curriculum to satisfy their curiosity and clarify their concepts. The experts' panelists have provided answers to their questions/ queries within the time available to them.

The proceedings of the videoconferencing while being telecasted were also recorded on Beta Tapes .The recorded tapes containing the live interaction of participants with the experts were replayed and the material was converted into textual form. This material is being used for developing more programmes on issues related to teacher training.

During the video conferencing 6070 language teachers who were teaching English to Classes I to XII in KVs, NVs and CBSE affiliated independent schools have participated in these interactive sessions. Class wise details are given below:

Teachers from different parts of the country interacted with the expert panelists who were involved in process of development and writing of the text books of English at various levels. The questions and queries asked by the teachers were belongs to different aspects of teaching of English at school level, which were further grouped in to different categories and presented in the Table 2.

The use of videoconferencing has been a pioneering effort enabling the orientation of a large number of teachers collectively across the length and breadth of the country with economy of time and financial expenditure and ensuring maximisation of availability and utilisation of scare resource- the resource person i. e. experts and textbook writers. The inputs received from the group of about 6070 English teachers through their direct interaction with experts on NCF-2005,new syllabi and textbooks is valuable towards undertaking exercise on continual improvement of textbooks and development of related educational materials for qualitative improvement of

Table 1 : Class-wise Number of Teachers, Teaching English and Total Number of Questions Asked by the Teachers during Interactive Sessions of videoconferencing

Class	*I&III*	*II&. IV*	*V*	*VI*	*VII*	*VIII*	*IX*	*X*	*XI*	*XII*	*Total*
No. of Trs	373	572	570	603	815	813	612	798	379	535	6070
No.of Qs Asked	66	47	33	97	120	48	69	125	140	55	800

Table 2 : Different Types of Questions asked by the English Teachers during Interactive Sessions of videoconferencing Class wise

Number of Questions related to								
Class/ Categories	*Syllabus Curriculum*	*Textbook Content*	*Evaluation*	*Teaching Methodology*	*Non-Availability*	*Infrastructure and other Support*	*Time Manage-ment*	*Total*
I and III	9	26	7	19	2	1	2	66
II and IV	-	24	06	13	02	-	02	47
V	4	13	7	9	-	-	-	33
VI	3	15	27	37	12	0	3	97
VII	17	32	09	53	07	01	01	120
VIII	7	23	12	06	-	-	-	48
IX	4	11	10	33	8	0	3	69
X	17	18	32	32	15	07	04	125
XI	19	23	33	47	17	0	1	140
XII	07	19	07	21	00	00	01	55
Total	87	204	150	270	63	09	17	800
%	10.8	25.5	18.5	33.7	7.8	1.12	2.11	

education in the country. All the reflections, views, observations, suggestions and also questions/queries on different aspects of curriculum framework, syllabi, textbooks made by the language teachers teaching English from Classes I to XII were analysed and answered by the subject experts. The interpretations based on analysis of interactions between teachers and resource persons are given in subsequent paragraphs which may be utilised by the teachers who are teaching English from Classes I to XII and who have not attended the video conferencing on the use of new textbooks developed by NCERT.

During the live interactive sessions the group of teachers in English subjects at different levels have expressed their views, observations and feedback about the NCF-2005, syllabi, new textbooks and the organisation of the programme and also put forward their questions/ queries to satisfy their doubts and curiosities. The analysis of the questions and queries indicate that in general, the participant teachers have appreciated the content and their presentations in the new textbooks. In general, questions/queries of teachers are related to concepts, illustrations, examples, exercises etc. given in these books and their critical analysis in the light of new syllabi and NCF-2005. Similarly, the important suggestions given by the teachers are related to continuum of concepts and elaboration at different levels; interdisciplinary linkages need for increased synergy between NCERT and the examining bodies like CBSE, ICSE, State boards, inclusion of practical examination/viva/voce in languages.

Curriculum, Syllabus and Text book

The questions and apprehensions of the teachers from Primary to Sr. Secondary stages, during video conferencing session are valid and worth appreciation. It shows their concern for their students and towards their responsibility in the class room. However, if we merge all the queries on syllabus and study them thoroughly we will find that there is lack of directionality, understanding and vision on the part of the teachers. The teacher is absolutely correct when she/he talks about the urban and rural divide and diversity existing in many situations in India. The text books should address these issues. The children should feel proud owners of a text book; it is possible if the child finds something which relates to his/her life experiences and something interesting to read. What is relevant and understandable for an urban child may prove totally meaningless for a rural child. NCF-2005 has seriously taken cognizance of this problem. It recommends plurality of text books, suitable for children in both urban and rural areas. The principle of honoring the values of democracy will be answered if no child is left out from the purview of the syllabus recommends curriculum 2005.

It may be highlighted here that NCF 2005 suggests teaching of English through whole language approach. The emphasis is on teaching language in meaningful contexts and we all agree that something more than grammatical competence is involved in acquiring language competence; the term "communicative competence" was

introduced to signify this extra dimension. The attempt to achieve communicative competence assumes the availability of a grammatical competence to build on. There is no doubt about the fact that grammar is the back bone of a language. The knowledge about the structure of a language and its usage is essential. The fear of the teachers as reflected in their, questions that grammar has been left out is unrealistic. NCF-2005 recommends that grammar should be contextualised. It should not be read and learnt in isolation. It should have a context, a basis from which it should emerge. And the learner should be able to understand the presence of grammatical items in a text. Now it is for the teachers to work out as well as create situations in the class room for contextualised, implicit grammar learning.

Another common problem which seems to run through Primary to Sr. Secondary stages as reflected in the observations made by the teachers is less representation of Indian writers in the textbooks and apprehensions of the teachers regarding use of multilingualism.

While answering these queries it is essential to bear in mind that NCF- 2005 is a national document which encompasses sociological, psychological and political factors prevailing in our country. Education is not a static concept; it is influenced by all the factors mentioned above. The vision of education remains the same but strategies to achieve that vision may change time to time that is why there is a need to bring about changes in the syllabus and text books. The teachers may find it too sudden and quick but then they themselves know how drastically and swiftly the changes are taking place all around us. When we talk of relating school life with child's own life we have in mind syllabus, text books as a takeoff point for bringing this change in our class rooms. English is in India today a symbol of people's aspirations for quality in education and a fuller participation in national and international life. It is predicted that by 2010 one third of the world's people will be learning English. The opening up of the Indian economy in the 1990's has coincided with an explosion in the demand for English in our schools because English is perceived to open up opportunities. In this scenario the role of language teachers become very crucial; the teacher's English language proficiency and the exposure of pupils to English i.e. the availability of English in the environment for language acquisition are essential preconditions for English language teaching.

There are thrilling times for Indian writers writing in English. There are many young Indian writers whose works in English have achieved acclaim. Hence the representation of Indian writers in text books is taken care of. There are translated works, authentic writings as well as references to Indian writings in the text books. It is suggested that teacher should take those lessons as points which can further be expanded and explored. The concept of multilingualism is also given due place in curriculum. Multilingualism is an approach, mindset to deal with language related difficulties. It is a very humane concept which makes us realise the presence and

dignity of all languages. It should not be misunderstood with translation method. It is a way of bonding all the languages. The use of two languages in the class room can be done in such a way as to provide comprehensible input in the target language, using the first language to provide background information. It is for the teacher to decide the levels of language mixing and use of mother tongue in the class room. The teacher can also make use of bilingual dictionaries, parallel texts at primary level. This exercise will gradually enrich the language repertoire and will definitely help in broadening the outlook of the learners. A broad, humanitarian global approach will emerge among the learners by making flexible use of languages. The teacher's pages in the text book provide a kind of guideline to them. At all levels an effort has been made to avoid stories with a background which is alien to the child, but a few pieces set in a different background are also incorporated intentionally, so that the children have glimpses of different cultures. In this era of globalisation there is no harm in introducing them to the parts of world with which they have no interaction. Above all the basic human values are not missed in these pieces. They too represent the essence of humanity.

Evaluation

It is astonishing to look at the number of questions asked on evaluation by the teachers during live interaction through videoconferencing. It reflects the stress which teachers are undergoing along with the children. No wonder there are suicides, break downs and many psychological problems which children undergo during the period of examination. We need to look into the issues which make the evaluation system so traumatic for children. Is there a gap between class room teaching and examination or the pattern of teaching is such that it implicitly induces stress for children. We need to understand that learning is not '*just in two minutes*' process. It is a long and a profound way of adapting familiar as well as unfamiliar things. If we speak in terms of pedagogy it involves certain methodologies also. The questions asked during videoconferencing as shown in data is a mirror of their concern for students but also of their confused state of mind. Perhaps they do not realise their own valuable role in breaking the barrier between class room teachings through syllabus based text books and examination/evaluation. In an ideal situation the class room transactions, including all interactions with children should smoothly flow into the boundary of examination. A recommendation in the NCF, an observation in the syllabus and lesson in the text book constitute a single whole. The "whole" is like an atom, comprising infinite energy, this energy is to be realised and experienced by the teacher as well as by the student. Now the whole process of breaking the atom may be very tenuous and hard.

The teacher on the one end is the most potential instrument as well as a facilitator of this process. Once the teacher realises his/her role, the battle is almost won against this so called "devilish character examination".

Besides this, there are many loopholes and discrepancies in the examination system particularly, in the case of language and literature course. If we have to judge the role of this, course we may find that language learning and language learning through literature has a very vast domain which goes beyond the class room and text book. Literature is a compilation of life's experiences. The rich fabric of these experiences has a special meaning for all the children irrespective of their class or level. Literature is a vehicle for attitude building and determining a value system for a child. It can not be assessed through formatted questions and certainly not through MCQs and short question answers. Hence a question paper setter should borne in mind the fact that literary piece will evoke different responses from different children. He/she should create a space for such responses in the question papers. Secondly short question answers may test child's information bank but would fail to check child's style of writing, her/her skill in developing an answer and use of language. Keeping in view the vast canvass of CBSE it has been decided that some changes will be there in the typology of questions. Other changes will follow. Continuous and comprehensive evaluation is the most efficient method of examination and assessment because unlike other disciplines language as a discipline is used most of the time and the teacher is the rightful person to assess the child's proficiency in language. Again speaking is another aspect of language spectrum which needs to be assessed. The suggestion of marking for oral work is widely accepted and justified also. An effort in this direction needs to be worked. Some weightage should also be given to children who prove to be good readers and those who have shown inclination for linguistics. The condition of KV system which holds teachers accountable for their result has relevance but then teachers' problems and difficulties should also be addressed. A kind of genuine flexibility should be provided to them so that they can do action research, invent and innovate.

At the present stage the suggestion of teachers during video conferencing that there should be counselors in schools is most welcome. Any standard professional help will be very beneficial.

Text book content and methodology

As we are aware that English as a subject has been introduced in Class I in almost 27 states in India, in spite of the poor infrastructural facilities and appropriate academic skills among teachers. The first criteria of English language teaching at class one in schools is availability of proficient teachers and secondly the input rich print/material environment. Researches and surveys have found that both the criteria are lacking in majority of the schools. The child's proficiency in English at the primary stage is very poor because of the factors mentioned. At the primary level lots of attempts have to be made irrespective of different approaches (behavioral or constructive) for children to develop an understanding and interest in the language. We all know that languages are learned implicitly by comprehending and communicating messages, either through listening or reading for meaning. A task based

methodology is suggested here. Beginning with action rhymes, simple plays, or skits, theatre as a genuine class activity can promote the child's engagement with language and its performance.

One of the aims of the education is to make children independent learners. The learners who would find solutions of their difficulties either through their own experiences or with the help of other resources. The teacher as a guide should equip him/her to 'look within' for answers and familiarise with all available areas of finding answers to their problems. There is no glossary provided at Senior Secondary level. The idea is to let children infer meaning from the context and in case of difficulty, discuss it with the teacher or dictionary. "Notes" given at the end of lesson provide suitable tips for understanding the lesson. It is observed that most of the teachers have found the content of the book difficult. One reason we could attribute to this problem is their non-familiarity with the content. The book presents contemporary literature with which, we hope, the children can relate. The issues and themes dealt in the text books are relevant to our present times. And again we will say that one of the principles of NCF is to relate the school life with life outside the school.

There is a persisting teacher concern that grammar is necessary for "accuracy" (as against fluency) in language. This presupposes that the learner has had enough exposure to the language to produce it with sufficient system to allow the identification of current errors. We must try to understand that grammar is not a route for developing primary or usable knowledge of language, but it can serve as a tool for increasing the language repertoire and for understanding the construction of text.

Recommendations

What emerges from the dialogue between Teachers and textbook development team is that textbook should be taken as a takeoff point. Personal life experiences of the teachers and students should be woven into the textbooks. Students should be taught to look into their textbook through a questioning eye aiming at building their knowledge. Here are a few recommendations which may be taken into consideration by the teachers.

1. Though textbooks are a major teaching resource in schools yet negotiated curriculum and source material other than textbooks, though not popular propositions should be encouraged.
2. Teacher's thoughtfully planning of what is to be taught in the class motivates teacher to depart from the script of the textbook.
3. There should be a linguistic and cognitive synthesis in all the classroom transactions and content of the language based activities should not promote memory based learning.
4. Memorisation of grammar rules, dates etc. need not be stressed.
5. Teachers should create space for local specific material. This will help in conserving area specific language inputs. And students will be able to develop linkage with

school life and life outside the school.

6. Text books for different stages should be developed in sequence. This will ensure appropriate and smooth transition of syllabi from one stage to another based on the cognitive development of the child.
7. States can make need based alterations/ adaptations in the textbooks developed by NCERT.

- For primary stages mere hands on activities are recommended with the involvement of teachers with children.
- The activities should generate print rich environment in the classroom. This will help in enhancing the skills of reading and writing among children.
- For senior secondary stage teachers should encourage students to read literary texts related to the text given in their textbook.
- Writing creatively should be encouraged from primary years to Senior Secondary stage for these teachers should develop the activities for young students. Senior students should also be encouraged for creative writing. Teacher should not depend upon text based activities.

The school curriculum is developed with a vision of inculcating academic richness and positive mental state among children. There are many factors which ensure this objective. However in this paper an effort has been made to clear the doubts of the teachers which were raised during teleconferencing, at the same time role of the textbooks, teachers and classroom transactions has been highlighted for translating the goals of NCF- 2005 into reality.

Through the conversation with teachers across the country, by video conferencing, a lot of problems and issues surfaced and some of them have been referred to their respective departments. After analysing the entire gamut of issues put forth by the teachers, one really appreciates the critical views of them on curriculum, syllabus, text books and teaching methodologies. But one who has been associated with the making of NCF-2005, feels let down and sad when there are no questions on current trends in English literature, when teachers do not ask the names of English journals which they should subscribe for their students. There are also negligible questions on the provision of infrastructural facilities. Their criticism has not saddened us in any way rather it is a stimulus for further action, we still are waiting for notes of positivism to ring.

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Grading System for Schools

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Abstract

Reforms in the examination system are often recommended, sometimes discussed and rarely implemented. Introduction of Grading System in Assessment is one of such reforms which have undergone a painful journey. Very few state education boards have attempted to declare results in terms of grades in some or other form. CBSE is on the threshold of replacing marks by grades for Class IX in 2010 and Class X board examination in 2011. Therefore, a detailed picture about grades, usefulness of different types of grading scales and their implications are presented in this paper for better understanding and acceptability by this reform.

The Reforms in the examination is one of the important areas in which all Committees and Commissions on Education had made number of recommendations. The reforms were once again revisited in National Curriculum Framework (NCF) – 2005. The Position Paper on Examination Reforms has reiterated number of reforms such as introduction of the grading system, implementation of the school based continuous and comprehensive evaluation, use of multiple techniques of testing, online and on-demand examinations, abolishing pass/fail declaration etc. Since National Policy on Education (NPE) 1986, the issue of grading system has been discussed and debated upteen number of times in the National Conferences of the Chairpersons of the Boards of School Education. Some of the boards have attempted to introduce grading system both in scholastic and other areas like arts, health and physical education etc. The examples can be cited of Central Board of Secondary Education and Kerala Board of Public Examination, Goa Board of Secondary and Higher Secondary Education, Haryana Board of School Education. All these boards don't have a uniform system of grading as each one is doing in its own way. Inspite of that, the unreliable raw marks still continue to dominate the examination results which promote unhealthy competition among the children (even among parents) at different stages of

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school education. Different systems of grading are used in developed countries to classify and certify students' performance.

The Grading System

The 'word grade' is derived from the Latin word *gradus* where it means 'step'. Grading is a process wherein subjects may be classified on the basis of pre-defined standards and aimed at minimising misclassification. In educational context, grading is essentially a method of communicating measurements of students' achievement. It involves the use of a set of symbols or numerals that ought to be clearly defined and uniformly understood by the students, teachers, parents and all other stakeholders. The absence of either of these will defeat the very purpose of awarding grades.

To measure achievement in terms of exact numbers like 50 or 51 is difficult though we accept these raw scores as true scores. Therefore, a better way of classifying and certifying students into different classes and categories is to put them into certain ranges or bands or grades. Therefore, students of similar ability will be put in a one group known as a grade. Thus the entire 101 point scale from 0 to 100 marks can be divided into 5 point or 7 point or 9 point scale depending upon our requirement. For example all students having marks between 91-100 can be awarded grade A and those from 81 upto 91 can be awarded grade B and so on. In this way the mis-classification of students will be minimised over a large range of marks but it will remain at the cut off points of each grade. The score at the cut off points can be re-examined and if possible the benefit can be passed on to the students by awarding a higher grade if the experts feel so. To enhance the usefulness of these grades for the purpose of awarding merit scholarships or admissions to other higher classes etc., each grade can be assigned in numerical value such as 9 for grade 'A', 8 for grade 'B' and so on which can be used to determine the Grade Point Average (GPA).

While developing the grading system it is of utmost significance that the meaning of each grade is clearly spelt out. Having done so, it becomes obligatory on the part of each examiner to adhere to the specified system of grading. This would, however, in no way encroach upon the autonomy of the examiner to determine which grade to award to a particular student. A properly introduced grading system may not only provide for the comparison of students' performance, but also indicate the quality of performance with respect to amount of efforts put in and the amount of knowledge acquired at the end of the course.

Methods of Assigning Grades

Grading may be carried out in a variety of ways. The classification depends upon the reference point. When the reference point is the 'approach', grading may be classified as direct grading and indirect grading. When the reference point is the 'standard of judgement', the grading may be classified as absolute grading and relative grading.

Direct Grading

In direct grading, the performance exhibited by the examinees is assessed in qualitative terms and the impression so obtained by the examiner is directly expressed in terms of letter grades. This method may profitably be exploited for the assessment of both cognitive and non-cognitive learning outcomes; however, it is preferred for the assessment of non-cognitive learning outcomes. It is suggested that non-cognitive factors that are important should be enumerated stagewise and evaluated and reported separately in terms of letter grades. Employability of a three-point or a five-point scale for grading may be determined in consonance with the nature and the quality of the attribute. One of the advantages of direct grading is that it minimises the inter-examiner variability. Besides, it is easier to use in comparison of other methods. Direct grading, however, is devoid of transparency and diagnostic value.

Indirect Grading

In this method the performance displayed by the examinees is first assessed in terms of marks and subsequently converted into grades by using different methods. The transformation of marks into grades may be carried out in terms of both absolute and relative standards using absolute and relative grading procedures. Each of these procedures, have merits and demerits.

Absolute Grading

This type of grading is based on a pre-determined standard that becomes a reference point for assessment of students' performance. It involves direct conversion of marks into grades irrespective of the distribution of marks in a subject. It is just like classification of the students into five divisions namely, distinction, first division, second division, third division and unsatisfactory. The present system of classification as given under is an example of absolute grading which is arbitrary and unscientific.

75% and above Distinction

60% - less than 75%	First Division
45% - less than 60%	Second Division
33% - less than 45%	Third Division
Below 33%	Unsatisfactory

It is possible to divide the absolute marks into any number of categories/ grades. In absolute grading the range of marks for each grade is fixed and may be the same for different subjects, however the grades so awarded may not be comparable, for the marks themselves are not comparable. The range of grades may or may not be of equal width. As the distribution of marks varies from subject to subject and from year to year for a given subject, the number of students placed in different grades will also differ from subject to subject and from year to year.

Another example of a point absolute grading which is better classification is given below:

This method of grading has got several advantages. The procedure is simple and straight-forward to use. Meaning of each grade is understandable and easy for the teacher to use it. Since the classification of grades is pre-announced, each student has the freedom to strive for the

S.No.	*Letter Grade*	*Range of Marks*	*Description*
1.	A	91% and above	Outstanding
2.	B	81% to less than 91%	Excellent
3.	C	71% to less than 81%	Very Good
4.	D	61% to less than 71%	Good
5.	E	51% to less than 61%	Above Average
6.	F	41% to less than 51%	Average
7.	G	31% to less than 41%	Below Average
8.	H	21% to less than 31%	Marginal
9.	I	Below 21%	Unsatisfactory

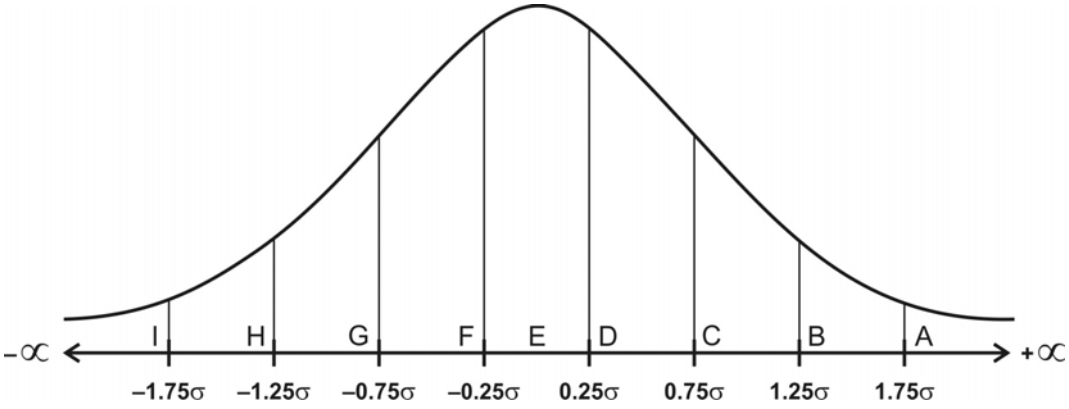
attainment of the highest possible grade. In this method, the criterion being the focal point, it enables the students to know their strengths and weaknesses serving the diagnostic purpose.

One of the limitations of this method is that the distribution of scores is taken on its face value regardless of the errors of measurement crept in due to various types of subjectivity. Another limitation is that the cut-offs for different categories/grades decided arbitrarily still remains a source of misclassification. Finally there may be subjects in which nobody gets grade 'A' due to nature of the subject or even lower one's i.e. G, H, I etc. due to large weightage to practical as in Music, Agriculture, Drawing subject etc.

Relative Grading

This type of grading is popularly known as 'grading on the curve'. The curve refers to the normal distribution curve or some symmetric variant of it. The shape of this curve depends upon a number of factors and thus may assume any form varying from positively skewed curve to negatively skewed curve. In the event of the application of relative grading method the actual distribution curve is transformed into a normal curve. Conversion of obtained cure into a normal curve stems from the premise that there is always a difference between the true level of achievement and the perceived level of achievement that is captured through the tests. The true level of achievement is expected to be normally distributed regardless of curricular areas for a larger population. A normal curve allows us to categorise the students' scores into any desired number of grades in a scientific manner. For a nine-point grading system, we may simply divide the entire measurement scale into nine equal parts. In this case the grade values will range from 1 to 9 with a mean of 5 and a standard deviation of approximately 2 units.

It may be pertinent to mention here that while classifying students' performance into nine categories using stanine scale, two tail categories at the either end of the distribution are combined so as to make nine categories instead of eleven.



In such a situation the grade wise distribution of students would be as:

S.No.	*Letter Grade*	*Interval*	*% of Students*	*Grade Value*
1.	A	1.75 s to ∝	4%	9
2.	B	1.25 s to 1.75 s	7%	8
3.	C	0.75 s to 1.25 s	12%	7
4.	D	0.25 s to 0.75 s	17%	6
5.	E	-0.25 s to 0.25 s	20%	5
6.	F	-0.75 s to -0.25 s	17%	4
7.	G	-1.25 s to -0.75 s	12%	3
8.	H	-1.75 s to -1.25 s	7%	2
9.	I	- ∝ to -1.75 s	4%	1

Should one decide to use a seven-point grade system instead of the nine-point grade system, the measurement scale may be divided into seven equal parts. Further, if someone wishes to still reduce the number of ability ranges from 7 to 5, the measurement scale may be divided into five equal parts. In this case, the grade values will range from 1 to 5 with a mean of 3 and a standard deviation of approximately 1 unit. The grade-wise distribution in this case would be as given below:

The method of 'grading on the curve' will have the following positive features:

- The pass/fail terminology will be completely eliminated as the performance of individual students will be rated in terms of grades and no grade will signify the failure of students.
- Grades so awarded will indicate the relative position of the individual student vis-à-vis his/her group and thus serve better purpose of certification.

S.No.	Letter Grade	Interval	No. of Cases	Grade Value
1.	A	1.5 s to ∞	7%	5
2.	B	0.5 s to 1.5 ∞	24%	4
3.	C	-0.5 s to 0.5 ∞	38%	3
4.	D	- 1.5 s to -0.5 ∞	24%	2
5.	E	- ∞ to -1.5 ∞	7%	1

- Grades will provide for comparability across the curricular areas and years because the normal distribution ensures the uniformity in spread of scores regardless of the nature of curricular areas and other factors like test difficulty etc.
- Grades may fruitfully be used for recording the growth and development of individual students.
- Grades will provide for meaningful additivity without distorting the scale of measurement for calculating Grade Point Average (GPA).
- Undue importance attached to raw scores will be considerably reduced.

The limitation of this method is that some bottom students in spite of having scored even 50% or 60% marks will still get the lowest grade in some subjects particularly having practicals or vocational subjects.

CBSE Initiatives

The National Curriculum Framework (NCF)–2005 has recommended the use of different scales at different stages of school education. Accordingly the 3, point absolute scale at the primary stage 5 point absolute scale at upper primary stage and 9 point absolute scale at the secondary stage is appropriate and should be used. For the public examination at Class X and XII a 9 point relative grading has been recommended as the number of students is very large and both absolute and relative positions within a group is more meaningful information. As a follow-up of NCF–2005, NCERT, has debated and advocated the use of grades in place of marks number of times. Now appropriate environment in favour of grading system in the country is built up. CBSE is planning to introduce 9-point Absolute Grading System in place of marks in Class IX this year (2009-10) and Class X in (2010-11) in all schools affiliated to it. The proposed model for Class IX is as follow-

The nomenclature of letter grades will be A1, A2, B1, B2..... E1 and E2. Each grade have descriptors such as Exceptional, Excellent..... These grades can be applicable to all subjects and to all areas i.e. scholastic and non-scholastic of development both for formative and summative evaluation. For Class X we need to use relative grades rather than absolute grades as the number of students is quite large. The measure will help in better interpretation of results, and will also reducing stress and unhealthy competition for raw, false marks. Let everybody concerned understand the process and improve if further.

Grade	*Grade point*	*Marks range*	*Descriptors*
A1	9	91-100	Exceptional
A2	8	81-90	Excellent
B1	7	71-80	Very Good
B2	6	61-70	Good
C1	5	51-60	Fair
C2	4	41-50	Average
D	3	33-40	Below Average
E1	2	21-32	Needs Improvement
E2	1	Less than 21	Unsatisfactory

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A Comparative Study of Selected Assamese and English Medium Pre-Schools in Guwahati

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Abstract

Assam has made considerable progress in pre school education during the last five years. In the recent years, a number of franchised English Medium School and also a number of Assamese medium pre schools like have also grown up. The investigator found it necessary to make a comparative study on these two types of (medium) pre schools, as pre-school is the base for the all round development of the children.

The present study has been conducted in Guwahati City of Assam and the data has been collected from 18 head masters/mistresses through interview and 36 school teachers through questionnaire from the selected 18 sample schools. The main aim was to make a comparative study about the status of those selected two types (medium) of schools (Eng. =9, As.=9). The other objective was to make a comparative study in respect of school activities, teaching equipments, evaluation, teacher's training etc. The results indicate that, in both types of schools there are lack of facilities, trained teachers, infrastructure etc. However, it is revealed that, English medium schools provides better activities for developing motor, gross motor, social and emotional development, language, alphabet, numbers as well as the sense training than that of the Assamese medium schools. English medium schools have better equipment, infrastructure, trained teacher, evaluating procedure than that of the Assamese medium schools. Both types of school are however lagging behind in fulfilling the overall objective of pre primary education.

Pre primary education is rapidly growing all over the world. All the psychologists and educationists agree that, the pre school years are the most important and crucial in determining the future progress and success. Comenius (1592-1670) was the first to advocate a school of infancy where special attention would

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be given to eat, sleep, fresh air and exercise. Robert Owen (1771-1852), Friedrich Frobel (1782-1852); Dr. Maria Montessori (1870-1952) developed methods which laid emphasis on developing a child's initiative and sense perception through freedom of movement.

Pre-primary education in Assam has made considerable progress during the last five years. In the recent years, there is a mushroom growth of these privately managed pre schools in the state of Assam. A number of franchised English medium pre schools like Euro Kids, Kidzee, Discovery Kids along with Montessori schools have grown up with colourful standardised classroom. Apart from these English Medium schools, the prominent Assamese medium schools like Axom Jatiya Vidyalaya, Navodaya Jatiya Vidyalaya, Sankardev Sishu Niketan etc. have also grown up. These pre schools, particularly the English Medium schools are upgrading themselves and are increasingly being evaluated and assessed as spring boards for facilitating entry into the best primary cum secondary schools. Few studies on these types of schools have been done so far. Some studies related to this study are worth mentioning. Muralidharan R. (1978), in the study "Development Studies of Indian Children of 2□ years to 5 years of age found that children from urban areas were faster than the children from rural areas in the adaptive, language, personal-socio and motor development of children. Rao, S. R. "A study of the effects of pre-school education on Primary and Secondary Education" (1980) found that the achievement of children with pre-school education was higher than others. Asi Surjeet K. "Tiny Tots: Their Learning Readiness (with and without), Pre Primary Education". Independent study: SCERT (1989), observed that, pre-primary education helped in the all round development of the child. P. Yashodhara: Attitude of parents and teachers towards various aspect of pre-school education find that parents and teachers preferred pre-school education in English medium than Vernacular medium.

Talukdar, Mridula (1994), on the study "Growth of Nursery schools in greater Guwahati and its impact on Society" remarked that only by taking some measurable action for establishment of the nursery education which can provide a quality oriented scientific pre-primary education to our blooming tiny tots. Pathak Pallavi (2007) studied on "Influence of pre schools under Montessori Method on Motor development and personal-social behaviour of children", viewed that, Montessori methods has great influence on motor and personal-social behaviour of children. Most of the schools in Guwahati, though named as Montessori schools, but they are of mixed type and donot follow purely the modern methods of teaching.

On the basis of the above discussion and the review the following objectives have framed for the present study.

Objectives

1. To make a comparative study regarding the status of privately managed English and Assamese medium pre schools of Guwahati city, Assam.

2. To make a comparative study of these two types of school in respect of (a) School activities (b) Method of teaching, (c) Availability of teaching materials, (d) Evaluation system (e) Training of Teachers, (f) Parent teacher relation.

Tools

1. Interview schedule for the Head of the institutions of both types of schools to know the status of the school.
2. Questionnaire for the teachers to cover the areas like – (a) School activities (b) Method of teaching (c) Teaching materials, (d) Evaluation system (e) Training of teachers, (f) Parent teacher relationship,

Sample

The present study was conducted on a representative sample of 18 pre-schools selected from the different parts of Guwahati city, Assam. 25 teachers and all the Head master/Head mistress were included for the study. The area wise selection of the schools were –

In the present study, the investigator selected the descriptive survey method.

Administration of the Research Tools

The investigators personally visited the schools and met the Head master/Head mistress of the selected schools and took their interview. Questionnaire was distributed among the teachers and collected the same by the investigator.

Results

The result will be presented in the following sequence: We begin with the responses of the Head master/mistress following by the teachers.

[1] Analysis on the basis of the Head Master's / Mistress Response

(A) General Observation

1. 44% of the pre primary schools are nursery type of school, 24% are Montessori schools and the rest are of mixed type among the selected schools.
2. 80% of the schools do not have their own school building, 60% do not

Name of the schools	*Area covers*	*Nos.*
ENGLISH		
Eurokids	Silpukhuri, Maligaon, Lachitnagar, Beltola,	4
Kidzee	Beltola, Bharalumukha, Ulubari	3
Discovery Kids	Beltola Hatigaon	2
ASSAMESE		
Asom Jatiya Vidyalaya	Noon Mati, Jalukbari, Hangrabari, Silpukhuri	4
Novoday Jatiya Vidyalaya	Beltola, Hangarabari, Japarigog, Zoo Road	2
ShankarDeV Sishu Niketan	Borbari, Zoo Road, Maligaon	3

have playground. Those who have playground, it is not big in size for the children to move freely.

3. 60% of the schools have 1:15 teacher student ratio. In English medium the ratio is 1:30.
4. 90% of the schools are housed in the residential area (i.e. in rented house), where the environment is not proper.
5. 90% of the Assamese and 70% of the English medium schools have single row type of classroom – (traditional).
6. All the head of the institution opined that 100% teachers are trained, but from teacher's responses it was observed that in English medium 70% and in Assamese medium only 44% teachers are trained.
7. From the head master/mistress views, it was found that teacher's are given in service and orientation programme, but from the teacher's responses, it was observed that only 50% in English and 20% in Assamese medium schools provide training programme to the teachers.
8. All the Head of the schools in both medium opined that, there exists a healthy relationship between the parents and the teacher. This is done by organising parent teacher meetings, various kinds of co-curricular activities, celebration of some important days/dates festivals etc.
9. Almost 90% of the head of the schools opined that there is a special provision of slow learners, but from the teacher's view it was observed that no such provisions are available in both types of school.
10. 80% head of the schools opines that, every class teacher's are provided with one assistant to help her to carry out school activities, but from teacher's responses only 20% in English medium and not a single school in Assamese medium school teachers are getting one assistant.
11. 40% teacher's in English medium and 20% in Assamese medium use innovative method for teaching.
12. Most of the head of the schools are female and roomed the schools in their own house. As these are privately managed, so there is financial crunch.
13. Though all the head master/ mistress viewed that they have proper equipment and infrastructure in their school, but from the teachers responses, it was observed that 50% English medium and 20% Assamese medium has proper equipments in their schools.
14. 90% of the head master/mistress of the schools viewed that it is not possible for them to provide ample freedom and opportunity to learn through manipulation.
15. 60% English medium and 90% Assamese medium schools are not monitoring the children's progress regularly.

[2] Analysis on the basis of the Teacher's Response of both medium schools:

[A] School Activities

All the schools activities like motor, gross motor development, social and emotional,

sense training, and language development. Teaching alphabets, teaching number are observed in both medium schools. The findings are as follows –

(1) Regarding motor development activities

Like colouring painting. 81.8% in English medium and 60.66% in Assamese medium, cutting 81.81%, 40.66%, followed by joining dots 68.18% and 30.18%, lacing patterns 60.15%, 1% are respectively taken by both medium schools. But activities like pouring water 31.81% and 1% and rolling mats 36.36% and 20% are being neglected.

In comparison of motor activities – 86.36% English medium and 28.18% Assamese medium schools provided different types of motor activities to the children.

(2) Regarding the gross motor skills like

Ball play (59.09%) and (20%), hopping (50%) and (20%), climbing (22.72%) and (0.2%), running (68.18%) and (24.10%), physical exercise (63.63%) and (25%), jumping (59.09%) and (15%), rhymes with action (100%) and (52.06%), somer saulting (13.63%) and (0%) are provided in the selected English and Assamese medium schools.

As a whole (82.95%) English medium schools and (26.13%) Assamese medium schools provided gross motor activities.

(3) Social and emotional Development Activities

Regarding the Social and Emotional development activities the observation are as - 88.80% and 68.80% celebrates important events, 68.18% and 62.08% gives activities for developing social values/social behavioural patterns, 36.36% and 16.06% gives exercise for practical life i.e. dusting, pouring water, folding napkins, washing etc., 31.81% and 12% give activities like role play, drama etc. 13.63% and 12% teach the children to keep things in their proper places and 13.63% and 10% encourage group work in English and Assamese medium schools respectively.

In comparison, 62.04% English and 23.45% Assamese medium school provides activities for development of social and emotional skills.

(4) Language Development Activities

Language development activities are mostly given in both medium schools. However, 68.18% and 26% give story telling 72.72% and 52.06% picture reading, 68.15 and 50% schools gives, rhymes and song in the English and Assamese medium schools respectively.

Thus it has been observed that 90% English medium school give importance on language teaching where as 42.42% Assamese medium schools give importance on language teaching.

(5) Teaching Alphabets

72.73% and 24% give importance on writing on dots 63.64% and 20%, scribbling/basic stories 45.45% and 65% orally, 36.36% and 2% tracing in sand paper, 27.27% and 35% making shapes letter from clay in both English and Assamese medium pre-schools respectively for teaching alphabets.

(6) Teaching Number

72.73% and 92.6% in writing on dots, 45.45% and 12% tracing in sand

paper, 36.36% and 98% orally, 36.36% and 12% counting on concrete objects 18.18% and 10% arrangement of number cards are allowed for number in English and Assamese medium schools respectively.

(7) Sense Training

31.81% and 10% gives grading activities, 40.90% and 22% gives colours cubes cylinders etc. 18.18% and 92%, noise box, musical bells, 81.81% and 50% help children to taste sour, sweet, bitter etc. in English and Assamese medium schools.

90% English medium schools in comparison to 50% Assamese medium schools give some activities for sense training.

[B] Methods of Teaching in English and Assamese Medium Schools

26% English medium schools follow Montessori Method, 49% follow a mixed method like story telling, playing with toys, and building blocks etc. but most of the schools follow traditional methods. Whereas few schools i.e. only 6% Assamese medium schools follows the innovative methods of teaching. Montessori Method (24%) is more popular in English medium schools whereas 34.8% Assamese schools adopt Pancamukhi, Sishu-Katika methods prescribed by Vidya Bharati.

[C] Comparison of the availability of teaching materials between English and Assamese medium schools

63.63% of the English medium school have excellent audio visual aids, whereas in Assamese medium schools only 27.27% schools have excellent AV. Aids. 34.54% and 64.04% have indoor and outdoor game facilities. Assamese medium schools have better facilities. Availability of puppets in most of the English medium schools are excellent (81.81%) as compared to only 18.18% in Assamese medium. Regarding story 90.90% English medium and 72.72% Assamese medium have the story books.

Comparison of the Teacher's having training

In English medium schools 81.81% teachers are found to be trained in comparison to only 36.36% Assamese medium school teachers.

[D] Evaluation System

59.09% of the English medium schools assess their children's performance quarterly, 18.18% monthly and 22.72% twice in a year, whereas 40.40% quarterly, 2% monthly and 0.9% twice in a year. No English medium schools are found to assess their children's annually where 80% Assamese medium schools assess their children annually.

[E] Parent Teacher Relationship

79% parents in English medium schools, and only 39% parents of Assamese medium schools have good relationship with their teachers. Sixty five per cent and fifteen per cent parents of both medium schools respectively attend the parents-teachers meeting or school functions.

The Early Chilhood Care and Education (ECCE) programmes present a picture of plurality, with government, non-government (voluntary sector) and private agencies providing a variety of

services. However, the coverage of these programmes is extremely narrow, and the quality of services provided is variable and largely poor. A vast majority of children, especially those belonging to poor and marginal groups, are not covered by early care programmes and are left to fend for themselves. Pre- school programmes range from those that subject children to a dull and monotonous routine to those where children are exposed to structural formed of learning, often in English, made to do tests and homework, and denied their right to play. These are undesirable and harmful practices that result from misguided parental aspirations and the growing commercialisation of pre-schooling, and are detrimental to children's development and motivation to learn. Most of these problems derive from the still 'unrecognised' status of ECCE as a part of the mainstream education system. Polarised serivices both reflect and perpetuate the multiple overlapping social devides in our country. The deep gender bias and pervasive patriachal values in Indian society are responsible for the failure to recognise the need for cre'ches and day-care facilities, especially for children of poor rural and urban working women; this neglect has also had an adverse impact on the education of girls.

Good quality ECCE programmes have a positive impact on children's all round development. This in itself is reason enough to demand that all children have a right to ECCE, and it is hence unfortunate that the 0-6 age group has been excluded from the purview of Article 21. In addition, ECCE is also seen to have critical linkages with enrolment of children in schools and learning outcomes. To provide ECCE of equitable quality to all children, it is not only necessary to vastly enhance the funds committed for the purpose, but also to address through different strategies the five basic dimensions of quality, namely, developementally appropriate curriculum, trained and adequately rewarded teachers, appropriate teacher-child ratio and group size, infrastructure supporitve of children's needs, and an encouraging style of supervison. While there is need for decentralisation, flexiblity and contextuality in these programmes, there is also an urgent need to evolve appropriate norms and guidelines and set in place a regularity frameworkso that children's development is not compromised. Capacity building at all levels in relation to the plurality of roles that different functionaries play, as well as fair wages, must also be ensured.

Conclusion

The present study portrays a vivid picture of the status and problems of pre primary education in the greater Guwahati area of Assam. The study reveals that the pre primary schools of both medium has yet to play a great role for all round development of the child by introducing innovative methods. Though, parents now a days in large numbers take part in pre school programme but in case of Assamese medium schools awareness of the parents regarding this pre primary schools yet to be developed. However, there is an urgent need to regulate pre primary schools in the state of Assam.

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Reinventing Nature to Develop Ecoglogical Virtues

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Abstract

The Ecological unrest of modern times is simply because of an aggravation of the earnest desire to conquer over nature and presence of extreme of logical positivist approach. The paper underlined the causes that plagued our understanding of nature. It argues that promotion of environment virtues cannot be just attained by transmitting the broad spectrum of scientific knowledge or 'indoctrination' rather students must be provided genuine opportunity to reinvent nature.

Introduction

Underpinning the global crisis of environment, poverty, hunger and deprivation of basic needs, which is tragically reflected in the third workd among marginalised, are the system, policies, institution and values of structural violence. With both external faces (e.g. debt, unequal trade, hegemony of greedy investors and elitist aid agencies) and internal dimensions (e.g. gross inequalities, oppressions and repression by local elites, inappropriate modernisation policies), structural violence is sustained by the powerlessness of the poor and marginalised, from local and community to national and internaltional levels. The empowerment of the powerless through education in general and environmental education in particular is therefore vital for creating a eco-friendly, more compassionate and just world in which the basic needs of all can be adequately and humanely met. Througout the third world, where the greed of local elites and governments collaborate with rapcious transnationals and growth- export-oriented "aid and development" agencies in environmental plunder, earth-caring intellectuals have teamed up with peasants and labourers, and with tribal peoples to defend the inalienable rights of human being to harmoniously live with and survive from their land, air, water and other species (Swee- Hin, 1988). In

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India, for example, the famous Chipko Movement, which began with tribals hugging their treess to protect them form loggers and bulldozers has inspired the active commitment of ecologist and other intellectuals to extent environmentalist ideas and practices throughout the sub-continent (Bahuguna 1988).

Greatest Challenge Facing Humanity

It is true that under 'the environment' is the *sine qua non* of all that we do, these matters are fraught with a potential for evasion and sentimentalilty and for confusion and misunderstanding. Specifically, the language in which it is communicated the ethical issues that are raised. Today, humanity is facing its greatest challenge that they are on the threshold of disaster, and nothing short of a fundamental change in consciousness and society can prevent them from carrying towards ecocide (Marshall, 1995,P.448). The human actions are affecting the environment, both unprecedented and unsustainable ways and there is a growing possibility of self-extinction of human race. The complexity of the forces influencing the human condtions seems impossible to comprehend in any systematic manner. Rather we are like a small boat in a hurricane seemingly in the hands of providence when the wind rise. We are buffered by environmental pollution that poisons our air, lakes, beaches, soil and drinking water. The weather changes and threatens our crops and water supply, melting the icecap and raising the level of the world's seas. In the face of such a daunting scenario, there is an impulse to take refuge in the familiar harbors of tradition. Creative responses that address the global complexity seem to elude us when we are charged with responsibility for providing direction for tommorow. We flounder under the overload of information and insufficient resources. Slogans, narrow nationalism and parochialism in religion, politics, ethic indentification, and regional competition bid to organise our perspectives to exclusion of concern for the other who so intimately influences our degrees of maneuverability. A new version is difficult to realise because we are still learning how to move from primary to secondary allegiances without abandoning our sense of personal identity (Overly, 1988).

There is a growing need that the curriculum should develop among children awareness and understanding of and respect for, the environemt in which they live, and secure their commitment to sustainable development at a personal, local, national and global level, in a variety of educational programmes, particulary in science, social science, geography and moral development programme. The majority of the environmental policies and the programmes undertaken in educational institutions are still appeared to be modest enough when compared with the problems they attempt to address. The very notion of environmental imperatives poses a serious challenge to the basic principles of liberal democracy where individual decides good life. There is a global sign of grasping the consequences of the fact that the Earth as, effectively, a close system cannot sustain unlimited economic growth and that the exuberant

high-consumption life styles to which people today are accustomed.

A concern for the environent is evident in educational policy and practice at all levels and in a variety of ways. Because of the repeated failure of the various school programmes developed for environmental education that restric itself to mere a few 'scientific facts' rather than addressing conrtoversial moral and ethical issues it beomes imperative in order to formulate policies and programmes of environmental education, instead of an authoritarian technocracy ecological democracy to be prevailed, at all levels, dissolving the power hierarchies, and promoting open forum on public debate to prove the efficacy of the proposals. The 'Iron Cage' of technology is to be replaced by spiritually conscious citizen expressing their concern for environment, the technological education is 'for each school leaver' to have formulated a responsible attitude towards the sustainable development of planet earth, an appreciation of its beauty and an assumption of an environmental ethic (Palmer and Neal, 1994, p29).

The profound issue at the Kernel of any approach to environmetal education is what nature is. Can it have intrinsic value or is it only to be valued instrumentally in terms of its potential to serve human needs (including aesthetic and spiritually). Given the complexity and diversity of views, the need is to articulate the metaphors and the conceptual schemes of our understanding of the concept of nature as often explained in the school textbooks as the physical world or does nature could have other, even more fundamental aspects and significances. The clarification is required the connotations of 'part of nature' or natural' as we are living in a post natural world where nature is at an end where nature no longer exists, becomes socialised. The nature is being disrupted not only physically but metaphysically as an idea and thus as an area of experience fragmenting its sense of organic holism. Some of the main issues for environmental education as identified by Michael Bonnett (2003):

- What understanding of nature and our relationship with nature and the environmental should we invite pupils to participate?
- What (environmental) ethic should inform our approach?
- What kind of knowledge and understanding best illuminate our relationship with nature of the environment and the environmental consequences of our actions, including their ideological content?
- What kinds of knowledge and pedagogy are appropriate in an area where many of the issues are considered controversial and yet where we are seeking to influence pupil's actions?
- How might any of the above require a redefinition of roles and ethos within the school as institution and in its dealings with the community outside itselft?
- By what standard should schools judge their success: What qualities of learning should they promote?

The distinction between 'ecologism' and 'environmentalism' is often used in

political theory and environmental ethics to make several related distinctions, most notably, between an ecocentric radicalism 'ecologism' and anthropocentric reformism 'environmentalism'. However, accounts of environmental education tend to be ambiguous between 'environmentalis' and 'ecologism' - although the underline idea may be closer to environmentalism (Barry, 1999, pp.21-35). For environmentally appropriate thought and action requires a clear and already understanding of what is to be valued or respected and in what senses. Our ideas of nature are fundamental in conditioning our outlook and clarifying our concept about environmental issues and our stand for 'environmentalism' or ecologism will finally help proper characterisation of environmental education.

Our Understanding 'Nature'

Humanistic utilitarian approach, the anthropocentrism is such a motive that has raised our desire for mastery of nature. Througout the modernist epoch of Western civilisation runs a fundamental desire to subjugate and exploit nature. The feminised concept of nature legitimises exploitation, penetration and bringing to order by 'masculine' culture. In aggressive science, nature gendered as feminine the technology thus turn the whole of nature into resources, the emphasis on consumption to an ever-increasing degree with the world around us. The drive in modern rationalism to explain, predict and control nature, in particular the logical and calculative over the emotional and empathetic corroborate this characterisation. According to eco-feminists under the rationalistic impulse, human nature is defined against nature. The qualities such as freedom, rationality and the transcedence of nature that we take to differentiate ourselves from the rest of nature have become definitve human virtues. This explicitly subscribe that all science in fact all rationality is aggressive towards nature in the same way and to same degree as individual is towards a prostitute. The respectful to prostitute has a profound sensitivity for human suffering and a keen social awareness of cruelty, discrimination and authoritarianism. Individual has to rise above an attitude of seeking momentary pleasure and trivial enjoyments, should become capable of transcending the brute elements, develops a profound love and warmth that enable individuals to confer privileges or inspire respect to nature.

Thus, environmental concern alerts us to the possibility of certain aggressive motives holding away within traditional subject knowledge. Nietzsche (1924, 00.37-38, 75) turned his wrath towards the most general form of culture, which would be levelised to a point of actual barbarism. Aurel Kolnai (1938) while describing Heidegger's doctrine aptly remarked: a radically barbarian outlook on life, the diametrical opposite of what the French call the cult of le Vrai, le Beau, et le Bien, sullen devotion to the "earnestness of life (p.208)". Philosophy does not begin only in wonder it begins also in dread. As Nietzshe (1924, p.24) warns. "He who feels no dread at this point must be asked not to meddle with

pedagogical questions. It thereby raises fundamental philosophical question not only about what kind of knowledge will best illuminate environmental problem, but also about the nature of educational knowledge itself.

Knowing Nature through Science

Our children through science largely know nature. This does not mean that nature is not revealed through other curriculum areas in schools. However, the preference for science, which is preoccupied with causal explanations and measurement, and whose basic experimental interventionist character, arising from its history and the cultural milieu in which it was born, which viewed nature is largely something to be overcome, tamed and made servant to human purposes. These remain implicit in much school science as a set of inherent unexamined prejudices. It must be emphasised here that I am not arguing that science has nothing of importance to offer. On the contrary, it has become more important than ever in order to monitor the effects of human activity on the biosphere in ways and at levels that lie beyond what may be apparent to other kinds of knowing. And of course, our everyday as well as our more 'elevated' understanding of nature throughout is infused with scientific views. Rather, it is that learners need to be made aware of science's prejudices and its partially in revealing nature when nature is presented from within a scientific perspective.

Besides this, it is undoubtedly true that scientific knowledge frequently has evoked and enhanced our respect, even reverance for nature. As we learn of the sheer magnitude, and the infinite deversity, complexity, integrity and subtlety of the cosmos and encounter the beauty of its forms and processes through the ongoing revelations of many areas of science. The gravest danger, which faces science, is its specialisation. As Nietzsche (1924) prophesied specialist in science gets to resemble nothing but a factory workman who spends his whole life in turning one particular screw or handle on a certain instrument or machine. Liberalising studies must complement specialisation in any field; for it is the man who counts and not the profession (p.39). Apart from super specialisation the science is taught impersonally, as if the world of nature were cold and indefferent. Existentialists argue that student will never fully understand the environmental problems unless they are actually become one, or at least plays the role. Simple experience or experimenting on location is not enough. One must appropriate the situation. In order to know, one must be. Existentialists teach that values do not exist apart from the freely chosen act of human being. Ideas of the good, the true, and the beautiful are primarily abstractions from empirical evidence or intellectual speculation. Even a 'purely scientific' analysis of envrionmental problems can be made to reveal the presence of a personal obligation an involvement; the only satisfactory way of handling an environmental problem is to become one with it. One has to identify oneself with nature, to understand the real problems of nature. In the existentialist way within the individual subjective processes

science is a tool; not a determinant. Experimentalism is a method; not a goal. Experience is an adverb; not a verb, or a noun. Nevertheless, to develop a new morality consonant with a complete affirmation of individual freedom the much needed is to reinvent nature. In order to develop ecologically virtuous human being the stance should be individual rather than group. Environmental education, should provide the opportunisties to expose students to; the woods, the rocks, the winds, the vulture, the flowers, the butterfly, the meads, the mountain slopes, must all speak to him countless reflections and images, in a variegated round of change of visions; and in this way he will unconciously and gradually feel the metaphysical unity of all things in the great image of nature, and at the same time tranquilise his soul in the contemplation of her eternal endurance and necessity (Nietzsche 1024,pp.95-96).

Simliarly, the key concept of nature is the 18th century what all thinkers urge to "follow nature" all would be well. Rousseau's claim that everything is good as it comes from nature led to an education that was concerned not just to follow the child's inner nature, but was also physically close to a mentally engaged with the natural world. Nature became the touchstone of belief in religion and politics (Marshall, 1995, p.222). The truth, knowledge, morality and person hood that uderpin our understanding of nature in our cultural consciousness in the context of envrionmental concern is determining what counts as harmony or discord, reciprocity or exploitation, truth or untruth, perhaps beauty of ugliness.

An intimate acquaintanceship with natural space is significant, as what had to be learned could not be expressed easily, if at all, in words; each person had to immerse in the enterprise and develop one's own skill. In whole-hearted engagement the real and intimate get revealed awareness is self-arising. Such an account reasserts the value of both direct intuitive engagement and understanding and learning that is continuous and organic rather than modular and essentially atomistic – the latter being the dorminant trend in the curricula of schools, further education and universities.

On the radical account, environmental learning should be active rather than passive – it should involve critical reflection on an active engagement with the current economic, social and political system, the environmental ideals and 'knowledge' in society and the learner's lived experience (Bell, 2004). Furthe Bell opined that the environmental education should be universal and compulsory to ensure that every one becomes environmentally conscious through proper environmental education.

Thus, Education 'about the environment (that is, basic knowledge and understanding of the environment)' is no less important than 'education for the environment (concerned with values, attitudes and positive action for the environment)' (UNESCO, 1997).

In a secular, democratic society political liberal ideologies often create subtle differences due to technico-economico-utilitarian view of the world. In the educational context this could surely be an occasion, a good starting

point for addressing many of the environmental problems that we presently confront, encourgaging students to ask not simply what is good for an individual or local community but what is good for the planet and to begin to appreciate the relationship between the two. The appreciation of the global requires an affiliation to the local (Bonnett, 2003).

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Learning Together Why and How?

NITIN BANERJEE*

Abstract

With the changing global scenerio of education and demand of mass participation for the all round development of the country as well as of the world. It has become imperative to re-focus and ensure participation of all sections of people in the schooling system, so that all sorts of working and capable people are available at the right place for engaging them in the developmental process. This is also one of the focused areas of Sarva Shiksha Abhiyan. (vide para1.4.9(d) Mission statement of SSA which reads as follows: " An equity based approach that focuses on the needs of … children with special needs"). The concept of inclusion is not new but it will take time for our practicing teachers to adopt themselves to such situation and explore the merits of inclusive learning and Multigrade teaching. Although legal provisions are made (Article 21-A) so that education becomes one of the fundamental rights, but like many other behaviour laws, the right to education is yet to be percieved and enacted with full potential. International organisations and many NGOs are actively involved to look after the issue and address such neglected (gray) areas with proper training and study materials developed at the International levels. Still it is a question of attitudinal change and convinces us of the urgency of the situation and moulds ourselves accordingly.

Homogneity, uniformly and symmetry are beautiful concepts in miniscule scale but when such ideas are extended and projected in real life situations, it seems to be a big yawm; instead of pleasing our aesthetic sensitivities, it disturbs and ridicules our sense of harmony in variety. It looks like an artificial, mechanical world, heartless, senseless, monotonous and foolishly repetitive.

Fortunately, nature is never uniformly homogenous. No two things in nature are alike or a carbon copy of one another. Variety is indeed the spice of life. But why then, do crave and advocate for homogeneity in society? Why do we expect every child to be same or similar in every aspect, so that we can apply the same methodology mechanically and be cent per cent sure of the output, minimising

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our reponsibilities? Do we really realise the consequences? Is not this an escapist approach?

The fact is that, novelty, ingenuity, creativity, talent are not the terms of mechanical world. Life is infinitely variable, myriad and more colourful beyond the limitations of VIBGYOR (violet-indigo-blue-green-yellow-orange and red; the colours of the rainbow). From ancient times this heterogenous aspect of nature is respected and we are taught to accept the variety, not as a freak but as the order of nature. The infinite variety and variability is both a challenge and beauty of nature. Only some 'crackpots' dare to overpower the order of nature and tries to do otherwise, in the name of reacial, religious and ethnic harmony and homogeneity. They propagate a false sense of artificial peace. We can remind ourselves of the experiences of Spartans, who believed that nobody should be allowed to live in the society who are weak or otherwise 'unfit' in some way or other and therefore should be eliminated. Human history has repeatedly proved such blundering ideas intangible and untenable.

Two apparently opposing ideas are in vogue in the society. Individualistic approach and community/society-centric appraoch. In the first instance, welfare of the individual is the only objective at any cost. Unfortunately, this idea has allured the masses and flourished in the age of consumerism. Everybody is vying each other to defeat and overpower. The other approach takes the (w) holistic view of the society, 'greater' good for greater number'.

बहुजन हिताय, बहुजन सुखाय

Because, man is essentially a social animal and therefore he cannot live alone, neither he can be satisfied with bread alone. The nature is bountiful, beautiful, never tiring and monotonous. It is refreshingly novel every time. It is our physical and mental limitations that in many occasions, we cannot appreciate and cope with the variety, get confused and demand the same or similar thing to deal.

Take for example a classroom situation. Teachers, who are not 'well-tempered' with life experience, complain of difficulty for handling different types of children in the same class. Their idea is that, they have to 'deliver' the teaching to the 'uniform clients' like the children; so that just a single mode of delivery will do. Even in some educational institutions, the heads of the institution also divide the sections of a class according to the level of achievements of the children as if, they are commodities and the teachers are machines. Is it socially, psychologically and pedagogically a sound practice? Aren't they hiding their own incapability of facing the reality in real life situations? Aren't they discriminating against social and moral standards? If, unfortunately, their own children are not of similar or comparable merit, will they build separate houses for each of them and hire somebody for parenting? The answer is obviously no.

There was interesting news item in the papers in April 2006, which may be mentioned here, in stark contrast against such discrimination. A school in Ralegaon Siddhi Village in Maharastra, named Sri Santha Nilobray Vidyalaya

initiated by social activist Anna Hazare. Among 900 students of the school 850 are repeaters and failures from conventional point of view. Hazare the founder said that the reason behind the unusual success story of this school lies in creating an environment to fully utilise children's talents. The children are bent upon to prove their mettle. Failure should not be a stigma for a child. The children who fail in other schoools succeed here with good marks because we provide conducive environment to utilise their talents.

A few centuries ago, many children who were rejected by the society/ teachers as 'worthless' uneducable and therefore a liablility and burden to the society, proved it to be otherwise. They were born with exceptional merit and had been instrumental for the advancemet of the human society to greater heights.

Take for example the great artist/ engineer Leonardo de Vinci, painter/ artist Pabio Picasso, Auguste Rodin, scientist/ inventor Alexander Graham Bell, the greatest inventor of all times, Thomas Alva Edison, scientist/ mathematician/ philosopher Albert Einstein, Michael Faraday, entrepreneur Walt Disney, writer Hans Anderson and Agatha Christie dejected in their times as worthless drop outs but they rose to fame with their talent perserverance and indomitable spirit.

Their life history shows that it is the school/ society, which was responsible for their rejection because it failed to recognise their special talents and nourish it to achieve their cherished goals/ if you think that physical disabilities is a barrier to achieve success and fame, take the example of the wheel chair-bound great mathe-metician/astronomer/astrophysicist professor Stephen W. Hawking. Mental abilities are not limited within physical barriers. But we often get biased with the latter and ignore or understimate the former. Racial discriminition, social ostracism (like the Indian caste system, untouchability, etc.) are all products of our blind bias for people looking fair, beautiful and powerful. The truth is somewhere else. Even in nature, medicinal herbs are not selected for their looks and fragrance but for their inherent properties and curative powers. Man has learned these lessons throughout the ages, through ups and downs of human history, through tiral and error, success and failure, keenly observing nature and the animals what do they do when they fall sick. The mightiest conquerors have seen their last days, the most powerful dynasty has passed into oblivion; the most beautiful faces have faded away; nothing lasts longer than the substantial contribution made by them to the society. So why repeat the similar blunder again and again?

Yes, believe it with all conviction and assert that we can live together, we can learn together; we can contribute to the society in a positive way. There is no need of discrimination or dejection. Similar lessons we are learning now in the context of maintaining ecological balance. Only beautiful flowers, beautiful birds, pet animals and beautiful people will not sustain the natural balance in nature. All the creatures in nature however horrible and grosteque they may

appear, have their own niche and a contributing role in nature to maintain ecological balance.

The following *sloka* of Upanishad is recited in many educational institutions as invocation and carries a deeper meaning in tune with the harnmony in nature. It also tells us that it is not teaching and learning (as is generally presumed by many) but " co-learning" both are 'learners' at different planes. It is " learning together", unfolding the mysteries of knowledge together and both moving in pursuit of the same goal or in the language of Rabindranath Tagore, lighting a lamp from the flame of one to the other'

औम् सह नाववतु सह नौ भुनक्तु
सह वीर्यंकरवावहै।
तेजस्विनावधीतमस्तु मा विद्विषावहै।।
औम् शान्तिः शान्तिः शान्तिः।।

God may protect both of us (the preceptor and the disciple) by unfolding the worth of education, let us be successful in our endeavors, the acquired knowledge be fruitful in our lives, let us not be envious of each other, we may be blessed with peace bestowed by the Almighty.

That is the foundation of the principle of inclusive learning.

When we agree to accept variety as an itegral part of life, we have to start the process of ' adaptation' to our situation also. Adaptation is not simply adaptation of infrastructure, furniture and other equipment, it also involes emotional adaptation, inviting someone into our larger family, making 'bridges' of bipolar communication, etc. It may also signify some adjustment of the way we behave, react cooperate and bring some output, a way of 'befriending' a new guest; the first step of which starts with building proper attitude, inclination and readiness. Here the family is the school family, family of the community, who is supposed to take the lead role. We have to learn that ignorance or infirmity is no impediment, some may learn slow some fast, it is ultimately the depth and quantum of 'learning' which matters. True learning will iluminate one's perception of the world around us; it will not segregate, build walls or seperation and divide our psyche.

The approach of inclusive education does not differentiate children with special needs (CWSN), children with disabilities and other children so called normal. There are nothing called problem children but 'children with problems' and everyone might have some problem sometimes. The chief objective therefore, is creating an inclusive Learning- friendly educational (ILFE) environment, where everybody is welcome and valued as a contributing member: not simply a consumer but also a valued producer at the same time.

The underlying philosophy of inclusive education is basically a human rights issue. In case of 'integration', the children with some problem are simply 'accomodated' in a normal learning environment while in case of inclusion they are' absorbed and assimilated in the big family', keeping in mind their special needs of aids and appliances and rediscover their hidden talents. Generally, such children are introvert, somewhat withdrawn, shy, secluded and lonely. They accept their fate as

inevitable, uncomplaining and simply waiting for their turn of attention and affection, if it happens to drop before them. But mostly, their inner strength is much more than normal children. They learn to withstand, wait with patience and not mind for trifling matters.

Inclusion is seen as a process of addressing and responding to the diversity of needs of all sorts of learners through increasing participation in the school community. It is not a matter of mercy of charity but deep understanding motherly love which comes from heart within.

यस्मिन सर्वाणिभूतानि आत्मन्येवानु पश्यते।
सर्वभूतेषुचात्मानां न ततो बिजुगुप्सते।।

'He who sees himself in all creations and percieves all within his own self, he does not hate or discriminate anything'.

Learning together also ensures value education in most natural way. Generally most of the children of affluent families are over-pampered by their busy parents who cannot afford time and parental care for their children and adopt an unnatural life-style of their own; they do never learn to care (for others) and share (their pleasures with others) and thus become obstinate, tempered, selfish, bully and unruly. It is not the fault of the children but of their parents who cut them off from themselves and other members of the family and the children of the neighbors. In inclusive learning friendly environment, such children may find the opportunity to re-learn (how to cope with others) socialise, become tolerant and considerate to downsize their inflated egos and to have ta humane face.

When dealing with a large class with children of different learning levels, teachers get confused and baffled how to handle them and yet produce some tangible result. The reason behind such confusion and attrition is our poor knowledge about the benefits of addressing a mixed group of children (multigrade/multilevel), which are as follows:

1. The range of experiences within a group is greater.
2. There is usually someone to help a young learner.
3. There is less stigma of being slow or fast amidst all the different levels of learning.
4. Self- learning generates more confidence and autonomy in the children.
5. It is possible for siblings and neighbourhood children to learn together in a multigrade class. This can lead to a greater sense of security, especially amongst the younger children beginning school. It can also remove social divides that graded schools may create.
6. Children enjoy the company of other children, provided no one in allowed to be bully and aggressive.
7. Learning can be interpreted as 'play' if the teacher creates such tension-free atmosphere.
8. The burden of the teacher to go to each child is less as active peer learning takes place.
9. Children actively participate in maintaining order and discipline in the class.
10. Children are kept occupied and can ask for next task when they finish an earlier one.

A novel experiment of this kind may be seen in the satellite schools of Rishi Vally, Madanapalle, Andhra Pradesh under Rishi Vally Educational Resources (RIVER) where in a village set up, children of mixed group are being actively helped to learn in Multigrade, multi-level (MGML) pattern. The only percondition of success for inclusive approach is that the teachers have to be more attentive, imaginative, patient and dedicated and foresee the next step of action and be ready for that, as a weaning mother knows when and how to feed the baby. So, let us start pondering over the issue of 'learning together'. It is the clarion call of the day.

Reportage

Srijan I : Reflections of Teachers in an Orientation Programme

KIRTI KAPUR*

Languages flourish in each others' company — today this is a proven reality. When we look back we find that some languages were considered more precious that others. The reason being, that these languages were associated with socio-political and economic power. While this can be traced to colonial times, the phenomenon continued till recent times. As a result barriers were created between Hindi and English, or other regional languages and English.

In fact all languages as abstract systems or subsystems are equal. The science of language studies treats all language systems equally. And the myth that one language is superior to the other has been dispelled now. India is a multi-lingual country and thanks to our vibrant linguistic plurality, most of us are at least bilingual. Several studies have shown that there is a positive relationship between bilingualism and cognitive growth and scholastic achievements. Another important aspect is that the curriculum needs to transcend borders not only with other subjects but among different languages as well. This will help in creating space for more number of options at the senior secondary level that have the potential for encouraging creativity and interdisciplinary understanding among learners. 'Creative writing and Translation' is one such course that can provide this opportunity to young minds.

Srijan-I, a course in creative writing and translation is a significant step towards bridging the gap between languages and dissolving linguistic barriers that limit free flow and exchange of thoughts and ideas. It is for the first time that the National Council of Educational Research and Training has developed a bilingual book in Hindi and English. The content of the book comprises parallel texts and not exact translations. The innovative design of this textbook has been developed to inspire both teachers and students to combine knowledge of language and literature in both the languages along with contemporary social realities and discourses associated with them.

Such an initiative can succeed only if school principals, teachers and

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parents recognise the significance of the course. Taking cognizance of this fact, the Department of Languages organised an orientation programme for principals, teacher-educators and teachers from 17 to 19 June, 2009 at NCERT, New Delhi. Teachers (PGT and TGT) of both Hindi and English were invited to attend the orientation programme. The programme comprised sessions dedicated to each unit of the book.

On the first day, teachers were inquisitive, anxious and at the same time apprehensive about a bilingual course. The non-hierarchical structure of the workshop however put all the participants at ease. The teachers said that they found the interactions fruitful and gradually their apprehension and anxiety were replaced by interest and curiosity about transacting the course.

In line with the spirit of the book, the workshop too encouraged participation and creative ideation. Feedback in the form of a short presentation on the textbook by each of the participants provided an insight into areas for further development in training as well as exhibited their new found understanding. This not only gave direction to the orientation programme but also revealed the teachers' enthusiasm about the new and challenging course. During the orientation programme the participants were asked to review the book. One of the participant's reviews is given below.

The teachers appreciated the fact that creativity is not inborn only in some people, in fact everyone is creative and children are more so. They were positive and convinced that what students need is their guidance so that the students' creative energy gets direction as they have the desire and requisite capability. They also felt that *Srijan-I* would encourage a constant dialogue between them and the students.

During the group activity session the teachers themselves did the activities given at the end of the book and opined that through activities the link between both the languages was further established. During discussions on translation as a creative activity, teachers shared examples of how translation is not just a literary activity but is also a skill. Since languages form culture and vice-versa, translation is an important faculty in a multilingual country like ours.

The session on assessment re-affirmed that assessment should not be merely in terms of marks or grades. Constructive feedback from the teachers would be more effective. This should be combined with teachers' observations and the assessment of students' work throughout the year through portfolios, oral presentations, group-work, students' self-assessment etc. thereby bringing together the teachers' agency and the students' agency.

The workshop closed with a brainstorming session where all concerned shared their plans about introducing the course and also worked out ways and means to work together and learn from each others' insights and creativity. Clouds of anxiety were now dispelled and a new dawn of creative possibilities shone. We are now hopeful that languages and subjects will transcend boundaries and become more porous and give opportunities to learners to express themselves creatively.

***Srijan-I,* NCERT, New Delhi, 2009, ISBN 978-81-7450-899-7, pp 211, Rs. 130**

The book *Srijan-I* a bilingual text in Creative Writing and Translation developed by NCERT for the class 11 is a pioneering piece of work. The title of the book is very apt and suggestive. The book represents a novel idea in the sense that it juxtaposes two languages and also discusses many genres of writing- literary, media, creative and translation simultaneously.

The book is like fresh air in a multi-lingual country like India. Here a wide chasm exists between the English speaking elite and speakers of mother tongues, as native speakers do not have have a good command over English even though English is widely used because of historical reasons and market forces. This book will fill that gap.

There are four units in the book and they are in both Hindi and English. The units are accompanied with good examples and visuals. The texts in Hindi and English are parallel and not translations. Each unit has variety of interesting activities that will make students aware of their environment.

The first unit deals with Creative Writing and provides exhaustive and impressive definitions of creative writing. Excerpts have been taken from books in different languages and the visuals show all forms of arts- sculpture, embroidery, paintings, photographs etc. The second unit Literary Writing introduces the reader to the process of writing in various hues- poetry, story, drama, autobiography, diary, letter, memories, reminiscences etc. The noteworthy thing is that the focus is on the process of learning. The third unit Media Writing gives tips and guidance for writing for the news media. All forms of news media i.e. news writing, features, interviews, editorials have been dealt with in easy and flowing language. The fourth unit Translation gives the meaning of the word 'translation' in many shades. It explains that beauty, readability, fidelity are indispensable requirements of a good translation describing all types of translation:- in print and electronic media, translators as interpreters, advertising and translation, and scientific, medical, legal, machine and literary translation as well. In this section fair amount of textual extracts have been given, but for the learners at stage-1, technical words/phrases/sentences should have been given and extracts could have been simpler. Some of the existing examples are suitable for Class XII.

The book *Srijan-I* direct or indirectly challenges the traditional concept of learning based on theory only. Its focus is on a learner-centered learning where the teacher is a guide, a facilitator. Group activities in the book will inculcate values of cooperation, accommodation and recognition of one another's talent rather than cut-throat competition and conflict, which are the result of the existing system of education. The book will help students as well as teachers to draw out their inherent potentiality and give it some concrete shape creatively. It will also develop sensitivity and sensibility among students towards various events happening around them. This will help them develop a perception of nuances in English and Hindi.

The success of the book will depend on the system of evaluation and will depend on the honesty and degree of 'pain' with which the teacher will stimulate learners towards creativity. Avenues need to be opened for students who opt for this subject. SRIJAN-I is a commendable enterprise. The members of the committee who have developed it deserve due appreciation, accolades for their hard work, intellectual strength and sense of aesthetics that are reflected in *Srijan-I*.

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Bahuroope Gandhi

Anu Bandyopadhyaya

The book vividly narrates how Gandhiji functioned in a variety of ways quite apart from politics and the public scene. The book describes how multifaceted personality he was as a barrister, author, kisan, weaver, nurse, journalist, mason, shoemaker, carpenter, blacksmith and barber. For this amazing devotion to, and capacity for different ways of work he won the title *Karamvir* from his South African colleagues. This book is a must for every book lover and one who wishes to know about Gandhi.

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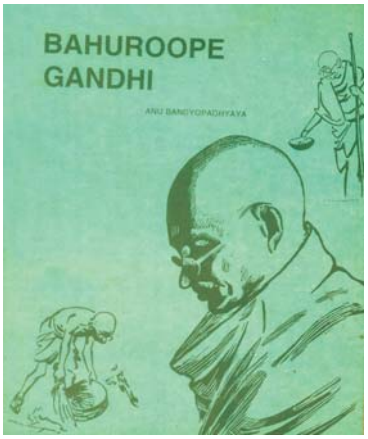

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