

ISSN 0970-9282

The Primary Teacher

Volume XXXX

Number 1

January 2015



About the Journal

The Primary Teacher is a quarterly journal, brought out by the National Council of Educational Research and Training (NCERT), New Delhi. The journal publishes articles and researches on educational policies and practices and values material that is useful to practitioners in the contemporary times. The journal also provides a forum for teachers to share their experiences and concerns about schooling processes, curriculum, textbooks, teaching-learning and assessment practices. The papers for publication are selected on the basis of comments from two referees. The views expressed by individual authors are their own and do not necessarily reflect the policies of the NCERT, or the views of the editor.

Copyright of the articles published in the Journal will vest with the NCERT and requests for reproducing the material should be addressed to the Academic Editor.

Advisory Board

Director, NCERT : B. K. Tripathi
Head, DEE : Manju Jain
Head, Publication Division : N. K. Gupta

Editorial Board

Academic Editor : Santosh Sharma
Chief Editor : Shveta Uppal
Kirti Kapur Padma Yadav
Kavita Sharma Varada M. Nikalje

Publication Team

Chief Business Manager : Gautam Ganguly
Chief Production Officer (I/c) : Arun Chitkara
Editorial Assistant : Mathew John

Cover Images

Vandana Mishra, *JPF, DEE, NCERT*

OFFICES OF THE PUBLICATION DIVISION, NCERT

NCERT Campus
Sri Aurobindo Marg
New Delhi 110 016 Phone : 011-26562708

108, 100 Feet Road
Hosdakere Halli Extension
Banashankari III Stage
Bangalore 560 085 Phone : 080-26725740

Navjivan Trust Building
P.O. Navjivan
Ahmedabad 380 014 Phone : 079-27541446

CWC Campus
Opp. Dhankal Bus Stop
Panihati
Kolkata 700 114 Phone : 033-25530454

CWC Complex
Maligaon
Guwahati 781 021 Phone : 0361-2674869

Single Copy: ₹ 65.00 Annual Subscription: ₹ 260.00

THE PRIMARY TEACHER

VOLUME XXXX NUMBER 1

JANUARY, 2015

CONTENTS

Editorial		3
ISSUES AND POLICY PERSPECTIVE		
1. THE DEIFICATION OF ENGLISH	VARADA M. NIKALJE	5
2. TEACHER PREPARATION PROGRAMMES FOR ECCE	PADMA YADAV	12
3. EMPOWERING GIRLS IN INDIA	DILBAAG SINGH	20
4. FUNDAMENTALS OF CHILD RIGHTS	PUSHP LATA VERMA	28
SCHOOL PRACTICES		
5. SCHOOL ENVIRONMENT FROM PHYSICAL ASPECTS TO LEARNING	ANJNI KAUL	40
6. FROM CURRICULUM TO TEXTBOOKS—POST 2005 REVISED TEXTBOOKS AND SOCIAL EXCLUSION	GUNJAN SHARMA	50
7. ANALYSIS OF ERRORS MADE BY CHILDREN WITH HEARING IMPAIRMENT	PRITHI NAIR	70
8. AN INVESTIGATION INTO THE CONCEPTUAL UNDERSTANDING OF STUDENTS IN THE LIGHT OF THINKING SKILLS APPROACH	S.V. SHARMA, S. YADAV K.B. RATH, RAM NIWAS A. HORO, RANA PRATAP	88
9. PROGRAMMES AND PRACTICES IN CONTEXTUALISING THE CURRICULUM FOR PRIMARY SCHOOL STUDENTS	SOFIA K.M. ANIL KUMAR K.	99
10. SCHOOL MANAGEMENT—A CASE STUDY OF MUNICIPAL CORPORATION OF DELHI (MCD) SCHOOL	P.D. SUBHASH M. SIRAJ ANWAR	113
EDUCATIONAL THINKERS		
11. PT. MADAN MOHAN MALVIYA	VANDANA MISHRA	125
DID YOU KNOW		
SWACHCH BHARAT SWACHCH VIDHALAYA		130

Do You Know

According to the 86th Constitutional Amendment Act, 2002, free and compulsory education for all children in 6-14 year age group is now a Fundamental Right under Article 21-A of the Constitution.

EDUCATION IS NEITHER A PRIVILEGE NOR FAVOUR BUT A BASIC HUMAN RIGHT TO WHICH ALL GIRLS AND WOMEN ARE ENTITLED

***Give Girls
Their Chance !***



EDITORIAL

Clean and Healthy Schools

The primary years are the most formative years of a child's life. Children are still growing; they need nutritious food and hygiene, and a clean environment for growth and development. Children are generally prone to infections and therefore a clean environment is essential for their wellness and health. Children spend about 5 to 7 hours each day in school; they need safe drinking water, clean toilets and hygienic and healthy food. A clean and healthy school environment is essential to retain children in schools. Absenteeism due to illness can be checked by providing them a clean and healthy school environment.

The existing condition in the majority of government schools is pathetic. Issues of cleanliness, hygiene and sanitation in these schools require immediate attention. During the field visit programme of NCERT, faculty members visited various schools and found that much needs to be done at the school level in matters of cleanliness and health. Municipal Corporation of Delhi (MCD) schools have separate toilets for boys and girls but in many schools these are not functional. In some schools, children do not use 'school toilets' because these are not clean. The Principal of one such primary school said that children must learn to use the toilet and also develop the habit of keeping them clean. Many children studying in these schools do not have toilets at home and need training for proper use and cleanliness. In some schools, the school environment was unhealthy for children. In one government school, the open space (ground) in front of primary classes was like a pool of stagnant water. The stagnating water is a major source of disease. The principal and teachers of this school expressed their inability to change the situation because of paucity of funds. In some schools, the window panes were broken letting the cold air in during winter, making children shiver. In many schools, classrooms and corridors were also dirty. Children often bring eatables such as potato chips, banana, biscuits etc., from home. They throw the wrappers, papers and leftovers in classrooms or veranda. The leftovers of mid-day meal was also seen in school verandas and open ground. Teacher's role is very important here. It is essential that children learn and practice personal hygiene and develop habits of keeping surroundings clean. Children are always ready to learn. It is teachers who need to provide instructions on cleanliness and hygiene. Students should be made responsible for keeping classrooms and school clean. Student teams can be made for supervision of cleanliness. Student teams may be

given incentives for promotion of cleanliness in school. Teachers, students and School Management Committees together may develop a plan for clean and healthy school. Schools have an important role in developing clean and healthy school environment. School management, administration and teachers have the responsibility to maintain school building and to provide clean, healthy school atmosphere.

The spirit of *Swachh Bharat Swachh Vidyalaya* Mission is to provide a clean and healthy school environment to all children. During the *Swachh Bharat Swachh Vidyalaya* Campaign from September 25 to October 31, 2014, Kendriya Vidyalayas and Navodaya Vidyalaya Sangathan conducted activities such as cleaning of the classrooms, laboratories, libraries, toilets, drinking water areas, playground and school gardens. To develop an awareness about cleanliness, hygienic and healthy school environment, essay, debate and painting competitions were organised. To supervise the cleanliness drives, school cabinets were constituted. Such activities should become part of school life. Habits developed in early years get embedded in one's personality. Students should be encouraged consistently to use, operate and maintain the facilities available in the school for drinking water, sanitation and hygiene.

Teachers should be the 'role models' and agents of change for the creation of a clean and healthy atmosphere in schools. Dear teachers, your efforts can make *Swachh Bharat, Swachh Vidyalaya* Mission a success.

— **Academic Editor**

The Deification of English

Varada M. Nikalje*

I remember a news item published a few years ago which stated that a temple was being built in honour of the “Goddess of English”, in a small village called Banka in Lakhimpur Kheri district in Uttar Pradesh. The foundation stone was laid on April 30, 2010, in a simple ceremony, with women singing ‘Jai Angrezi Devi Maiyaa Ki’, (Long live Mother Goddess of English) in honour of the goddess. Donations were already pouring in for a temple. Intrigued, I took in the details. The temple was to be a single-story structure covered with black granite. It was being built on the premises of a local school, the Dalit-run Nalanda Public Shiksha Niketan. The temple would be run by a trust. A 30 inch brass image of the goddess was brought from New Delhi to the village for the consecration, which was attended by around 1,000 villagers. (The news item stated that 3 feet high statue of the goddess would be installed at a later stage).

The image was modelled on the lines of the Statue of Liberty: the Indian image is wearing a floppy hat, with a pen aloft in one hand, and holding the Constitution of India in the other. The image of the goddess has been installed on a pedestal in the shape of a computer screen. The pen in her right hand indicates that she favours literacy. Her dress is a kind of long robe, very unconventional, and the hat (Indian women don’t wear hats, much less goddesses) symbolises a rejection of the traditional dress code. The plan was to inaugurate the temple on October 25, 2010, to coincide with Lord Macaulay’s birth anniversary. As most of us would recall, Macaulay was a 19th century colonial official who sought to create an English-speaking Indian middle class elite. Construction work has halted, however, following a directive from the district administration. The authorities said that the builders have not obtained permission to construct the temple.

* Assistant Professor, DEE, NCERT, New Delhi

The temple is being built by the Dalits, who form the lowest rung in the hierarchy of castes in India. They wish to symbolise their belief in English, and also honour Lord Macaulay, by including an icon of Lord Macaulay in the temple premises. The temple is the brainchild of Chandra Bahu Prasad, a Dalit social psychologist, who says, “This temple would help encourage Dalits to learn the language, which has become essential for one’s growth.”

The Constitution of India guarantees equality of status and opportunity to all citizens. However, although the caste system was abolished, prejudices still remain. Most Dalits still believe that they do not have access to good quality education. By this they mean mainly the ability to speak and write English. For English is perceived by them as that which separates the educated elite from the masses.

Since time immemorial, schooling has always been the result of community effort. In India, the education of the younger generation in villages in pre-independence times was usually entrusted to a learned person respected by those around him. This is beautifully brought out by the writer Khushwant Singh when he describes childhood in a rural setting:

“My grandmother always went to school with me because the school was attached to the temple. The priest taught us the alphabet and the morning prayer. While the children sat in rows on either side of the veranda singing the alphabet or the prayer in a chorus, my grandmother sat inside reading the scriptures.”

Generally, education in India was restricted to boys belonging to upper caste families. Later, schools were established by missionaries. Between 1813 and 1921, the British administrators laid the foundation of the modern Indian educational system, though, of course, mainly for their own colonial and imperialistic purposes. As Macaulay’s Minute makes clear: “It is impossible for us, with our limited means, to attempt to educate the body of the people. We must at present do our best to form a class who may be interpreters between us and the millions whom we govern—a class of persons Indian in blood and colour, but English in tastes, in opinions, in morals and in intellect.”

The worst difficulties were encountered when the problem of educating the ‘untouchable’ castes came up. The schools established by the East-India company were, in principle, open to all children. The renowned educationist J.P. Naik recalls that the first test case arose in 1856 when a boy from an untouchable caste applied for admission in a government school in Dharwad, Karnataka. He was refused admission because it was feared that it would result in the withdrawal of the upper caste children, and thus in the closure of the school itself. But the decision was sharply criticised by the Governor-General of India as well as by the court of Directors of the East-India Company, a clear policy was laid down that no untouchable child should be denied admission to

a government school, even if it meant closure of the school. In the years that followed, children of the untouchable classes began to get admission to the government schools in slowly increasing numbers, and their right to admission was recognised. Thus, the British administrators firmly and unequivocally established the right of every child irrespective of caste, sex or traditional taboos to seek admission to all schools supported or aided by public funds.”

The Indian leadership which assumed control of education from 1921 made a more committed approach to the problem of equality in education. Education was viewed by Indian leaders as an integral part of nationalist thought in India. Thus developed the idea that the educational system should provide equality of educational opportunity. They launched many measures to spread among girls and the disadvantaged groups. In 1906, the Indian National Congress, then spearheading the Indian freedom struggle against the British Empire, passed a Resolution stating that the time had come “for the people all over the country to take up the question of a national system of education for boys and girls” on national lines (Zaidi, 362).

After independence the Constitution of India emerged out of the ethos of the freedom struggle. The process of building a new India on the values of the freedom struggle became the guiding vision for drafting the Constitution, which was geared towards the

national interest. In education, the idea of equalisation of educational opportunity has been brought out in the Education Commission, which says “The education of the backward classes, in general, and of the tribal people in particular, is a major programme of equalisation and of social and national integration. No expenditure is too great for the purpose.” In the context of promoting equality through education, the Education Commission (1964-66) was of the view that it was the responsibility of the educational system to bring different social classes and groups together and thereby promote the emergence of an egalitarian and integrated society. It recommended a radical transformation of the existing system through the adoption of the ‘neighbourhood school concept’, where each school would be attended by all children in the neighbourhood irrespective of caste, religion, economic condition or social status.

The idea is continued in the National Policy of Education (NPE) 1986 which says “More intensive efforts are needed to develop among the backward classes and especially tribal people.” The *Sarva Shiksha Abhiyan* (SSA), a Government of India’s flagship programme, was launched in 2001 with the aim of fulfilling the goal of universal, free elementary education. It particularly focuses on the girl child and the weaker sections of society. More recently, the Right of Children to free and compulsory Education Act (RTE) was passed on 4 August

2009 under Article 21A of the Indian Constitution. It came into force on 1 April 2010, giving every Indian child the right to have elementary education, i.e., eight years of schooling.

For centuries, bilingualism has been the accepted norm among the educated in India. For instance, a knowledge of Sanskrit/Persian (the language used in administration) along with one's mother tongue was expected. In the days of colonial rule, Indians saw no contradiction between commitment to their own country and learning a foreign language. Since independence, there has been a sea change in the attitude of Indians towards English. In 1961, English was seen as the language of the ruling class. In the 70s, the relationship between English and the Indian languages was perceived to be one of competition. The opening up of the Indian economy in the 1990s has coincided with an explosion in the demand for English in our schools because English is perceived to open up opportunities. Today, by and large, no antagonism is perceived between English and the various Indian languages. The Focus Group Position on the Teaching of English, which formed one of the bases for the *National Curriculum Framework (NCF) 2005*, states that "English is in India today a symbol of people's aspirations for quality in education. Its colonial origins now forgotten, or irrelevant, the current status of English stems from its overwhelming process on the world stage and the reflection of

this in the national arena. The level of introduction of English has now become a matter of political response to people's aspirations and not an academic issue."

The visible impact of this presence of English is that it is today being demanded by everyone at the very initial stage of schooling. This has led to the mushrooming of so-called English-medium private schools in every locality. Many middle-income and lower-income households spend a considerable part of their incomes on sending their children to schools that claim to teach English. The quality of the education they provide is questionable, yet parents prefer them over government schools. A study examining children's schooling in Andhra Pradesh, India, has revealed a dramatic rise in the number of parents opting for fee-paying private schools over state-funded government schools. The perception among parents is that children will make better educational progress in private schools, because government schools mostly teach in the vernacular. Trends in government schools are responding to the competition from private schools by changing over to English medium, or by introducing English medium streams. A British Council study on the status of English in India found that "In Mumbai, the Corporation (BMC) has been finding that recruitment to its Marathi medium schools is failing, which that of its English medium schools is rising. Andhra Pradesh introduced English medium teaching

in 2008 from Class VI in 6,500 high schools in rural areas, to offer 'convent type English medium education' to the children of the poor" (Graddol, 86).*

The National Knowledge Commission (NKC), a high-level advisory body to the Prime Minister of India, stated that in a multi-lingual country like India, language is relevant not only as a means of communication or a medium of instruction but as a determinant of access. Those who are inadequately trained in English as a language find it exceedingly difficult to compete for a place in institutions of higher education, and this disadvantage is accentuated further in the world of work. As the NKC states "An understanding of and command over the English language is a most important determinant of access to higher education, employability and social opportunities. This reality is not lost on our people."

CONCLUSION

Two points seem to emerge from the news item:

- I. Till now, almost every effort and demand with regard to the welfare of Dalits had expected 'others' to act. The 'others' referred to the state, society or media. The exercise of the temple building is praiseworthy in this crucial aspect. As the academic Shyam Babu commented, "The state and society cannot emancipate all Dalits from

backwardness and poverty. The Dalits themselves should shape their own future."

- II. The construction of a temple dedicated to a 'new goddess' is an idea that has for its basis the flexibility and accommodation of the Indian tradition. It is envisaged that in future, the temple would become the focus of Dalits with most of their rituals like the ones relating to births and weddings revolving around it. There are innumerable gods and goddesses; a deep philosophical examination would reveal that they represent various concepts and ideals. The message of this goddess is, "Come to me –I will empower you." If English is perceived as something that will lead one to prosperity, its deification, in some minds, is perhaps inevitable.

English language cosmopolitanism is greatly admired in societies such as ours. This condition has been produced by a combination of colonialism and contemporary globalisation, both of which have helped to make English the powerful medium that it is. In many cases it may even be a more powerful marker of difference than caste – a Dalit with English language fluency is likely to be much more accepted in upper-caste company and "get ahead" than an upper-caste non-English speaking person. For many, this is a good thing since it is seen as signifying

* The research is part of the Young Lives Project, which is tracking the development of children in four countries, including India. The sample group of 3,000 children were selected randomly from 20 different sites in Andhra Pradesh, representing a range of social and economic backgrounds. Retrieved from www.younglives.org.uk.Web.

how education can overcome inherited disadvantage.

A few aspects, however, are disturbing:

1. Attaching a pious identity to the modern language was understood as the easiest way to bring it within the orbit of daily life. In other words, the perception is that people accept things more readily if they are linked with religion. For instance, removal of footwear, or washing one's feet before entering a place of worship has as much to do with maintaining cleanliness as with godliness. But how much of piety and its associated qualities actually form part of daily life? The holy basil is worshipped, but is not generally used in most Indian kitchens on a daily basis. One apprehension is that, if English becomes revered as a goddess, and the worshipful attitude is carried to an extreme, the very purpose of including it in daily life may be defeated.
2. A knowledge of English is expected to be the harbinger of modernity and progress, according to the founders of this temple. Engravings of mathematical symbols, formulae of physics and chemistry, English proverbs would adorn the walls of the temple. 'English' is the new *mantra*. But in the frenzy of chanting it, no one seems to have paused to wonder about the kind of English that children would be exposed to. The tragedy is that the common people usually mistake learning of English with 'English Medium', and as a consequence, send their children at great financial sacrifice to the so-called English medium schools. In the 21st century, how should teaching and learning, and by extension, learning environments, respond to changing needs? Mechanically repeating 'A for Apple' in Class I, or engaging in extensive rote learning of incomprehensible 'English Question-Answers' is hardly what one would associate with quality education.
3. The third, and most distressing fact, is the utter disregard shown by them for the indigenous languages. While there is no denying that at the heart of India's new prosperity is English, and that the (often opportunistic) acceptance of English has improved the lives of countless Indians, educational theory stresses on the role of the mother tongue for optimum learning at the initial stages. "In the formative years where Science and Maths are being introduced and consolidated in the mind of the student ...emphasis on comprehension, excitement of quest and the enjoyment of discovery are vital and these can be communicated best in the mother tongue"(Narlikar 132). Research on language education has shown that bilingualism/multilingualism has definite cognitive and social benefits. For any sound programme of language

teaching in schools, it is important to recognise the inbuilt linguistic potential of children as well as to remember that languages get socio-culturally constructed. The fruits of these research studies are reflected in the *National Curriculum Framework-2005* which states,

“Languages provide a bank of memories and symbols inherited from one’s fellow-speakers and created in one’s own lifetime....They are so closely bound with identity that to deny or wipe out a child’s mother

tongue(s) is to interfere with the sense of self.”

Considering the knowledge of English as a mark of social advantage and that of the vernacular as backwardness disenfranchises significant sections of society.

Thus, the three — community, culture and language are very intimately connected with each other. Multilingualism is very much a part of the Indian linguistic landscape, and cannot be set aside.

REFERENCES

- GOVERNMENT OF INDIA. 1986. National Policy on Education (pp. 4.4). Government of India, New Delhi.
- _____. 2006. Report of the National Knowledge Commission. Government of India, New Delhi.
- GRADDOL, D. 2010. English Next India. British Council, New Delhi.
- MACAULAY, T. B. 1835 (2 February). Minute on Indian Education (pp. 34).
- MINISTRY OF EDUCATION. 1964. Education and National Development Report of the Education Commission (1.01, pp.66), New Delhi.
- NAIK, J.P. 1975. Equality, Quality and Quantity: The Elusive Triangle in Indian Education. Allied Publ. Pvt. Ltd. New Delhi.
- NARLIKAR, J. 2010. ‘Science in Mother tongue’ Shake-up India. Global, New Delhi.
- NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING (NCERT). 2006. Focus Group Position Paper on the Teaching of English. NCERT, New Delhi.
- _____. 2005. *National Curriculum Framework*. NCERT, New Delhi.
- NDTV INDIA. 2010 (27 October). ‘Temple for “Goddess English” focusses on Dalits’. Press Trust of India. Retrieved from Web. www.ndtv.com
- SHYAM BABU, D. 2010 (12 December). ‘D is for Dalits and E is for English Goddess’, *The Times of India*.
- SINGH, K. 2005. ‘The Portrait of a Lady’. The Collected Short Stories of Khushwant Singh. Orient Blackswan, New Delhi.
- SRIVASTAVA, S. 2013 (3 April). ‘Alphabetical Order to Discrimination’. *The Hindu*.
- ZAIDI, A.M. and S. E. ZAIDI. (Eds). 1978. ‘Combating an Unwanted Constitution.’ S. Chand & Co. Ltd., New Delhi.

Teacher Preparation Programmes for ECCE

Padma Yadav*

Effective preparation of teachers for Early Childhood Care and Education (ECCE) is critical to the issue of quality of ECCE, especially since its focus is on a play-based, child-centered methodology which requires specialised skills and knowledge to equip the teacher to address specific contextual needs of every child. The National Policy on Education (1986) viewed ECCE as a crucial input in the context of human resource development and as a feeder and support programme for primary education.

The ECCE has not yet been accorded the status of a fundamental right, nor is it in the ladder of school education system however it has found a place in RTE 2009 which says “With a view to prepare children above the age of three years for elementary education and to provide ECCE for all children until they complete the age of six years, the appropriate government may make necessary arrangement for providing free pre-

school education for such children” (Section 11, RTE Act, 2009). However, on 27 September 2013 Government of India (Ministry of Women and Child Development) after due consideration and approval passed a resolution and adopted National Early Childhood Care and Education (ECCE) Policy to promote inclusive, equitable and contextualised opportunities for promoting optimal development and active learning capacity of all children below 6 years of age.

“Teacher education at pre-primary level is perhaps the most neglected and least developed sector in India. Courses available for pre-service training for ECCE teachers are widely disparate in terms of content and duration, despite the fact that NCTE has laid down the syllabus, norms and standards for an integrated Diploma programme in ECCE after grade 12, which was under review recently. Teacher preparation programmes vary from state to state and from private to

* Associate Professor, DEE, NCERT, New Delhi

public sector. Variations can be seen in terms of nomenclature (Pre- Primary Teacher Training, Nursery Teacher Training and Montessori Teacher Training etc.), duration (3 months to 2 years), eligibility qualifications (Matriculate/ Secondary to Senior Secondary/ graduation), curriculum, and qualifications of teacher educators teaching these courses” (CECED, AUD 2012). For teachers teaching children below six years, schools select teachers as per their requirements and convenience without according any priority to training and appropriate educational qualifications. The notion still prevails that any person who likes children, or who is herself a mother, will be a good staff member in early-childhood programmes. At one extreme, there are university and government recognised courses with fixed curricula and duration and some standards set for trainers and organisations. At the other extreme, there are private institutions (which have multiplied in the era of globalisation), which run their own courses with no standards for curricula or duration, producing individuals who are unable to develop healthy programmes for young children.

However, there is no demand for trained staff as no State government has laid down any norms for staff qualifications or remuneration, nor any guidelines for the recognition of ECCE staff as teachers. In recent times, private schools have begun to employ staff with B.Ed. and D.Ed. degrees as early childhood

educators, but these individuals have not been trained to apply the principles of child development, or to use pedagogy, there is a general lack of input regarding children’s learning and development. The ICDS programme (earlier it was a four-month training programme, and now its duration is less than one month) has one of the most organised staff-training programmes at the national level, the curriculum is based on the principles appropriate for young children, and yet it is often criticised for its failure to create effective human power. The staff in early childhood development programmes are poorly paid, have no social security, no opportunity for climbing the career ladder, and no status as teachers. For teachers/workers of grades 1 and 2 (which are also included as part of ECCE in the diploma course in ECCE) professional qualifications are prescribed but the teacher education curriculum for this sub-stage is not harmonised across programmes, and not addressed distinctly from the rest of the elementary education stage such as in the Diploma in Elementary Education and Bachelors in Elementary Education. Teacher educators in this field are very limited in number and sometime people with no relevant degree teach in the Nursery teacher training institutes. Regular provisions for refresher and induction training for teachers and teacher educators are rare, integrated and inclusive approach in curriculum transaction is totally missing.

ISSUES AND CONCERNS RELATED TO TEACHER EDUCATION PROGRAMMES IN ECCE:

- There should be uniformity to some extent in the structure of teacher education programmes in all the States and UTs, such as duration, nomenclature, content, pedagogy, assessment etc.
- The access and coverage of teacher training institutes needs to be enhanced. There is inequitable distribution of ECCE teacher education institutions across states at present. The physical facilities are also poor.
- Teaching methodology is limited to copying of notes or lectures or rote learning.
- There is no lab school facility available for Internship. ECCE centres attached to primary schools should be made available for internship.
- It is observed that admissions in the teacher training courses are delayed and just after enrolment trainees are attached to schools for internship having no idea what to do in field and how to do? They are left on their own. As a result they do not get clear idea of programme planning, development of teaching-learning material, teaching methods, assessment procedures etc.
- Capacity of ECCE teachers also needs to be strengthened to handle multi-age and multilingual contexts (National ECCE Policy, 2013).
- The role of open and distance education in teacher preparation needs to be clearly conceptualised and regulatory norm and standards need to be developed for offering courses through the distance mode for pre-primary and grade 1 and 2 teachers, which are at present lacking in the NCTE regulations.
- Creating a single cadre of teachers for the pre-primary and primary levels of education, which together form the foundation of all school education, would go a long way in giving this stage its due importance. An integrated approach will also allow the possibility of the pre-school teacher moving along with her group of children through grades 1 and 2, thus providing the much needed continuity and emotional stability to children during this tender age.
- A common cadre of teachers for ECCE and Primary stage with similar nomenclature and pay scales and terms of employment are required to be formed.
- Training of functionaries (both pre-service and in-service) is very essential particularly keeping in mind the specialised nature of early childhood care and education. Organisations offering ECCE programmes should ensure that there are regular refresher courses, workshops, visits to other schools, self-evaluation techniques etc., for teachers and assistant teachers so that they can update their knowledge and enhance their efficiency.

These issues can be addressed through reforms in pre-service and in-service teacher education.

Pre-Service: Develop training programmes that will provide opportunities to teachers to teach in any programme that caters to children up to 8 years. Introduce flexibility in training by creating modular programmes, which help teachers to move from a certificate to a diploma to a degree; each of these achievements will make them eligible for specific programmes, like being crèche worker, day-care workers or *anganwadi/balwadi* teachers or school teachers. Emphasise practical ‘hands-on’ training rather than resorting to outdated, formal, and heavily theoretical approaches, particularly in those aimed at grass-roots-level workers.

In-Service: Develop innovative and practical in-service courses, distance-education models, etc., spread over a period of time, to meet the needs of the vast numbers of the so-called ‘untrained’, especially in the private sector. Emphasise short and medium-term in-service training programmes. Develop training approaches and courses employing participatory methods to involve the various players, especially teachers.

Certify and recognise ECCE training to promote both self-employment and employment that can deliver quality services. Strengthen inter-sectoral development, sharing, and networking of resource expertise and resource materials in ECCE.

PLANNING AND DEVELOPING ECCE TEACHER EDUCATION CURRICULUM

ECCE is considered as a preparatory stage for the realisation of Universalisation of Elementary Education. In order to provide healthy and enriched childhood to young learners, a teacher specifically sensitised about the perspectives of child development will be required. In order that early childhood education becomes a reality, in terms of its organisation and accessibility, one of the significant inputs in making a success story of it is that of a professionally trained and committed teacher. The professional preparation of teachers for this stage, hitherto unplanned and uncared for, calls for thoughtful planning of training sequences relevant to the developmental needs of early childhood interwoven with commonalities and specificities.

The ECCE teacher education programmes are offered by both government and private institutions. Most of these courses in government sector are Diploma courses, conducted by DIETs and Nursery Teacher Training institutes. Now Universities have also started offering ECCE teacher training programmes such as Jamia Milia Islamia University (B.Ed. Nursery), Ambedkar University (M.A. ECCE), New Delhi; RIE Bhopal constituent unit of NCERT has developed course for pre-primary and primary; Ministry of Women and Child Development has developed National ECCE policy (2013)

and based on policy National ECCE curriculum framework and quality standards have been developed. Considering the curriculum offered by various institutions, the National Policy on ECCE and also our experience of organising in-service teacher education programmes, ECCE teacher education programmes need to be re-looked.

While planning and developing early childhood teacher education, it is important to take objectives of teacher education into consideration. The objectives of teacher education are to prepare teachers for facilitating physical, motor, social, emotional, creative, aesthetic, linguistic and cognitive development of children; to acquaint them with the knowledge of child psychology; to cultivate social sensitivity, affection for children and respect for their uniqueness; to acquaint them with techniques of caring for children and enable them to identify their needs; to provide experiences and organise activities that promote children's self-concept, creativity and inventiveness; to enable them to select, prepare and use different kinds of resource materials; to develop a sense of involvement with and appreciation of local resources (human and material) and their utilisation; to develop an acquaintance with basics of scientific and technological literacy; to develop a repertoire of children's games, songs and literature; to empower student-teachers towards creating learning readiness among young learners.

ECCE teacher education curriculum should be flexible, innovative and use of locally available community resources. The curriculum must provide hands-on-experience and practical exposure to trainees in different ECCE settings. The teacher education programmes must cover the development and learning aspects of children from birth to eight years, i.e., under 3 children, pre-school stage and early primary stage. The course must be planned in such a way that lectures and theoretical aspects are minimised and practical and hands-on-experiences are maximised. It must include project work/assignments through which trainees will be confronted with real grass-root issues.

(i) Course Content: Theory, may include Conceptual Understanding about ECCE; Child Development; How Children Learn, ECCE Curriculum-Methods and Material; Planning and Management of ECCE Programmes; Addressing Variability and Aspects of Equity in ECCE; Advocacy and Communication; Linkages between ECCE and Primary Education/Convergence; Action Research and Innovation and Internship.

(ii) Course Material: The course material may be in the form of handouts, photocopies of relevant topics, printed books on ECCE. Under each unit, the core material considered essential for reading by trainees be included in the material to be given to them.

(iii) Activities: The course needs to include practical activities like

development of early stimulation material for children under 3 years, advocacy material for parents like slogans, posters, brochures etc., preparations for parent-teacher meetings, cultural activities and festivals, development of teaching-learning material like dominoes, picture cards, conversation charts etc., development of stories and games based on cultural context of the child, puppet making, etc. It must include material development activities for various domains of child development like –

- Language development – developing activities like stories, songs, rhymes, riddles, picture reading charts, games etc.
- Mathematics skills/abilities – developing activities and material for developing concept of number, space, volume, weight, time and speed; material for developing skills of thinking, reasoning, problem-solving, memory skills and sequential thinking; material for reading readiness, writing readiness and number readiness etc., preparation of album for developing environmental concepts.
- Creative art and craft – developing album of art and craft work like marble painting, brush painting, thread painting, finger painting, spray painting, leaf painting, vegetable painting etc., developing skills related to paper cutting, collage work, mosaic development, skills in cutting, stitching, pasting,

working with wire, use of waste material, preparation of puppets, masks, dolls making, making of soft and paper toys, developing apparatus for sensory stimulation, hearing, touching, smelling, tasting and vision etc.

- Physical and motor development – developing material for gross and fine motor development, skills in community mobilisation/resource mobilisation for creating facilities for different team games such as swings, balancing in beams, sand pit, etc.
- Health and nutrition related activities, preparation of first-aid box, administration of first-aid and minor accidents, maintenance of health records and plotting of growth chart, skills in planning and preparation of supplementary nutrition for young children, preparation of nutritive drinks and low cost food (using peanuts, soya beans, green vegetables, sprouted grams), preparation of *salads* (using fruits, vegetables, sprouted *dal* and cereals), projects on cultural practices, skills in serving food, skills in increasing nutritive value of foods through fermentation, sprouting, malting, etc., skills for understanding planning a balance diet with reference to child's needs in a specific area/region.
- Observing and recording, preparation of observation schedule, maintaining total record (health record, growth record chart) through observation of

child in various play situations, development of specimen for communication with parents about child's irregular attendance, annual function, development of album of nature study related to environment science, music, dance and drama activities, maintenance of admission and withdrawal register, contents register, specimen voucher, cost register, etc., some case studies could also be undertaken by the trainees.

(iv) Practical Work: The course must include intensive training in practical aspects integrated with theory. It must lay strong emphasis on field visits and visits to different institutions like *Anganwadis*, government primary schools with nursery section, private pre-schools, pre-schools run by NGO's, SOS Village, early primary grades of primary schools, etc., to provide first hand experiences.

(v) Internship: The course needs to be designed to include internship in various ECCE settings. During the period of internship, the trainees should plan ECCE activities on a daily basis and undertake these activities in the classroom. As trainees also need exposure in aspects of community participation. They should get chance during the internship to organise and observe activities of community participation and organising meeting of parents.

(vi) Assessment: It is necessary to assess teacher trainees regularly for their understanding of the subject matter, development of skills necessary

to organise ECCE programme and handle children effectively with an objective to act as agent for growth, learning and development of children during early childhood stage. It is essential that teacher trainees be assessed on continuous basis for their interest, understanding and practical skills in areas covered under theory and internship. They must get opportunity to prepare projects while working with children and community. The evaluation of trainees may be done by giving grades based on their performance in different areas of theory, practical and internship and marks may be assigned in theory and practical (internship) in the ratio of 2:3, respectively. Assignments, project reports including seminar presentation and small action research should be used as tools for helping trainees learn and enrich themselves from ground realities. They also need to be part of assessment.

CONCLUSION

In order to provide healthy and enriched childhood to young learners, a professionally trained and committed teacher is an essential. The professional preparation of teachers for this stage, requires thoughtful planning of training sequences relevant to the developmental needs of early childhood providing opportunities to teachers to teach in any programme that caters to children up to 8 years. The Course Content should disseminate information about Child Development; How Children Learn;

ECCE Curriculum – Methods and Material; Planning and Management of ECCE Programmes; Addressing Variability and Aspects of Equity in ECCE; Advocacy and Communication; Linkages between ECCE and Primary Education/Convergence; Action research and Innovation including Internship in any ECCE settings. The course must emphasise on activities, hands-on-experience and field observations. It must also include project work/assignments related to various aspects of child development.

REFERENCES

- CECED, AUD. 2012. *Preparing Teachers for Early Childhood Care and Education*. Ambedkar University, Delhi.
- GOI, MWCD. 2013. *National Early Childhood Care and Education (ECCE) Policy*, MWCD, GoI.
- KAUL, V., C. RAMACHANDRAN AND G.C. UPADHYAY. 1994. *Impact of ECE on Retention in Primary Grades: A Longitudinal Study*. NCERT, New Delhi.
- NATIONAL CURRICULUM FRAMEWORK FOR TEACHER EDUCATION. 2009. Draft for Discussion. Retrived April, 2009 from <http://www.ncte-india.org/>
- NCERT. 2005. *National Curriculum Framework*. NCERT, New Delhi.
- _____. 2006. *National Focus Group Report Position Paper on ECE (3.6)*. NCERT, New Delhi.
- _____. 2012. *Course Outline Diploma Course in ECCE*. NCERT, New Delhi.
- NCTE. 2005. *Report on ECCE Teacher Education Curriculum and Framework and Syllabus Outline*, National Council of Teacher Education, New Delhi.

3

Empowering Girls in India

Dilbaag Singh*

Abstract

If you educate a man you educate an individual, however, if you educate a woman you educate a whole family. 'Woman empowered means Mother India empowered' has rightly been said by Pt. Jawaharlal Nehru on the eve of Independence. We are now living in a democratic country and all the citizens, male or female, in such a country have the right of equality according to constitutional provisions. The same is also applicable in concerning the education of a girl. Today in India there are many Schemes and Acts in practice which are for the all-around development of girls. Education is the major issue. All Acts and schemes are useless if the beneficiary is not literate and not able to know. Only an educated girl can fight for her rights. Before making so many other schemes and providing facilities, we have to make sure that the girls, for whom schemes/programmes are made, can access the existing provisions. It is possible and easier for a well aware and educated girl to access her rights. Education should be a priority for girls. Recently Central Government as well State Governments have introduced many schemes for the improvement of girl's education. Some of them are: 'Dhanlakshmi scheme', 'Bhagyalakshmi scheme', 'Ladli scheme', 'Rajlakshmi scheme', 'Rakshak scheme' etc. After RTE Act, 2009 a positive attitude has been noticed in the Indian society, particularly in Rural areas regarding girls education. The role of media and information technology cannot be ignored in this regard to promote and popularise the expanded outlook of people. It is the right of a child (girl or boy) to get education. Between the age group of 6 and 14 years the elementary education is completely free for each child. There are also some special schemes for the single girl child. For the girls in higher education, there are some other schemes too. In this paper the focus is on how girls can be empowered by education and to analyse the role and impact of RTE to enhance

* Research Scholar, Department of Education, Visva Bharti

girls education after the execution of Children's Right to Free and Compulsory Education Act, 2009. This paper also analyses the impact of various means for communication, Films, Television and Information Technology to enhance the empowerment of Girls through Education in India in post-RTE era.

INTRODUCTION

If you educate a man you educate an individual, however, if you educate a woman you educate a whole family. 'Woman empowered means mother India empowered' has rightly been said by Pt. Jawaharlal Nehru on the eve of Independence. We are now living in a democratic country and all the citizens, male or female, in such a country have the right of equality according to constitutional provisions. The same is also applicable regarding the education of a girl. Today in India there are many Schemes and Acts in practice which are for the all-around development of girls. But all Acts and schemes are useless if the beneficiary is not literate and not able to know about. Only an educated girl can fight for her rights. Before making so many other Schemes, we have to make sure that the girls, for whom these Schemes are made, are able to access and get benefit on their own behalf. It is possible and easier for a well aware and educated girl to access her rights. Education should be a priority for girls. Recently Central Government as well State Governments have introduced so many schemes for the improvement of girl's education. Some of them are 'Dhanlakshmi scheme', 'Bhagyalakshmi scheme', 'Ladli scheme', 'Rajlakshmi scheme',

'Rakshak scheme' etc. After RTE Act, 2009 a positive attitude has been noticed in the Indian society, particularly in rural areas regarding girl's education. The role of media and information technology cannot be ignored in this regard to promote and popularise the expanded outlook of people. It is the right of a child (girl or boy) to get education. Between the age group of 6 and 14 years, the elementary education is completely free for each child. There are also some special schemes for the single girl child. For the girls in higher education there are some other schemes too.

WHY THERE IS LESS EMPHASIS ON GIRLS' EDUCATION IN INDIA

Indian society feels that a girl is a liability who gets married and will not contribute to the economic and social development of the family. It perceives a girl as somebody who has to do duties of cooking and housekeeping. As a result, Indian society considers home training more important for girls as compared to formal education.

Another contributing factor is the rapid growth of the population. Most Indian households have a number of children. Thus their needs are much higher than their earnings. This leads to the

neglect of the girl education and put more emphasis on the education of the boy child. In this instance, marriage is taken more seriously as compared to education hence a number of Indian girls are married at a younger age. This becomes as an impediment in the education of the Indian girl.

Some of the important Committees and Institutes established by Indian Government after the Independence to improve the status of girls' education –

1. In 1904, Annie Besant established Central Hindu Girls' School at Banaras.
2. Prof. Karue established SNDT Women's University at Poona for the promotion of women education.
3. Radhakrishnan Commission or University Education Commission (1948)
4. Smt. Durgabai Deshmukh Committee (1959),
5. Smt. Hansa Mehta Committee (1962),
6. M. Bhaktvatsalam Committee to look into the causes of Public Support particularly in Rural Area for girls Education and to public Corporation,
7. Kothari Commission (1964-66),
8. Resolution on the National policy on Education (1968),
9. Report of the Committee on the status of women in India (1974),
10. Challenge of Education (1985),
11. National Policy on Education (1986),
12. Programme of Action (1986) and (1992) etc.

To develop the primary education and to achieve the aim of universalisation of primary education up to age level 6-14 years, some schemes or programmes like, Operation Blackboard (OBB), District Primary Education Programme (DPEP), *Sarva Shiksha Abhiyan* (SSA), National Literacy Mission (NLM), National Programme of Nutritional Support of Primary Education (NPNSPE) or (Mid-Day Meals), RTE Act, 2009 etc., were introduced. Despite these government efforts to educate girls, women are still lagging behind in literacy.

The following are some of the reasons for a girl child to get education –

1. to educate the future generation;
2. to decrease the infant mortality;
3. to decrease the maternal mortality;
4. to decrease the population explosion;
5. to increase involvement of women in political process;
6. to decrease domestic and sexual violence;
7. to decrease the support for militancy;
8. to improve socio-economic growth;

PRESENT STATUS OF GIRLS' EDUCATION IN INDIA

At present the people are getting educated and their way of thinking is also changing. Now the educated people do not discriminate between a girl and a boy. They are providing education to both. Girls are also

getting aware about their rights. The enrolment of girls is getting high comparatively.

WOMEN'S PARTICIPATION IN EDUCATION

Education for women is the best way to improve the health, nutrition and economic status of a household that constitute a micro unit of a national economy. The trend of literacy reflects some positive and astonishing changes if we look at the scene behind the curtain. In table, we can see a wide gap between the literacy rate of the male and female but the same is decreasing after 1981. This will have far reaching consequences on the development of society.

IMPORTANCE OF GIRLS' EDUCATION

Women constitute half the human race. Education has been recognised as an essential agent of social change

and development in any society of any country. Education is considered as a potent instrument through which processes like modernisation and social change come to existence. Education exposes people to new thoughts and ideas and provides necessary skills. Hence to think harmonious development without educating girls is impossible. Moreover it has been rightly said that to educate a girl is to educate the whole family. Therefore, the emphasis with regard to girl education should be to equip her multiple role as citizen, homemaker and contributor to family income, builders of new society and builder of the nation. Education is the most important factor for girl empowerment, prosperity, development and welfare. Discrimination of girl from womb to tomb is well known to all of us. There is continued inequality and vulnerability of girls in all sectors – Economic,

Table 1
Trends in Women Education (Literacy Rate during Decades)

Year	Persons (Total)	Males	Females	Literacy Gap
1951	18.33	27.16	08.96	18.30
1961	28.30	40.40	15.75	25.05
1971	34.45	45.96	21.98	23.98
1981	43.56	56.38	29.76	26.62
1991	02.21	64.13	39.29	24.84
2001	64.88	75.26	53.67	21.59
2011	74.04	82.14	65.46	16.68

Source: Census of India, 2011

Education, Social, Political, Health Care, Nutrition, Rights and Legal etc. Girls are oppressed in all spheres of life, they need to be empowered in all walks of life. In order to fight against the socially constructed gender biases, girls have to swim against the system that requires more strength. Such strength comes from the process of empowerment and empowerment will come from the education. More importantly, an educated woman in a society like India will contribute to reducing the infant mortality rate.

Some of the Constitutional Provisions for the Girls' Education –

1. The Constitution of India in Article 15(1) on right to equality, provides the basic policy framework that enshrines the vision of girls' and the spirit in which their education is to be provided.
2. The 86th Constitutional Amendment Act, 2002 has made elementary education a Fundamental Right for children in the age group of 6-14 years by providing that "the State shall provide free and compulsory education to all children of the age of six to fourteen years in such manner as State may, by law, determine".
3. A new thrust was provided to girls' education in the National Policy on Education 1986, (as modified in 1992) which provided a holistic vision for the education of girls and women and recognised a cross-cutting issues that inhibited the

realisation of this goal. It aims at using Education as an agent of basic change in the status of women in society.

ROLE OF ICT IN EMPOWERMENT OF GIRLS AND THEIR EDUCATION

Information and Communication Technology (ICT) have played a vital role in the development of societies. ICT sector encompasses segments as diverse as telecommunication, television, radio broadcasting, computer hardware and software and services and electronic media like the Internet and the electronic mail. ICT enable girls to create access, store, transmit and manipulate information. In other words it consists of IT as well as telecommunication, broadcast media, all types of audio and video processing and transmission and network based control and monitoring functions. There has a rapid and unprecedented growth of ICT since the 80's. The growth of information technology has been phenomenal and its impact is seen in almost all spheres of life.

HOW ICT CAN HELP THE EMPOWERMENT OF GIRLS AND THEIR EDUCATION

Through ICT, girls are getting empowered. They can access important information very easily and see so many encourageable programmes which are specially broadcasted for motivation and inspiration of girls. Some of the most important

advantages for the girls from ICT are as follows –

1. Communication has become inexpensive and affordable and has extended to remotest areas (rural and tribal).
2. The broadcasting industry, especially the television and radio, have also grown by leaps and bound and are now easily accessible to rural areas also.
3. The broadcast in television is now in all languages with many channels being aired.
4. The radio broadcast is also freely available to most of the people and has been well integrated with mobile technology.
5. The potential of ICT for girls in developing countries is highly dependent upon their levels of technical skill and education.
6. Government is also imparting the technical education on the use of ICT as a part of both formal and informal educational systems and initiating distant learning and vocational courses.

In Indian context, this revolution of ICT has not been passed on to the girl folk primarily due to the social structure, values and beliefs. But now the thinking and attitude of the people regarding education and ICT are changing. They are also sending their girl child to the vocational institutes to get education so that

those girls can also come in the mainstream. The Girl ICT Day Was Celebrated on 7 May 2013, in New Delhi.

GIRLS' EDUCATION IN RTE ACT 2009

According to RTE Act, 2009, “child” means a male or female child between the age of six to fourteen years. Some specific recommendations for the girl child education are given below –

1. Every girl child of the age of six to fourteen years shall have the right for the free and compulsory education in a neighbourhood school till the completion of elementary education.
2. For the purpose of the sub-section (1), no child would be liable to pay any type of fee or charge or expenses which may prevent her from pursuing and completing the elementary education.
3. As defined in clause 1 of section 2, the person with disability will not be discriminated.
4. For seeking admission in such other school, the head teacher or the principal have to provide the transfer certificate immediately without any delay.
5. For each girl child school will be in the neighbourhood area so that the parent can send their daughters to the school without any hesitation and fear.

FACILITIES AND SCHEMES PROVIDED BY THE STATE AND CENTRE GOVERNMENT

Both the state and the central governments are providing facilities to empower the girls and improve their status in the society. There are many schemes run at state and centre levels like 'Dhanlakshmi scheme', 'Bhagyalakshmi scheme', 'Ladli scheme', 'Rajlakshmi scheme' and 'Rakshak scheme'. But once again the same question comes to our mind that the benefit of these schemes and facilities can be taken by the common people only when their mindset changes and they become ready to send their girl child to school.

DISCUSSION AND CONCLUSION

The situation and status of girl child is improving in India. The government of India is making umpteen efforts to uplift the girl child. Education also brings reduction in inequalities and functions as a means of improving their status within the family. To encourage the education of girls at all levels and for dilution of gender bias in providing knowledge and education, the Government has established schools, colleges and universities exclusively for girls. To bring more girls, especially from marginalised families of Below Poverty Line (BPL),

in mainstream of education, the government is providing a package of concessions in the form of free books, uniform, boarding and lodging, mid-day meals, scholarships, free cycles and so on.

Yet one cannot speak of women empowerment when cases of violence against women are rampant. Society needs to change itself and the way it thinks. What needs to begin is a movement to empower the girl child right from the womb, means before her birth to her existence. Her upbringing needs to be changed. She cannot be brought up in an environment where girls are taught to remain subdued. Their aspirations cannot be curbed because they are females, they cannot be ignored. The girl child needs to grow learning that she is not less than her brother. She needs to know that a wide range of avenues wait for her to be explored in this world of hi-tech lifestyle. The urban India is adopting these changes, but the situation has to be improved in rural parts where the major part of our population lives. The government and NGOs are doing their best to bring out changes in these areas. Women empowerment drives and initiatives will continue and some will do wonders in achieving their goals. But the real difference will come only once the foundation of our society undergoes dramatic transformation.

REFERENCES

- DAYARAM, 2009. *School Development Plan Under the RTE Act, 2009*, American India Foundation, New Delhi.
- GoI. 2005. *Child Protection-A Handbook for Teachers*: Ministry of Women and Child Development, New Delhi.
- _____. 2007. *Study on Child Abuse: India*: Ministry of Women and Child Development, New Delhi.
- _____. 2009. *The Right of Children to Free and Compulsory Education Act-2009: The Gazette of India*, New Delhi.
- GUPTA, N.L. 2003. *Women's Education Through Ages*, Concept Publications Co, New Delhi.
- NCERT. 2005. *National Curriculum Framework for School Education*. NCERT, New Delhi.
- NCPCR. *Eliminating Corporal Punishment in Schools*. Govt. of India.
- RAO, R.K. 2001. *Women and Education*, Kalpaz Publications, Delhi.
- SIDDIQUI, MOHAMMAD SHAHEER. 2013, Changing Scenario of Women Development: Emerging Partnership in Economic Development and Challenges Ahead, pp 434-435 in *Challenges of Livelihood and Inclusive Rural Development in the Era of Globalization*, New Delhi Publishers, New Delhi.

4

Fundamentals of Child Rights

Pushp Lata Verma*

Abstract

India is home to about four hundred and forty million children, that is, 42 per cent of the total population. They are our most valuable asset and a significant human resource. The prosperity of our country depends indeed in their holistic development, that is, physical, mental, social and economic development. India has adopted various child-friendly policies, laws and programmes for the all-round development of children. We have the National Policy for Children which obligates on the State to provide adequate services to children for their full physical, mental and social development. The National Charter for Children emphasises the Government of India's commitment to children's rights to survival, health and nutrition, standard of living, play and leisure, early childhood care, education, protection of the girl child, right to a family and right to be protected from economic exploitation and all forms of abuse. The National Commission for Protection of Child Rights has been set up by an Act of Parliament in 2007 for proper enforcement of children's rights and effective implementation of laws and programmes relating to children. Several States in the country have also set up similar Commissions.

There is no issue more vital to humanity and its future than enabling children to realise their full potential. The needs and the rights of the children all around the world must be accorded top priority in all developmental efforts.

Children constitute the principal asset of any country. The prosperity of a country largely depends on the all-round development of its children and young people. The

protection of children has emerged as a major concern all over the world, especially against the backdrop of growing incidences of gross abuse and exploitation of children in many

* Assistant Professor, DESM, NCERT, New Delhi



ways. Trafficking of children and young people, and child labour are forms of exploitation of children. It requires greater attention and multi-dimensional approach towards achieving all-round development of children and also to protect the children from abuse, trafficking and exploitation.

ROLE OF THE UNITED NATIONS

The principles that childhood is entitled to special care, assistance and safeguards were for the first time stated in the Geneva Declaration on the Rights of the Child in 1924. It was not until recently that children have become a constituency in their own right. A number of Government laws and human rights decrees have been created to advocate more equitable treatment of children under existing laws and for a more equitable share of resources and opportunities.

The first major step, on behalf of children, taken by the United

Nations was the creation of the United Nations Children's Fund (UNICEF) in December 1946. Two years later, the Universal Declaration of Human Rights was adopted by the UN General Assembly in 1948. The provisions of that Declaration and its two International Covenants on human rights – International Covenant on Civil and Political Rights and the

International Covenant on Economic, Social and Cultural Rights – adopted in 1966, recognised that child rights need protection. The Declaration on the Rights of the Child in 1959 was United Nation's first Statement devoted exclusively to the rights of children, but it served as a moral rather than a legally binding framework. The special plight of girls was addressed by the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), adopted by UN in 1979.

THE CONVENTION ON RIGHTS OF THE CHILD

The Convention on Rights of the Child (CRC) is the first legally binding international instrument to incorporate the full range of human rights – civil, cultural, economic, political and social rights. In 1989, world leaders decided that children needed a special convention just for them because people below the age of 18 years often

need special care and protection that adults do not. The leaders also wanted to make sure that the world recognised that children have human rights too. The objective of the Convention is to give every child the right to survival and development in a healthy and congenial environment. The Convention sets out these rights in 54 articles and two Optional Protocols to the CRC, namely, (i) on the involvement of children in armed conflict, and (ii) on the sale of children, child prostitution and child pornography. It spells out the basic human rights that children everywhere have the right to survival; to develop to the fullest; to protection from harmful influence, abuse and exploitation; and to participate fully in family, cultural and social life. The four core principles of the Convention are non-discrimination; devotion to the best interests of the child; the right to life, survival and development; and respect for the views of the child. Every right spelled out in the Convention is inherent to the human dignity and harmonious development of every child. The Convention protects children's rights by setting standards in health care; education; and legal, civil and social services. By agreeing to undertake the obligations of the Convention (by ratifying or acceding to it), national Governments have committed themselves to protecting and ensuring children's rights and they have agreed to hold themselves accountable for this commitment before the international community. States party to the Convention are

obliged to develop and undertake all actions and policies in the light of the best interests of the child.

The Convention on the Rights of the Child (CRC) was adopted by the United Nations in 1989. India is a signatory to the Convention. The Convention was acceded by India on December 11, 1992. India has also signed and ratified both the Optional Protocols to the CRC in 2005.

India is also party to the Millennium Development Goals which *inter alia* includes achievement of universal primary education by 2015 when children everywhere, boys and girls alike, will be able to complete a full course of primary schooling and the South Asian Association for Regional Cooperation (SAARC) Conventions on Child Welfare and Combating Trafficking of Women and Children in SAARC Region.

INDIA'S SCENARIO

India has the largest child population in the world. It is home to about 440 million children which is 42 per cent of the total population. The founding fathers of the Constitution were deeply concerned for the protection and welfare of children. Several constitutional provisions (Fundamental Rights and Directive Principles) towards welfare of the children have suitably been incorporated in the Constitution of India. Some of the provisions laid down by the Constitution are:

- Article 14 provides that the State shall not deny to any person equality before the law or the equal

protection of the laws within the territory of India.

- Article 15(3) provides that nothing in this article shall prevent the State from making any special provision for women and children.
- Article 21 provides that no person shall be deprived of his life or personal liberty except according to procedure established by law.
- Article 21A directs that the State shall provide free and compulsory education to all children of the age of six to fourteen years in such manner as the State may, by law, determine.
- Article 23 prohibits trafficking of human beings and forced labour.
- Article 24 prohibits employment of children below the age of fourteen years in factories, mines or any other hazardous occupation.
- Articles 25 to 28 provide freedom of conscience, and free profession, practice and propagation of religion.
- Article 39(e) and (f) provide that the State shall, in particular, direct its policy towards securing to ensure that the health and strength of workers, men and women, and the tender age of children are not abused and that the citizens are not forced by economic necessity to enter vocations unsuited to their age or strength and that the children are given opportunities and facilities to develop in a healthy manner and in conditions of freedom and dignity and that the childhood and youth are protected

against exploitation and against moral and material abandonment.

- Article 45 envisages that the State shall endeavour to provide early childhood care and education for all children until they complete the age of six years.

In pursuance of the spirit of these constitutional provisions, several laws have been enacted by our Parliament with a view to protecting and securing the all-round development of children:

- The Guardian and Wards Act, 1890.
- The Young Persons (Harmful Publications) Act, 1956.
- The Immoral Traffic (Prevention) Act, 1956.
- The Child Labour (Prohibition and Regulation) Act, 1986.
- The Infant Milk Substitutes, Feeding Bottles and Infant Foods (Regulation of Production, Supply and Distribution) Act, 1992.
- The Pre-conception and Pre-natal Diagnostic Technique (Prohibition of Sex Selection) Act, 1994.
- The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995.
- The Juvenile Justice (Care and Protection of Children) Act, 2000.
- The Commission for Protection of Child Rights Act, 2005.
- The Prohibition of Child Marriage Act, 2006.
- The Juvenile Justice (Care and Protection of Children) Amendment Act, 2006.

NATIONAL POLICY FOR CHILDREN

The National Policy for Children was adopted on August 22, 1974. The Policy lays down that the State shall provide adequate services for children, both before and after birth and during the growing stages for their full physical, mental and social development. The measures suggested in the Policy include, amongst others, a comprehensive health programme, supplementary nutrition for mothers and children, free and compulsory education for all children up to the age of 14 years, promotion of physical education and recreational activities, special consideration for children of weaker sections like SCs and STs, prevention of exploitation of children, etc.

NATIONAL CHARTER FOR CHILDREN

The Government adopted the National Charter for Children which was notified in the Gazette of India on February 9, 2004. The National Charter is a statement of intent embodying the Government's agenda for children. It emphasises the Government of India's commitment to children's rights to survival, health and nutrition, standard of living, play and leisure, early childhood care, education, protection of the girl child, empowering adolescents, equality, life and liberty, name and nationality, freedom of expression, freedom of association and peaceful assembly, right to a family and right to be protected from economic exploitation and all forms of abuse. It also provides for protection

of children in difficult circumstances, children with disabilities, children from marginalised and disadvantaged communities, and child victims. The Charter while stipulating the duties of the State and the community towards children, emphasises the duties of children towards family, society and the nation.

NATIONAL PLAN OF ACTION FOR CHILDREN 2005

The National Plan of Action for Children 2005, which has been prepared in consultation with concerned Ministries/Departments, States/Union territory Governments, NGOs and experts includes goals and objectives, strategies and activities for improving nutritional status of children, reducing Infant Mortality Rate (IMR) and Maternal Mortality Rate (MMR), increasing enrolment ratio and reducing dropout rates, universalisation of primary education, increasing coverage for immunisation, etc.

NATIONAL COMMISSION FOR PROTECTION OF CHILD RIGHTS

A National Commission for Protection of Child Rights was set up on March 5, 2007 in accordance with the provisions of the Commission for Protection of the Child Rights Act, 2005 for proper enforcement of children's rights and effective implementation of laws and programmes relating to children. The Commission, a statutory body, deals with all matters relating to children. As per the Act, the Members of the

Commission have to be the experts in the field of child health, education, child care and development, juvenile justice, children with disabilities, elimination of child labour, child psychology or sociology and laws relating to children.

The functions of the Commission *inter alia* are to (i) investigate and examine all matters relating to the safeguards provided for children under the existing laws; (ii) present to the Central Government, annually and at such other intervals as the Commission may deem fit, reports upon the working of those safeguards; and (iii) inquire into complaints and take *suo moto* notice of matters relating to deprivation of child's rights, non-implementation of laws relating to children. The Commission also enjoys the powers which *inter alia* include the summoning and enforcing the attendance of any person and examining him on oath; requisitioning any public record or copy thereof from any court or office; and issuing commissions for the examination of witnesses and documents.

In accordance with the Act, the States of Delhi, Goa, Karnataka, Maharashtra and Sikkim have set up State Commissions for Protection of Child Rights.

ACHIEVEMENT OF UNIVERSAL PRIMARY EDUCATION

To achieve universal primary education, India has to increase the primary school enrolment rate to 100

per cent by 2015 and wipe out at the same time the dropouts. *Universal primary education is within our reach as the Net Enrolment Ratio (NER) in primary education is likely to reach the 100 per cent mark for both boys and girls before 2015.* For girls, it stands at 90.9 per cent in 2005 showing an increase of nearly 12.7 percentage points in the six years since the year 2000. The corresponding increase for boys is only about 2 percentage points. The latest flash statistics of the District Information System for Education (DISE) 2009-10 shows the Gender Parity Index (enrolment) at 0.94 for primary education and the overall NER at 98.28 per cent against 87.4 per cent in 2000 indicates that 100 per cent NER should be achievable before 2015.

THE RIGHT OF CHILDREN TO FREE AND COMPULSORY EDUCATION ACT, 2009

The Right of Children to Free and Compulsory Education Act, 2009 is a watershed legislation providing children in 6-14 age group a Fundamental Right to free and compulsory education till completion of Class VIII. This Act, which is a consequential legislation of Article 21A of the Constitution would pave the way for all children, especially those belonging to disadvantaged groups and weaker sections, the opportunity to pursue and complete elementary education of acceptable quality. The Act casts a statutory obligation on the Government – Central Government,

State Government and local authority, to ensure that every child exercises his or her Fundamental Right to be educated in a school which conforms to the minimum standards specified in the Act.

The Act is anchored in the belief that the values of equality, social justice and democracy and the creation of a just and human society can be achieved only through provision of inclusive elementary education to all. Provision of free and compulsory education of satisfactory quality to children from disadvantaged and weaker sections is, therefore, not merely the responsibility of schools run or supported by the appropriate Governments, but also of schools which are not dependent on Government funds.

Constitution of a School Management Committee in every Government and Government-aided school marks a significant step in ensuring that the most important stakeholder in a child's education viz., the parents or guardians have an important role in monitoring the functioning of the school. Every State is required to lay down a curriculum and evaluation procedure taking into consideration various factors, such as, conformity to the values enshrined in the Constitution, building up of child's knowledge, potentiality and talent, making the child free of fear, trauma and anxiety and Comprehensive and Continuous Evaluation (CCE) of child's understanding of knowledge and his ability to apply the same.

The Act envisages a crucial role for teachers in conduct of the prescribed curriculum, to assess the learning ability of each child and, if required, supplement it with additional instructions. The Act makes special provision for bringing hitherto non-enrolled and out-of-school children into the mainstream of elementary education. Every such child would be admitted in an age appropriate class and provided special training to come at par with other children. Such children would have the right to complete elementary education even after the age of 14 years.

PREVENTION OF TRAFFICKING OF WOMEN AND CHILDREN FOR COMMERCIAL SEXUAL EXPLOITATION

Trafficking in human beings is an organised crime violating all basic human rights. India has emerged as a source, transit and destination country. It is estimated that there are 3 million sex workers in India, of which 40 per cent constitute children, as young as 10 years old. Most often these victims are trafficked through means like duping, luring, fake marriages, abducting, kidnapping and manipulating social and economic vulnerabilities and sold to brothels where they are continuously subjected to abuse, violence and exploitation by perpetrators of crime.

The right against exploitation, a Fundamental Right guaranteed by the Constitution, is a high priority item for the Government, which is reflected in various legislations and

policy documents. The principal legislation Immoral Traffic Prevention Act, 1956 lays down provisions for providing stringent punishment to the perpetrators of crime. It was amended in 1978 and again in 1986 for better implementation, enhanced scope, and more stringent penalties. In addition, the Indian Penal Code also provides provisions for crimes related to trafficking. India is also signatory to various international and regional conventions such as *UN Convention against Transnational Organized Crime with its Protocol, to Prevent, Suppress and Punish Trafficking in Persons, especially Women and Children; the SAARC Convention on Preventing and Combating Trafficking of Women and Children and Prostitution; the Convention on the Elimination of all Forms of Discrimination Against Women and the Convention on the Rights of the Child*. The Government of India has adopted a multi-pronged approach to prevent and combat trafficking which includes legislative measures, enforcement, prevention of trafficking, rescue and rehabilitation, reintegration and repatriation of cross-border trafficked victims.

PROHIBITION OF CHILD MARRIAGE

Child marriage is a social evil that robs children of their childhood and impedes their holistic development. Child marriage has continued to prevail in spite of seventy-eight years of enactment of the Child Marriage Restraint Act, 1929 which has been replaced by the Prohibition

of Child Marriage Act, 2006. The amended Act has forward looking provisions and emphasises more on prohibition rather than prevention of child marriages. Besides, it has provision for relief to the victims of child marriage as well as enhanced punishments for all those who abet and solemnise such a marriage. Under Section 19(1) and Section 16(1) of the Prohibition of Child Marriage Act, 2006, State Governments are required to frame rules and appoint Prohibition Officers. The Ministry of Women and Child Development (MWCD) is conducting training and sensitisation workshops for various stakeholders on the provisions in the Act.

CHILD LABOUR

An estimated 158 million children aged 5-14 are engaged in child labour - one in six children in the world. Millions of children are engaged in hazardous situations or conditions, such as working in mines, working with chemicals and pesticides in agriculture or working with dangerous machinery. They are everywhere but invisible, toiling as domestic servants in homes, labouring behind the walls of workshops, hidden from view in plantations. Hazardous and exploitative child labour violates child rights as enshrined in the Convention on the Rights of the Child.

In India, the problem of child labour poses a great challenge before the nation. According to Census 2001, there are 1.26 crore economically active children in the age-group of

5-14 years, which includes about 1.2 million children working in hazardous conditions. The Government has taken various pro-active measures to tackle this problem. The Child Labour (Prohibition and Regulation) Act enacted in 1986 prohibits employment of children in certain specified hazardous occupations and processes and regulates the working conditions in others. The National Policy on Child Labour formulated in 1987 seeks to adopt a gradual and sequential approach with a focus on rehabilitation of children working in hazardous occupations and processes. The National Child Labour Project Scheme (NCLP) was launched in 1988 in 9 districts of high child labour endemicity with the objective of running of special schools for child labour withdrawn from work. In the special schools, these children are provided formal/non-formal education along with vocational training, supplementary nutrition and regular health checkups so as to prepare them to join regular mainstream schools. The coverage of the NCLP Scheme increased to 250 districts during the Tenth Plan.

The Eleventh Plan envisages to expand the NCLP scheme to:

- cover all the remaining districts having a reasonable number of working children in the hazardous category;
- conduct child labour survey twice in the plan period to have correct estimate of the child labour in the country;

- develop standard curricula for the special schools for providing uniformity and linkage with regular schools;
- make vocational training, already a component of NCLP, more meaningful by indentifying those skills that have marketability; and strengthen health component in special schools.

INTRODUCTION OF WHO GROWTH STANDARDS IN ICDS

The World Health Organisation (WHO) based on the results of an intensive study initiated in 1997 in six countries, including India, has developed New International Standards for assessing the physical growth, nutritional status and motor development of children from birth to 5 years age. The Ministry of Women and Child Development and the Ministry of Health have adopted the New WHO Child Growth Standards in India on 15 August 2008 for monitoring the Growth of Children through ICDS and National Rural Health Mission. Through these standards, correct classification of children can be made as per international norms.

RAJIV GANDHI NATIONAL CRECHE SCHEME FOR THE CHILDREN OF WORKING MOTHERS

The Rajiv Gandhi National Crèche Scheme for the Children of Working Mothers was launched from January 1, 2006 to provide crèche services to the children of age group of 0 to 6



years, which includes supplementary nutrition, emergency medicines and contingency. These crèches are operationalised through the Central Social Welfare Board, the Indian Council for Child Welfare and the *Bhartiya Adim Jati Sevak Sangh*. The priority is given to uncovered districts/areas and tribal areas while extending the Scheme to maintain balance regional coverage. So far, about 31,718 creches have been sanctioned.

SCHEME FOR WELFARE OF WORKING CHILDREN IN NEED OF CARE AND PROTECTION

The MWCD is also implementing the Scheme for Welfare of Working Children in Need of Care and Protection since 2004-05 with the objective to provide opportunities including non-formal education, vocational training, etc., to working children to facilitate their entry/re-entry into mainstream education in cases where they have either not attended any learning

system or where for some reasons their education has been discontinued with a view to preventing their continued future exploitation. The programme is to lend support to projects in urban areas, not already covered by the existing schemes of the Ministry of Labour and Employment, which provide support for the wholesome development of child workers and potential child workers especially those who have none or ineffective family support such as children of slum/pavement dwellers/drug addicts, children living on railway platforms/along railway lines, children working in shops, *dhabas*, mechanic shops, etc., children engaged as domestic workers, children whose parents are in jail, children of migrant labourers/sex workers, leprosy patients, etc.

The programme focuses on measures such as (a) facilitating introduction to/return to the mainstream education system as children at study are not children at work; (b) counselling to parents, heads of families, relatives of the targeted children so as to prevent their exploitation; and (c) give vocational training whenever necessary.

INTEGRATED CHILD PROTECTION SCHEME

The Ministry of Women and Child Development has formulated the Integrated Child Protection Scheme (ICPS) by merging the components of three of the existing Schemes, namely, (i) the Programme for Juvenile Justice;

(ii) the Integrated Programme for Street Children (including Childline Services); and (iii) the Scheme for Assistance to Homes [Shishu Greh], to promote in-country adoption and has proposed new interventions to cover the gaps in the existing schemes. The objectives of the Scheme are to contribute to the improvement in the well-being of children in difficult circumstances, as well as to the reduction of vulnerabilities to situations and actions that lead to abuse, neglect, exploitation, abandonment and separation of children. These will be achieved by: (i) improved access to and quality of child protection services; (ii) raised public awareness about the reality of child rights, situation and protection in India; (iii) clearly articulated responsibilities and enforced accountability for child protection; (iv) established and functioning structures at all Government levels for delivery of statutory and support services to children in difficult circumstances; and (v) introduction of operational evidence-based monitoring and evaluation. The ICPS focuses its activities on children in need of care and protection and children in conflict and contact with the law as defined under the Juvenile Justice (Care and Protection of Children) Act, 2000 as amended in 2006.

CHILDLINE SERVICES

The MWCD launched Childline Service during the year 1998-99. The childline is a 24-hour free phone service, which

can be accessed by a child in distress or an adult on his behalf by dialing the number 1098 on telephone. Childline provides emergency assistance to the child and subsequently based upon the child's need, the child is referred to an appropriate organisation for long-term followup and care. The service focuses on the needs of children living alone on the streets, child labourers working in unorganised sector, domestic workers and sexually abused children. This service is now available in 83 cities but any child can use the service in case of an emergency.

CENTRAL ADOPTION RESOURCE AGENCY

The Central Adoption Resource Agency (CARA) was set up in 1990 and was subsequently registered under the Societies Registration Act, 1860 on March 18, 1999 to act as an autonomous body in the matters relating to adoption. It has been designated as the Central Authority by the Ministry of Social Justice and Empowerment on July 17, 2003 for the implementation of the Hague Convention on Protection of Children and Cooperation in respect of inter-country adoption (1993). It regulates and monitors the working of recognised social/child welfare agencies engaged in in-country as well as inter-country adoptions. The CARA grants recognition to Indian Placement Agencies on the recommendation of the State Government for processing inter-country adoption cases. It also enlists foreign agencies that are engaged in sponsoring applications of

foreign prospective adoptive parents. The CARA is also responsible for furthering the cause of adoption through advocacy, sensitisation and capacity-building programmes.

NATIONAL INSTITUTE OF PUBLIC COOPERATION AND CHILD DEVELOPMENT

Established in 1966, the National Institute of Public Cooperation and Child Development (NIPCCD) is an autonomous organisation engaged in promoting voluntary action, research, training and documentation in the overall domain of child development and welfare, women empowerment and related issues. The Institute functions under the administrative control of the Ministry of Women and Child Development. In order to cater to the region-specific requirement of the country, the Institute, over a period of time, has

established four regional centres at Guwahati, Bangalore, Lucknow and Indore.

CONCLUSION

All principal organs of the State viz., the Executive, the Legislature and the Judiciary in India have taken several proactive measures to put in place an exhaustive legal and policy framework for fulfilling the Convention on the Rights of the Child. Several schemes and programmes have been initiated to address issues relating to children and a lot more is still on the anvil. The hallmark for success and the biggest challenge however, is to ensure proper implementation of all such provisions and interventions. Besides, the governmental efforts, the NGO's and other civil society organisations such as the media as well as the corporate sector need to come forward for providing a better life to the children of our country.

REFERENCES

- FRANKLIN, Bob. 1995. *The Handbook of Children's Rights – Comparative Policy and Practice*, Routledge Publication.
- GOPALKRISHNAN, B. 2004. *Rights of Children*, Aavishkar Publishers, Delhi.
- GOVERNMENT OF INDIA. *Convention on the Rights of the Child – India First Periodic Report*, GoI, New Delhi.
- LOVGREN, S. 1995. *Child Labor Banned in India*, Children's Rights International Justice is Hope An Initiative of World Congress on Family Law and Children's Rights Inc. National Geographic News.
- MINISTRY OF WOMEN AND CHILD DEVELOPMENT. Annual Report 2009-2010. MWCD. New Delhi.
- NUEPA. 2008. *Education for All Mid-Decade Assessment Reaching the Unreached*. Delhi.
- RAO, D. VENKATESHWARA. 2004. *Child Rights: A Perspective on International and National Law*. Manak Publication.

School Environment from Physical Aspects to Learning

Anjni Kaul*

ABSTRACT

School is a place where teachers and students interact both formally and informally. In this paper author has tried to examine the physical environment of a school such as teacher-pupil ratio, school building, activity room, library, classroom space, outdoor space, furniture, staff provided, along with aspects such as gender issues, inclusive education, space for parents and community etc. Author has also tried to find out if school and classroom environment is reasonably good, to what extent it would really be responsible for influencing students learning. Even though environment of the school is satisfying but educational practice is still based on limited lesson plans as indicated in the present study. Tasks are repetitive, mechanical and focus is on outcomes only.

INTRODUCTION

The aim of school education is to help children learn to become autonomous learners and to make children's life at school a happy experience rather than a source of stress or boredom

In the school education scenario in India, the present *National Curriculum Framework-2005*(NCF-2005) and the textbooks of science have already been implemented in the school system for almost seven years. The time has come to view the textbooks

transaction in an actual teaching-learning situation.

Being a faculty member of National Council of Education Research and Training (NCERT), author decided to go to a rural school of India for three months with the following objectives :

- To observe and collect information on the physical environment of the school, such as teacher-pupil ratio, building of the school, activity room, library, classroom space, outdoor space, furniture, staff

* DESM, NCERT, New Delhi

- provided, gender issues, inclusive education, space for parents and community etc.
- To observe whether teachers are transacting the concepts given in the textbooks and other related materials in the light of NCF-2005.
 - To observe whether children are able to comprehend the concepts given in these textbooks and other textual materials.

This activity will help in getting feedback about the physical environment, textbooks and other supplementary materials from the grassroot level, which will help in improving the present curriculum/textbooks, which is the actual need of the hour.

Author opted for a rural Government Middle School in Haryana. Teaching in a remote school for three months was altogether a new experience. Author interacted freely with students, teachers and parents of this school. She also observed and collected information about the physical and academic environment of the school.

In this particular paper focus is on physical environment of the school. However, one of the academic experiences has already been shared in a paper which has been accepted in the Journal of *School Science – A Quarterly Science Journal*.

PHYSICAL ENVIRONMENT OF SCHOOL

BUILDING

There are four schools in this campus.

- *Aanganwadi* (where daily laborers keep their toddlers)

- Government girls' primary school
- Government boys' primary school
- Government middle school for both boys and girls.

All these schools have separate small buildings, each with a school in-charge.

Since Department of Education in Science and Mathematics, NCERT is working for Classes VI-XII, author adopted Government middle school for boys and girls (Figure 1).



Fig. 1 Government middle school

The building of this school has six rooms along with a small kitchen. One room each is provided for children of Classes VI, VII and VIII. One room each is meant for in-charge of the school, staff room, and science and mathematics activity room, respectively. In the science and mathematics activity room, science and mathematics kits have been provided under *Sarva Shiksha Abhiyan* (SSA). SSA is a scheme launched by Government of India to provide useful and relevant elementary education for all children in the 6-14 age group. These kits contain consumable and non-consumable items, whenever required funds are being provided to get the consumable items. These

kits are not being used by teachers or students during teaching-learning process, because either teachers are not trained to use science and mathematics kits or even if they are trained they prefer the traditional way of teaching. Chart papers with different concepts of Science and Mathematics are drawn by students and hung on the walls of the activity room. In this rural school, there is no laboratory facility so students are put to great disadvantage because they are deprived of the excitement of performing activities. Since activities at upper primary stage are of very simple nature, these can be performed by teachers and students with minimal materials. Author could transact most of the concepts given in textbooks by performing activities with the help of the science kit by involving students (Figure 2). It was so exciting for them to see hydrogen gas burning with a pop sound, acidic solution turning blue litmus paper red rather than to read and memorise that hydrogen burns with pop sound and blue litmus turns red on dipping in acidic solution, there is a separate kitchen.

Initially in this kitchen, the mid-day meal used to be cooked. However, the mid-day meal is now being supplied by



Fig. 2 Learning by doing

‘ISKON’. The Mid-day meal is served during the short break. It is brought in a van to the school (Figure 3). In the school this meal is served by a lady part time worker. Each day the menu is different. Before serving this food to students, the teachers taste it. This showed that they really care for their students’ welfare. After finishing the food, the utensils are washed by the worker and kept in the kitchen. In the absence of the worker, utensils are washed by the children.



Fig. 3 Van carrying mid-day meal

There are separate toilets for boys, girls and staff. Though water is available in the toilets, there is no flush system. Toilets are cleaned by a temporary worker.

There is no separate library but 300 books are available which are kept in a cupboard in the in-charge’s room (Figure 4). These books consist of dictionaries of different subjects, story books, novels of Indian authors. However, students do not have free access to these books, there is also no library period allocated in the time table.



Fig. 4 Books in a cupboard

Quotations are written on the walls of the building (Figure 5a). Two separate blackboards are mounted on the front wall of the building. One is meant for 'today's thought' (Figure 5b), where children are encouraged to write a 'good thought' for the day, and the other board shows the attendance of the students (Figure 5c) in the upper primary classes i.e., Classes VI, VII and VIII.

There is a boundary wall for the school. It has a small region where students can play (Figure 6a). A



Fig. 5 (a) Quotations written on the walls (b) Blackboard for writing today's thought (c) Blackboard showing the attendance of the children

number of plants have been planted and are being nurtured by the teachers and the students. The school has taken care of Water Harvesting System with the help of villagers. Villagers have also sponsored for the construction of one room, which is under the process of construction. There is a bore-well from which water is being supplied for gardening and other purposes (Figure 6b). This water is also used by staff and students for drinking.



Fig. 6 (a) Playground of the school (b) Student watering the plants

A spacious corridor is in front of the building where students can move at ease (Figure 7a). There is a huge

Banyan tree in the school ground under which the Morning Prayer is held. The shade of this tree is also utilised during summer for teaching the students when there is no electricity in the classrooms (Figure 7b). There is a huge iron grided gate at the entrance of the school for security children (Figure 7c).



(a) (b) (c)
 Fig. 7 (a) Spacious corridor (b) Huge Banyan tree
 (c) Grilled Iron Gate

The classrooms are spacious enough to accommodate around twenty students each. Classes VI and VIII are provided with benches, whereas in Class VII students sit on mats on the ground (Figure 8). Requirement for benches has been sent to the higher authority. There are about twelve, two seater benches in the classroom.

The rooms have fans and bulbs but most of the time there is no electricity and so the rooms get darker and the visibility is low (Figure 8).

STAFF

There are five teachers including the school in-charge. Four of them are females. Each teacher handles two subjects. There is only one non-academic staff. All the staff come from nearby places/villages.

There is not even a single computer in the school, though it is likely to get one soon for office purpose. Teachers do most of the official writing work, manually. The parents of the students said that they also want their children to get familiar with computers. Students



Fig.8 Students sitting on benches and mats and also low visibility in the classroom

also wanted computers but to play games of their choice.

SCHEDULE

In summers the school begins at 8 a.m. till 2.30 p.m. After morning's assembly, classes begin at 8.20 a.m. There are nine classes per day including zero period. In the zero period, issues related to values, concerns related to environment, general knowledge and additional inputs for different subjects are given. There is a short break at 11.40 a.m. and continues till 12.10 p.m. during which mid-day meal is served. During winter schools starts at 8.20 a.m. and finish at 3.30 p.m.

The school works from Monday to Saturday except second Saturday. There are five classes of 40 minutes duration before the short break and four classes each of 35 minutes duration after the short break.

Each class gets one games period every day. A box containing, laziums, dumb bells and other sports material for children are kept in the in-charge's room. On August 15, Independence Day celebration students performed exercises using dumb bell as well as a cultural programme. This was appreciated by audience/villagers.

The morning assembly is conducted by physical education teacher.

Assembly focuses on:

- Prayer
- National Anthem of India
- Mass PT
- Yoga (Daily)

Zonal level school tournaments are held every year.

Bal Shabha for students of all classes is usually held twice a month, where students perform different cultural activities. This is done to raise the confidence level of the children. The discipline of the entire school is maintained by the physical education teacher.

STUDENTS

There are 21, 19 and 18 students in Classes VI, VII and VIII respectively. The total number of students at middle school level is 58.

Boys prefer to sit with boys and girls prefer to sit with girls only. Boys and girls of Classes VI and VII interact freely with each other, but Class VIII boys and girls feel hesitation while interacting. Author first tried to change their sitting arrangements but this did not work because children got more conscious. Not to make it obvious, author made heterogeneous groups when students were performing activities, which to certain extent helped in making gender inclusive classroom, because students were

Class	Number of girls	Number of boys	Total
VI	13	08	21
VII	09	10	19
VIII	10	08	18

so engrossed in their work that it did not matter to them whether they are working with boys or girls. Now students were freely interacting with each other and it was not difficult for author to rotate their seats and they were quite friendly with each other irrespective of their gender. Most of the time students communicate with each other and with the staff in Hindi (local language), but in between they do use certain sentences in English such as 'May I have water please?', 'May I go to toilet please?', 'May I come in?' etc. They feel proud and happy when they speak such sentences in English. These phrases are also encouraged by teachers.

INCLUSIVE CLASSROOM

In Class VI, one can find an actual inclusive classroom. All students regardless of their ability level are included in mainstream and taught as equals. However, teachers are not trained to adjust the curriculum and methodologies in a manner so that all students can be benefitted. Most of the students in Class VI are from disadvantaged groups. There are two special girls, Priya with mental disability and Neelam, partially visually impaired. In the classroom these girls are being taught and assessed as other students. Author could see that teachers have not designed any alternate activities and strategies for these girls. However, author planned special strategy for these girls. One example is highlighted here

The first thing author did was to make these girls sit in the front row. While dealing on chapter 'Sorting Materials into Groups', author told students to look and collect things which can float or sink in water. Students went out and collected different materials such as green grass, pieces of stones, marble, petals of flower, soil, small pieces of wood. They filled half a glass tumbler with water and started putting these materials one by one in water. Author told them to record their observations in their notebooks. Including these two girls they all noted down their observations. Author wrote one question on the blackboard related to this concept. "Hypothesise/ guess which among these materials float or sink in water: a piece of chalk, hair, dry grass, a piece of cotton, iron nail." Author wanted them to hypothesise first and then confirm by doing the activity and see whether they could hypothesise correctly or not. To author's surprise when she checked Priya's notebook, Priya has written things as floating or sinking which she has tried earlier herself. Author could observe that she is not able to hypothesise. Author told her to get half a glass of water and try these materials one by one whether they float or sink. Priya tried and could write her observations. Author assessed her on this particular task.

Neelam is academically quite good. Her only problem is that she would go very close to the blackboard to

read. Author noticed this and started writing on the blackboard with bigger font size. Most of the time author tried to communicate orally whatever she used to write on the blackboard. These were Simple steps, but they actually worked. Both these girls are good at drawing. Neelam is quite good at clay modeling. She gifted a clay idol of



Fig. 9 Clay idol of Goddess

Goddess to the author (Figure 9).

SCHOOL UNIFORM

Girls wear *salwar*, *kameez* and *dupatta* (local dress) whereas boys wear pant and shirt (Figure 10). Girls tie their hair with red ribbon. Trouser



Fig. 10 Girls and boys in uniform

and *salwar* are blue in colour whereas shirt and *kameez* are having brown and blue checks. They wear blue socks and black shoes.

Earlier all the girls and Scheduled Caste (SC) and Scheduled Tribe (ST) boys were provided free uniforms, but now all the students get free summer and winter uniforms. In winter they also get a blue colour sweater. For this purpose the school gets ₹ 800/- per student per year. Apart from this, books are provided free to the students. In addition ₹ 100 and ₹ 150 are given to each student for stationery items and school bags respectively.

PARENT-TEACHER MEET (PTM)

Parent-teacher meeting is held four times in a year. During these meetings, teachers discuss issues related to the students with their parents/guardians. Many of the parents/guardians do not take these meetings seriously because of their work related engagements, as most of them are daily wagers. Whenever, they come at their convenience, teachers entertain them patiently and positively.

There is a committee called School Management Committee (SMC) which includes members from the village, teachers and students.

ROLE OF SCHOOL MANAGEMENT COMMITTEE (SMC)

A bank account has been opened in the name of SMC.

Funds from this account are spent for school welfare in the presence of SMC members. A meeting of SMC is held every month in the school. The responsibility of the welfare activities of the school lies with SMC such as admission of students, their presence, mid-day meal etc. They are also required to monitor that the teachers should not be burdened with extra work which is non-academic in nature.

For 300 students, total members of the committee are 12.

It constitutes 50 per cent women, one member from SC community. (75 per cent of the members including president and vice president should be parents/guardians of the children. Remaining 25 per cent members will comprise of member of *Gram Panchayat*, one teacher and one student representative).

VACATIONS

Summer vacations are in the month of June and a short break for ten days in April. Winter vacations for ten days are given in January. Holiday homework is given to keep students engaged. This homework is checked by the respective subject teachers when school reopens.

EXAMINATION SYSTEM

At present the academic year is divided into two semesters. During each semester, two unit tests and one final semester examination is held and also one project in each subject is given. For unit tests and semester examinations, students are seated on the floor of the corridor with suitable

distance between them. The duration of one unit test is of 45 minutes and that of semester examination is 1 hour and 30 minutes for each subject.

In the academic year 2012-2013, the school was provided with booklets regarding Continuous and Comprehensive Evaluation (CCE) from state government. Each of the booklets had to be filled for individual students. Teachers were trying to understand the CCE. They were not familiar with CCE.

Earlier there used to be Board Examination for Class VIII. However, it not held now, and due to 'No Detention Policy', the examination of Class VIII is held at school level. The teachers feel that the board examination scheme was better because due to the fear of board examination, students used to be more disciplined in academics. They also feel that students are evaluated in a better way when they face board examination because the question papers are being set from an external agency which used to bring students at par with students of other schools.

Continuous and Compressive Package developed by NCERT in Science and Mathematics was provided to teachers for field testing. According to the teachers, this approach can only be followed if the duration of each period is either increased or syllabus is reduced.

CLASSROOM OBSERVATIONS

The teacher uses only chalk and blackboard, a traditional method of teaching. Students are learning within

four walls of the classroom. Usually teacher writes questions and answers on the blackboard and students simply copy them or sometimes students mark the answers of the questions in the textbook. No discussion takes place among students or with teacher, even though teacher-student ratio is 1:20, very ideal. It is sadly, totally a teacher- centric classroom.

CONCLUSIONS

- Teachers and students use raw bore-well water for drinking; this needs attention to ensure safe drinking water.
- In summers, most of the time there is no electricity and classrooms are dark; it needs improvement.
- There should be one library period everyday so that students can have easy access to books which are kept in a cupboard under lock and key.
- Teachers are not at all comfortable in using Science and Mathematics kits. They need massive training for using these Kits.
- There is gender discrimination in the class by children. It needs attention. It is suggested that in the primary classes children should be encouraged to sit and work in

heterogeneous groups so that they will not find it awkward in higher classes and will have respect for each other as adults.

- Teachers are usually following the traditional method of teaching. They are not at all familiar with the child-centric teaching. The present textbooks of Science for Classes VI, VII and VIII recommend a pedagogy that is hands-on and inquiry based. However, teachers were following the teacher-centric approach in the classroom even though teacher-pupil ratio is quite ideal (1:20).
- Teachers are not familiar with Continuous and Compressive Evaluation (CCE). Teachers need orientation regarding CCE.

ACKNOWLEDGEMENT

I would like to acknowledge the following:

- Prof. Parvin Sinclair, Director NCERT, and Prof. B. K. Tripathi, Joint Director, NCERT, New Delhi, for deputing me to a remote school continuously for three months.
- Students, teachers and parents/guardians of Government Middle School, Haryana, for their warm welcome and cooperation.

REFERENCES

- KOUL ANJNI. Experience of Teaching Components of Air at Elementary level. New Delhi. India (under publication).
- NCERT. 2005. *National Curriculum Framework*, National Council of Educational Research and Training. New Delhi. India.

6

From Curriculum to Textbooks — Post 2005 Revised Textbooks and Social Exclusion

Gunjan Sharma*

This paper examines how a curricular policy is translated into practice. To do so it reviews some selected school textbooks that have been revised based on *National Curriculum Framework–2005* (NCF–2005). It focusses on mapping how social exclusion has been addressed in these textbooks. These findings are supported with fieldwork in a government primary school, and discussions with school teachers and Sarva Shiksha Abhiyan functionaries.

1. CONTEXT AND QUESTIONS

The relation between school curriculum and exclusion has been a prominent concern in research, policy and practice in education. In the past two decades this has further come to the centre stage in education policy and research in India, particularly with the paradigm shift towards the question of ‘quality’ in school education particularly at elementary level (Kumar, 2004). While whether or not there is a ‘shift’ may be a matter

of analysis, it can be said that one of the prominent markers of a focus on quality is the *National Curriculum Framework–2005* (NCERT, 2005) NCF–2005 may be understood as an envisioning document that sketches a national policy level response to some concerns that have been framed in curricular (or educational) discourse in India. Many of these concerns and questions share an organic link with the context of social exclusion in the country.

One of the most debated among these is the divisive character of the school system which plays a role in amplifying inequity and exclusion – by providing qualitatively different educational experiences to children from different socio-economic cultural ‘backgrounds’. The poor quality of school education, in particular, varieties of government schools is at the heart of this debate or concern (Kumar, 1996; Sadgopal, 2006; Pratham, 2013). Though not contradictory, this appears

* Assistant Professor, School of Educational Studies, Ambedkar University, Delhi

paradoxical when seen with the State's claim of the near achievement of UEE whereby increased enrolment rates among the marginalised social groups are emphasised or highlighted. [These claims also need to be read closely with the much 'talked about' withdrawal of the low income-groups from the State schools (Tooley, 2009)]. Furthermore, researches around the categories of caste, class, gender and religion, have presented various descriptions of children's experiences of exclusion in school and classroom contexts – asserting that Indian school contexts are far from being inclusive (Nambissan, 2009; Ramachandran, 2012; Majumdar, 2004; Krishna, 2012). How curriculum, pedagogy and texts are involved in reproducing and/or shaping students' identities based on their location in the social structure/hierarchy, is a prominent dimension in these researches (Bala, 2001; Bhadu, 2007; Krishna, 2012; Guru, 2012). One such example is seen in the recent controversy around the Ambedkar-Nehru cartoon in the Class XI NCERT political science textbook.

Although NCF-2005 does not claim to resolve these concerns, its formulation clearly revolves around them. Based on this national framework a nation-wide curriculum renewal project has been initiated.

In most of the states and union territories, the curriculum, syllabi and textbooks renewal/adaptation/ adoption processes have been completed recently, and in some these are as yet underway. In this context, this paper focuses on assessing the textbook revisions that have taken place post-NCF-2005, with a focus on social exclusion. Through a broad review it attempts to address the questions –How well do the guideposts emerging from NCF-2005 reflect in the textbooks of the selected states? What can be inferred about the translation of national curriculum framework to state level curricular material and textbooks?

For this purpose, the paper reviews some selected textbooks from three Indian states, to understand how (if at all)the concerns emanating from NCF-2005 as regards to social exclusion have been incorporated. Environmental Studies (EVS) and language (English and Hindi) textbooks from three classes at primary school level (Classes 3, 4 and 5) from the states of Bihar, Uttarakhand and Andhra Pradesh have been selected as case points for a broad based review and comparison¹. NCERT textbooks that have been selectively adopted in several states including Delhi, have also been referred to – though not included in the review.

1. The selection of these states, though somewhat arbitrary, has been made on the basis of variations in the processes and approach to curriculum renewal that they represent [an aspect that will be discussed in the chapter at a later point]. Focus on EVS and language textbooks is an outcome of the potency of these subjects to address social exclusion and of the specific recommendations made by the NCF in relation to these school subjects.

The review has been supplemented with data collected from interviews with three SSA personnel – who have been anonymised to maintain confidentiality. To develop a linkage with curricular practice, some vignettes from school visits and interactions with school teachers, which were a part of a yearlong qualitative research, have been presented (Sharma, 2013).

The paper has been organised in four sections. It begins with a discussion on NCF–2005 and exclusion. It then moves on to draw a broad framework for review, highlights the inter-state variations in curriculum renewal approaches and finally presents a review of the selected textbooks.

2. NCF–2005 AND EXCLUSION

NCF–2005 is the latest of the three national curriculum frameworks for school education (1988, 2000 and 2005) developed by NCERT after National Policy on Education 1986, aimed at guiding development of state level curriculum frameworks, syllabi and textbooks across states and union territories in the country. In the process of understanding curriculum and exclusion, it is relevant to note that all the three curricular documents claim to be based on the core values enshrined in the Indian Constitution, which-directly or indirectly relate to social exclusion. These values include justice, liberty, equality and fraternity situated in a socialist secular democratic polity. However, despite having been quoted, these values have not always mirrored in the curriculum

frameworks or in how they have been implemented in practice. This has been the case with NCF–2000 which has been critiqued for its ‘saffron’ hues (Dhankar, 2012, p. 3).

The textbooks developed on the basis of NCF–2000, particularly the History textbooks, were debated for saffronising school knowledge (Delhi Historians’ Group, 2001), which entailed an exclusion of a variety of cultural beliefs as well as biased presentation of cultural identities and the nation. NCF–2005 emerged out of the need for ‘reviewing’ its predecessor. However, the review, at least in an explicit way, did not claim to focus on the saffronisation debate [for which it has been critiqued (Sadgopal, 2005; Ganesh, 2005)]. It stated that its focus was on reducing the curricular load on children and making learning more ‘joyful’ [based on the Learning without Burden report (MHRD, 1993)].

Furthermore, NCF–2005 is distinguished from its predecessors based on three aspects. The first among these is a focus on the individual, not as a means to achieve some national goals but as an individual in her/himself – which in a way throws light on how the framework proposes to address ‘exclusion’ [to be discussed in the following section]. The other two include “an awareness of the need for epistemological considerations” (Dhankar, 2012, p.5), and the detail in which the exercise of the development of the framework was undertaken. NCF-2005 is based on the development

of 21 position papers on various curricular aspects. Among these three were titled 'Problems of Scheduled Caste and Scheduled Tribe Children', 'Gender Issues in the Curriculum', and 'Education of Children with Special Needs'. In these respects the framework appears to bring in the concern for exclusion of some social groups within the vision of school curriculum and education.²

NCF-2005 draws its educational aims as – "a. independence of thought and action, b. sensitivity to others' well-being and feelings, c. learning to respond to new situations in a flexible and creative manner, d. pre-disposition towards participation in democratic processes, and e. the ability to work towards and contribute to economic processes and social change" (p. viii). In these aims, b, d and e may be seen as having a direct bearing on the context of inequity and exclusion, though all are interlinked in addressing these concerns.

In fact NCF-2005 mainly focuses on the problem of 'exclusion' of children from the process of learning or from engaged learning at schools. In imagining an engaged and meaningful curricular environment for the child, references to social context,

marginalisation, diversity and critical pedagogy have been made. Thus, the relation between the individual and the social, forms a centrepiece of the design of the framework (Dhankar, 2012). It can be inferred that it is through this focus on the individual child, that the overlaps between exclusion and education have been addressed. This gets clarified further when the task of the framework is located in the 'social context of education' in India marked by hierarchies of caste, gender relations, economic status, cultural diversity, lopsided development and the challenges of a globalising society as the main aspects constituting the social context of education (NCERT, 2005, p. 9).

While these overtones in the document are explicit, there is also an acceptance that the practice in reality is far from such approach. However, the framework does not address this gap. The picture becomes more complicated when one observes the 'implementation' of the ideas outlined in NCF-2005 (and in other national legislations/documents) in school practice. For instance, in a workshop with 40 school teachers (in the year 2012) from government and private schools in Delhi, in the context of CCE,

2. The paper does not critically review NCF-2005. However, this does not imply that the framework has no problems. There are conceptual confusions or ambiguities of various kinds (Dhankar, 2012, p. 10). For example, while reading the text with a focus on social justice and exclusion, one finds references to terms like critical pedagogy, plurality in perspectives, relating school knowledge to social context and community knowledge. It is difficult to make-sense of how these have been conceptualised and knitted together or differentiated from each other. In fact, at several places they have been used to explain one another. Since these terms have particular connotations in educational thought and theory, it becomes difficult to trace how social exclusion has been conceived. However, the general spirit of the document is relatively clear.

it emerged that all the participants were in strong disagreement with the ideas of no detention and no corporal punishment (as mandated in RTE Act, 2009). The teachers argued for the need to beat children and explained how difficult it was to teach without these practices. The core arguments were that ‘the *guru-shishya* tradition is over and now children and parents do not respect teachers’, and thus ‘they don’t listen to teachers’. Teachers were of the view that CCE is ineffective in the government schools, given the adverse class-size and the ‘backgrounds’ of children. In another focus group discussion, the teachers of an MCD school discussed about the ‘backgrounds’ of children saying:

“For me all are one; I do not distinguish. That is a separate thing that most in this locality are SCs [Scheduled Castes]... But some of the SC children at our school are good, they are better off economically and don’t avail schemes; so just by looking you can’t make a difference between them and the general category children, which is otherwise so easy.” (sic.)

“You cannot say things for sure here; you do not know ‘who is who’ – one who claims to be an SC may not actually be one. You would generally see that better-off people send their children to the Gaur school [a neighbourhood low fee charging school]. So you are left with the rejected lot. If I do

not beat them, you tell me what do I do? Who comes here to study afterall!”

Further, these practitioners felt that the framework represents an imagination that is far from the educational and cultural reality of India, and expressed how they experience the gap between the chaotic practice and the utopian imagination. Many of the school teachers and the SSA personnel (from among those who were interviewed) stated that the problems they face in implementing the NCF are not recognised by the ‘authorities’ – which in itself creates a gap between the ideas in and practice based on the framework. From these narratives, it also comes across that the manner in which the NCF (and RTE) are being implemented is creating a sense of resistance among the practitioners.

The question of social distances between the teacher and the children in the context of the state school systems accessed by marginalised communities has been underlined by many researches (Ramchandran, 2012; Ramachandran, Pal and Jain, 2005; Majumdar, 2005; Subrahmanian, 2005; Sharma, 2011). State’s response to this question is seen in the form of teacher preparation -which some educationists believe is a key component in bringing about the expected shifts (Batra, 2005). However, to even make sense of (let alone reform) how ‘social distances’ implicate the curricular contexts requires a deeper qualitative engagement with all aspects of the school system – and not just

implementing curriculum frameworks and training functionaries to deliver these.

3. FRAMEWORK FOR ADDRESSING EXCLUSION

Based on the perspective emerging from the NCF–2005, the various states and union territories in India have taken up the process of curriculum (particularly syllabus and textbook) renewal. There have been some analyses of the revised textbooks from various states from the perspective of exclusion. Notable among these are the analysis by Nirantar (2011) from the standpoint of gender, and the debates stemming from Ambedkar-Nehru controversy whereby school textbooks became a subject matter of inquiry. However, the review done in this paper does not examine the textbooks from the perspective of any one particular marginalised social group. In this review, three particular criteria, emanating from the NCF in the context of exclusion, have been conceived to assess the textbooks from the selected states and classes. These three criteria are presented below.

3.1 Situating the Subject-matter in the Social Context of Children

One of the clear guideposts for curriculum development emanating from NCF–2005 concerns establishing a relation or bridging the gaps between the subject matter and everyday context of children. While overcoming the alienating character of education is one purpose, enabling

an understanding of the social context is the other. Linking school knowledge and community knowledge comes under the purview of this criterion and so does representing diversity or variation in the social context. However, this also calls for a critical engagement with the social context or reality such that the social hierarchies and oppressive inequalities can be problematised. NCF–2005 says:

Experiences of the socio-cultural world also need to become a part of the curriculum. Children need to find examples of the plurality of peoples and ways of life represented in the textbooks. These portrayals need to ensure that no community is oversimplified, labelled or judged. It may even be better for children to study and generate portrayals of the local social groups as a part of their social science studies (p. 32).

3.2 Multiple Frames and the Frames of Marginalisation

NCF–2005 asserts representation of plural identities of children as constituted in the socio-culturally diverse Indian society. However, representation of plurality has been ascribed a special meaning in the case of social sciences. This special meaning entails not only representing plural perspectives, but involves shaping the content and pedagogy of social sciences from the perspective of marginalised social groups. “A paradigm shift is recommended, proposing the study of the social sciences from the perspective of

marginalised groups. Gender justice and a sensitivity towards issues related to SC and ST communities and minority sensibilities must inform all sectors of the social sciences” (p. ix). The underlying educational aim is to develop sensitivity towards others’ well-being and feelings, and to nurture the abilities to understand democratic processes. This is a move towards ‘rescuing’ school knowledge from a unitary or ‘mainstream’ frame – and thus moving towards a more critical envisioning. To meet this objective, the framework recommends the use of plural textbooks and curricular material.

3.3 Instituting a Critical Pedagogy

The concept of critical pedagogy directly relates to the educational aim of pre-disposition towards participation in democratic processes, and the ability to work towards and contribute to social change. In NCF-2005, representing plural perspectives, paradigm shift towards perspectives of the marginalised and critical pedagogy have been seen as being interlinked:

Critical pedagogy provides an opportunity to reflect critically on issues in terms of their political, social, economic and moral aspects. It entails the acceptance of multiple views on social issues and a commitment to democratic forms of interaction... Critical pedagogy facilitates collective decision making... (p. 23).

Although they are interlinked and interdependent, here in etching out this criterion they have been presented

separately. This has been done to stress that merely presenting plurality in perspectives or a shift towards the perspectives of the marginalised, does not necessarily entail a critical approach to school knowledge. A critical perspective is reflected much more in how children are enabled to examine and participate in the world around them. The purpose of this criterion is to assess how well do the textbooks prepare children to critically understand and act upon circumstances by asking basic questions on the taken-for-granted realities, examining their own assumptions and engaging with situations.

4. CURRICULUM DEVELOPMENT: INTERSTATE VARIATIONS

Following NCF-2005, NCERT also issued guidelines for the states for the revision of their respective syllabi and textbooks. Although the states and union territories followed these guidelines (as shared by an SSA personnel in an interview), there is a variation in the approaches to curriculum renewal or outcomes of the same processes. In the three states chosen in the paper the strategies followed for curriculum were different.

Bihar and Andhra Pradesh developed their own curriculum frameworks based on NCF-2005 (Bihar Curriculum Framework, 2008; Andhra Pradesh State Curriculum Framework, 2011), whereas Uttarakhand did not. Bihar SCERT revised and/or developed the state textbooks for Classes I to

VIII for all subjects in three phases – Phase I: Class I, III and VI (August, 2009); Phase II: Class II, IV and VII (December, 2009); Phase III: Class V and VIII (April, 2010). In the case of Andhra Pradesh, I to VII textbooks have been revised or developed by the SCERT for all school subjects except Hindi (for which NCERT textbook was adopted). For VIII to X, NCERT's Mathematics and Science textbooks were similarly adopted. In the case of Uttarakhand, the syllabi and textbooks for I to VII were revised based on NCF–2005. Thus, the state in a way adopted NCF–2005 as it is.

With such differences in approaches, variations in the interpretation and realisation of the vision of the NCF appear to be guaranteed. In this respect, an interview with an SSA personnel working at the national level, was found to be particularly insightful. He said,

There are certain uncanny practices that continue even after the training [given by NCERT] on the curriculum renewal guidelines. For example, Uttarakhand's syllabi, despite the claims of being based on NCF–2005, give an impression of being highly competency based... In the case of Kashmir, there was an agreement that the NCERT textbooks will be adopted.

However, 'somehow' instead of the revised ones, the old textbooks, some developed between 2000 and 2005 and others developed before 2000, got printed and distributed.

To highlight another peculiarity the SSA personnel referred to his discussions with a principal of a school that caters to a tribal community in Hazaribagh, Jharkhand. He said,

The Principal who has been working with tribal children since 1971, made a passionate case against the revised NCERT textbooks, saying that these books [particularly English ones] are not appropriate for the children of his school in terms of the contents, difficulty level and overall perspective. It makes the school community wonder about the utility and meaningfulness of these textbooks for the children in that context. Despite having a space and finances to develop its own textbooks, the state of Jharkhand has adopted NCERT textbooks and pays a heavy royalty for this every year.

Thus, one finds that there are differences in the 'approaches' of how the states have interpreted the guidelines for curriculum renewal. How textbook and curricular decisions may shape exclusionary processes in the everyday classroom contexts also reflect in these variations.³

3. How these processes have a bearing on school children also has a link to the manner in which teachers' training is planned. Most of the pre-service teacher education programmes (including the ones offered by the premier institutions) in the country are yet to be revised based on NCF for Teacher Education 2009 (NCTE, 2009) (developed in consonance with NCF 2005). The SSA personnel told in an interview that although, in-service programmes have been revised, the revisions are limited to gender sensitisation trainings and orientations on the education for children with special needs.

Cont. on Next Page

In these contexts a review of the outcomes of curriculum renewal processes and their reflection in the classrooms becomes pertinent not only from the standpoint of exclusion – but to understand how the ideals envisioned in national policies and documents like NCFs are translated into practice. This includes not only review of textbooks but all aspects of education in relation to each other.

5. ANALYSIS OF THE TEXTBOOKS

While textbooks alone cannot be sufficient to assess how they are pedagogically made use of in classroom contexts by teachers and how they may be interpreted by children, yet the contents of the textbooks indicate the nature of teaching-learning they may facilitate. The review of the textbooks from the selected states indicates that there are inter-state and intra-state variations and commonalities not only in how exclusion has been addressed, but also in how NCF–2005 guideposts have been interpreted.

5.1 Subject Matter and the Social Context

A survey of Classes III, IV and V textbooks from Bihar, Uttarakhand and Andhra Pradesh brings to the fore that across these texts there is an attempt to make the content more approachable for school children. In general, the choice of topics is such

that the contents do not appear to be alienated from the everyday life. The themes around which the units/chapters revolve are common in the life worlds of children from all kinds of social contexts. Themes like family, games and play, houses, water and rain, food, animals' and plants' worlds and the like, cross-cut EVS and language textbooks from all the three states (and the NCERT textbooks as well). These have been presented by relating them to the day-to-day observations that the children may make. The chapters are supported by simple questions involving thinking, observing and talking to people around. For example, in the chapters on the theme 'houses' in EVS textbooks of Classes III and IV, children have been asked to visit their locality and observe the various kinds of houses and to inquire from the local people about the materials used in their construction.

Commonly used words from the local language, contents related to local geography and real life stories from the region have also been incorporated. In Uttarakhand's Class V English book four chapters (out of 15) relate to the state's local geography and well known places. These chapters include 'where does Bhagirathi come from', 'The Mahavriksha' and 'A Day at the Saat Taal'. Similarly, local names and words like 'Dada-Dad', 'Nana-

Cont. to Previous Page

Revisions with a focus on building on a wholesome perspective on socio-cultural identities of children and marginalisation have not yet been done. Also, the number of days for in-service teacher training have been reduced from 21 to 7 due to budget cuts at national level.

Nani, *Aloo gobhi* and *sattu* find references in the Uttarakhand's and Bihar's textbooks. In fact, in Bihar's Class III English textbook, there are Hindi glossaries for difficult words in the chapters. By and large, each topic has pictorial depictions and some real-life photographs that depict people, particularly, children engaged in everyday activities, plants, animals and objects that one sees around – though not in the 'form' in which one may see them.

While in general, these features were demonstrated across the selected textbooks, some textbooks were better than others with respect to bridging the gap between the school knowledge and social context. All the selected textbooks from Uttarakhand and Bihar, and Class III EVS and English textbooks from Andhra Pradesh, were found to be fulfilling the criteria of making the content more child-friendly. In fact, many of the selected states' textbooks were found to be better than the NCERT textbooks in representing children's local contexts – an aspect that will be referred to later in the chapter.

However, one textbook in obvious ways deviated from this trend. Class IV EVS textbook from Andhra Pradesh, despite having been revised, does not give an impression of having gone through the process of review. The selection and organisation of content is such that it reminds of the 'traditions' that the NCF critiques. There are 13 units, each with around 3 to 4 sub-units, organised in a linear

fashion. There are units on Indian history (that talks about pre-historic age, medieval history and the like), Indian government (that concerns the structure of governance), Earth (that includes contents like longitudes and latitudes) and so on. These themes have been built upon in a descriptive fashion.

The case of Andhra Pradesh's English textbook for Class V (with integrated workbook and supplementary textbook), is peculiar. There is an overemphasis on biographical accounts or description of lives of famous national and historical personalities (like A.P.J. Abdul Kalam, Bismillah Khan, M.S. Subbalakshmi, Doctor Joseph Lister, Maharana Pratap and Rani Padmini). The contents could have focused on anecdotal accounts from the lives of these personalities. However, they include accounts of various achievements with dates and famous people who had a bearing on the lives of these personalities in a descriptive style. The rationale for inclusion of several of biographical notes in a language textbook does not come across clearly. Even the presentation of the content is not such that a child would relate to it spontaneously – the design and language seem fairly balanced but how would children relate to these, is a question that persists as one reads the texts.

Furthermore, along with such aberrations there are variations among the textbooks from these states in terms of the difficulty level of the contents.

Uttarakhand's English textbooks seem to be least difficult as compared to the rest. Andhra Pradesh's English textbooks are pitched at a higher level. Since English more often than not is the second (or even the third) language for a child, this variation needs a more careful examination. Bihar's and Uttarakhand's EVS textbooks for Classes IV and V look simpler than those of Andhra Pradesh's. What is interesting is that in some cases there is disconnect (in terms of the level of difficulty) between the textbooks of different classes from the same state. Also, while the developmental continuity between some textbooks is clear, there are somewhere this progression is broken. For example, in Uttarakhand's English textbooks for Classes III and IV seem to be pitched at nearly the same level (the progression is visible in the chapter end exercises though). Andhra Pradesh's Class IV EVS textbook seems to be difficult (in terms of how the content has been organised) than that of Class V. It is also logically not in continuity with Class III EVS book. However, this pattern is not visible in Andhra's English textbooks.

Moreover, a broad examination of these textbooks indicates that while the 'social context' finds a representation in the texts, the 'social reality' does not. 'Social context' seems to have been interpreted a-critically in most cases. The everyday problems of local economy, polity, infrastructure, health services and education have not found a place in these texts. Another common

observation across the textbooks relates to the imagined audience of the text. It seems as if the contents have been selected/ designed around the life world of, or addresses, a child from a rural/semi-urban middle class nuclear (Hindu in most cases). The institutions (family, marriage, market, school, etc.), occupational profiles of the main characters, values and standard of living, clearly represent this slant. Poverty, conflict affected contexts, children without families or in different kinds of families and social relations hardly find a reference.

Even in the case of NCERT [which steered the development of NCF-2005] primary school textbooks, similar problems are seen. For instance, the Class V English textbook (NCERT 2008) opens with three kinds of stories on food. The first unit is a poem called 'Ice-cream man' by Field (2008) that begins with a quote that reads, "What is cold, sweet and creamy, and wonderful to eat? Everyone's favourite treat especially on a hot summer day is an ice cream! And everyone's favourite person might just be the Ice-cream Man!" (p. 3). The second chapter in the text was titled "Wonderful Waste!" – a folktale where a king asks his cooks not to waste the vegetable remains and use them to make a dish – in this process his Brahmin cook invents *Avial* and serves to Brahmin guests (as depicted in a picture) (p. 11). This is followed by a "folktale" of a Santhal [an Indian tribal community prominent in the states of Jharkhand and West Bengal] bridegroom, who

misinterprets a communication and brings home a bamboo door from his in-law's house and asks his wife to make 'bamboo curry'. The chapter concludes with a comment on the 'foolishness' of the Santhal groom (p. 17). This is followed by the chapter end exercises (two sets of fill-in-the-blanks) which are descriptive in nature. In fact, in the text, there is no description or question about the Santhal community – with which the primary school children (and even school teachers) in many Indian classrooms may not be familiar with (as was the case with the MCD school to which the researcher went). While inclusion of folktales in language textbooks is clearly the purpose of the text, the rationale for selecting this particular folktale is unclear. This is particularly so because of the sequence in which these texts emerge and as the textbook does not prompt the children and teachers to critically think or discuss about the context. This is the only chapter that does not figure in the content list of the textbook. While it could be a simple omission, how children may make meaning from such 'ignorances' needs to be reflected upon.

Chapter Seven, Topsy-turvy land, begins with a pictorial depiction of a child's personal room which is in a mess as he has unkemptly thrown his things here and there. It asks questions like "does your room sometimes look like this" (p. 111). While this represents one style and standard of living, the other kinds

of lives (for example those of the children of the MCD school to which the researcher went – whereby most children came from a slum with small one room houses). Further, there are stories and poems from foreign contexts, which may make candidates for inclusion in a language text – but this needs to be seen in relation to the struggle that the children of many government schools make in learning the language. Many school teachers from government schools expressed these concerns in various discussions. One from an MCD school said, "There is a poem 'Teamwork' [by Jan Nigro] about the game of basketball... our girls have neither played this game and nor had heard about it." The contrast between the experience of the children and these textbook chapters was explicit. It also threw light on how textbooks based on a framework that stresses 'child's experience', 'child-centered and 'critical pedagogy' and 'social construction of knowledge', would work in different contexts.

These observations indicate a trend of commonalities and variations in how NCF translated into practice in various states. They also reflect a lack of synergy within the state teams designing different textbooks – which brings forth a need for an inquiry in the processes through which curricular materials get developed. While there seems to be a general trend towards connecting school knowledge and social context in the textbooks, the scenario with respect to representation of plural frames is

different. This also makes it possible to critically examine the interpretation of the meaning of 'social context' by the textbook teams.

5.2 Multiple Frames and the Frame of Marginalisation

In the textbooks there are several case materials which a child may find in her/his context. However, the manner in which the case material have been presented, organised or handled in most of the cases does not involves an engagement of/with multiple perspectives. Although, assessing textbooks for inclusion of content relating to different social groups would amount to oversimplification of the meaning of 'plurality', it is worth-mentioning that there are several textbooks among the ones selected that did not qualify this test. This is the case with almost all textbooks from Uttarakhand, and some textbooks from the other two states. In general, in terms of parity in representing boys and girls (in illustrations and contents) and depicting mixing of both the sexes all the textbooks are fairly balanced. However, the girls and the boys (exempting a few cases) are shown in their traditional roles. This is particularly the case with Bihar's textbooks. Furthermore, references to minority religions, tribal communities, oppressed caste groups and poor, find place in very few textbooks. Caste hierarchy or inequity did not come across as a subject matter in any textbook.

In fact, there seems to be an inherent ambiguity regarding the meaning of representing multiple perspectives. Does it mean removing all markers of or references to socio-political identities of people? Does it constitute including stories of 'brave' and 'unique' women, differently-abled people, tribes and minorities? Does it mean inclusion of some stories representing these social groups? Does it involve including stories and poems on national unity? Does it comprise showing pictures that represent unity? Or is it simply including characters in some stories with [stereotypical] names representing affiliation to different religions to give an impression of unity? Would it imply representing socio-cultural contexts with "real" political over/undertones to the children? These ambiguities and patterns become visible in the selected textbooks particularly from Uttarakhand and Bihar. For example, in Uttarakhand's Class IV textbook, *Hansi-Khushi*, in all the chapters the characters have been given common Hindu names and they represent the Hindu ways of life or culture (through common festivals, family structures, mythological stories etc.). However, inclusion of Eidgaah seems to be an attempt to break this trend (or is just the one case where a different kind of culture finds a reference). It is also worthnoting that this story finds a place in Class V (and not IV) Hindi NCERT textbook. Thus the arbitrariness in assessing the level of

texts also comes to the fore. Similarly, in Bihar's Class III Hindi textbook, *Kopalein Part I*, the contents revolve around characters with Hindu names. Amidst these there is a poem making references to religious unity in India, that says – "Hindu, Muslim, Sikh, Isaai chaaron milkar gaen" (p. 80). In several textbooks there are 'references to' (and sometime meaningful incorporation of) Muslim minority, but references to Sikh, Christian, Buddhist and other religions are hardly found. It is only in Andhra Pradesh's Class III textbooks that one sees Sikh children in illustrations.

The contents that bring social conflict, debates, contesting perspectives and viewpoints have not found a place in these textbooks. There seems to be a deliberate attempt to de-politicise the textbooks (and thereby the social world), which in itself raises questions about how well do the textbooks represent the social context of the children. [This could be an outcome of a very literal interpretation of the term 'joyful' learning proposed by the NCF.] What Kumar (1996) says in the context of presenting children with the category of 'conflict' becomes relevant in this context: "institutional education [in India] avoids imparting the knowledge of issues that involve conflict" (p. 6). As an outcome of these ambiguities, not only the objective of representing multiple perspectives in a meaningful fashion remains unfulfilled, the possibility of presenting contents from the perspective of the marginalised becomes remote.

However, there are certain notable exceptions where instead of an omnipresent ambiguity; there is a sense of clarity and direction in this context – where it is possible to infer the principle of content selection and organisation. Two cases that were found to be better than the others on the parameter of presentation of multiple perspectives are Andhra Pradesh's Class III EVS and English textbooks. The EVS textbook is also one case where one sees an attempt to examine the social norms and institutions from the frames of the marginalised. This also presents a meaningful example of how 'critical pedagogy' may be supported by textbooks. Both of these have been reviewed in the next section.

5.3 Critical Pedagogy

Although based on textbooks it is not possible to understand pedagogic environments of classrooms, here an attempt is made to review whether or not and how the selected textbooks facilitate (or provide contents and cues for) thinking critically about the social world. The kind of picture that emerges from this brief review of textbooks indicates that on this criterion the situation is abysmal. The textbooks from Bihar and Uttarakhand, were particularly found to be lagging on this dimension. With exception to countable instances, the textbook contents and chapter end exercises did not appear to promote or support critical questioning.

These texts present the social context as it exists, without creating spaces for the children and the teachers to critically examine social norms, institutions and stereotypes. In fact, themes like poverty, hunger, inequity, disability, exclusion and the like do not find a space in the textbooks at all. For example, if one examines the contents in the Bihar's EVS textbooks of Classes III and IV, it emerges that they primarily revolve around plain descriptions of the social and natural world that children observe around them. In Class III EVS book, there are chapters like 'chacha's wedding', 'our family', 'various kinds of foods', 'world of living beings', 'preparing for Diwali', 'know about houses', and the like. The poem 'Chacha's wedding' (p. 1) which is the opening chapter, basically lists the various close relatives who usually come to attend family weddings. The text is supported with a picture of a traditional Hindu wedding and the chapter end exercises include: listing the relatives who usually come to weddings, matching the category names for relations with their descriptions and classifying relatives according to their gender. There is no reference made to the variety of ways in which weddings take place, and to the traditions and practices in marriages that are problematic from the standpoint of gender equity. Class IV textbook also has a chapter on relationships (pp. 41-46), 'When *mamaji* [maternal uncle] came home'. It describes how an uncle comes home on the festival of *Raksha Bandhan* and

brings a variety of gifts for his sister's family and how the two children are elated. The chapter is followed by questions that revolve around change in women's residence after marriage. For example, the text asks, 'where did your mother live before marriage'—without facilitating a critical inquiry about this practice or aberrations to this norm or how gender roles are shaped in the social institutions.

The case of Class III chapter 'Know about houses' (p. 48-52) is similar. The chapter is about the various kinds of homes one sees in villages and cities, the material with which they are made and the availability of the material in villages. There are illustrations of four kinds of houses. One is a dilapidated hut structure made of mud, wood and straws. The second is a relatively permanent and better off hut structure. The third illustration is of a permanent structure and the fourth of a multi-storeyed building. Although there could be a variety of concepts about the social world that a child may be able to question or engage with through such contents, the text limits the exercises to listing the materials with which the houses are made, drawing pictures of the houses around, describing the materials with which the children's own house is made and the like. Aspects such as who lives in what kinds of houses, why are houses different from each other, who constructs various kinds of houses, what may be a better way (ecologically) to make houses and the like, remain untouched. The

Class IV EVS textbook, in continuity to this chapter, there is another chapter on houses (p. 58), which again asks children to do similar tasks. In fact, in Bihar's textbooks there are several exercises that limit the work to preparing lists of various kinds. Uttarakhand's textbooks are also very similar.

However, as said in the preceding section, Andhra Pradesh's Class III English and EVS textbooks, *My English World* and *We-Our Environment*, (particularly the latter) emerged as being the better ones in the sample. That is, they have the potential to support children in a critical examination of the taken-for-granted 'reality'. The very same themes, as presented in the textbooks from the other two states, have been treated very differently. The textbooks satisfy all the three criterion of focusing on the social context, representing plurality and presenting contents in fashion that encourages children to think about situations from a logical standpoint (if not from the standpoint of the marginalised). The English textbook (from among all the textbooks chosen for review in this chapter) came across as being the most balanced in the representation of the major religious beliefs practiced in the local context of the state. While there are some critical cues given in the main body of the chapters, the criticality is primarily promoted by asking questions that involve imagining, thinking and developing narratives around questions of who, how and why.

The EVS textbook is better than the one for English with respect to the parameter of promoting critical thinking by presenting intellectually stimulating and critical content. For example, in the chapter on different types of houses (pp. 86-93) (which has been dealt very descriptively in Bihar's and Uttarakhand's books), the children have been asked to think about the structure of the village – in terms of who stays in which part of the village and in what kinds of houses, and why this may be so. There are pictures of tents and big unused drainage pipes that show families using them as houses. The children have been prompted to think about who lives in such accommodations and why. The cues lead them to discuss about migrant labour, homeless and poor – and even the lives of people who work in circus. Similarly, the differences between city and village houses are made problematic. Across this textbook, gender, poverty and disability run as undercurrent in the contents and have been stated explicitly in the syllabus (p. iii).

However, there are problems in representations that come across in a few sections in the book. For example, the first unit has a section, "Let's play" (pp.7-8), that shows 'abled' and 'differently-abled' children playing together. While this picture is unique or one of its kind (vis-a-vis the various kinds of pictures in all other textbooks), the questions that follow bear an awkward or rather a condescending tone. The text asks,

“Who are there in the picture? What difficulties do they face in doing their day-to-day work? How should they be helped and supported?” and the like (p. 8). This seems to be an outcome of difficulty in finding a solution to the question how to incorporate the agenda of sensitising children towards ‘others’. However, the complication involved in defining and addressing the category of ‘other’ or ‘us’ and ‘they’ seems to not have been adequately engaged with. While the concern for doing so is clear, the form that it has taken seems to do the opposite.

Thus, the instances from the various textbooks bring out that (though there is one exception to the norm) the textbooks have not been adequately scrutinised with respect to criticality in perspective. Furthermore, despite NCF’s (2005) recommendation of practicing critical pedagogy, it is pertinent to think about whether or not critical pedagogy can be ‘implemented’ in classrooms based on ‘recommendations’ or ‘mandates’. Can teachers be ‘trained’ to ‘incorporate’ critical pedagogy and what kind of work and how long it would take to do so, are also questions that may or may not have been reflected upon in the large scale curriculum renewal processes at the state level. As it is apparent the textbook development teams would need support to make sense of critical practice.

6. SUMMING-UP

Broadly it can be said, that despite efforts towards inclusion, the perspectives

of Dalits, tribals, differently-abled and religious minorities find fewer references in the textbooks. The textbooks demonstrate a trend of a more balanced representation of the two sexes. However, the representations follow a descriptive or a-critical trajectory (with some exceptions) that reasserts the traditional gender roles. Also, the complexity of the constitution of gender and diversity in sexuality do not find a place in the textbooks. Themes like poverty, unemployment, hunger, conflict and multiplicity in ideologies and the like which are omnipresent in the social context of the country and the world, also do not emerge from the textbooks. At the same time, certain kinds of stereotypes continue to be embedded in the textbooks in subtle ways. Thus, although it would take a closer and a more holistic analysis to understand whether or not the textbooks’ contents are exclusionary, it is evident that they are far from addressing the category of exclusion in a holistic and critical fashion.

NCF-2005 lays emphasis on the context of social exclusion in the country and presents a broad vision for contextualising school curriculum in this social reality. However, being a broad guiding document, it skips detailing on how this may be achieved. While this may not be the task of a curriculum framework for obvious reasons, it creates varied kinds of ambiguities in interpretations at the state level. The genesis of these ambiguities, in some ways at least,

can be traced to the NCF itself – which presents ideas like ‘social context’, ‘plurality’, ‘paradigm shift to the perspective of the marginalised’ and ‘critical pedagogy’ in a somewhat ambiguous form. Although the spirit of the document is clear, this clarity does not seem to find a reflection in the renewed textbooks developed at the state level and by the NCERT as well (in some cases at least). Would representing social context imply reflecting “real” political over/undertones embedded therein? How to make textbooks “joyful” and “critical” at the same time? How may a textbook’s contents incorporate concerns of varied social groups, varied views of reality, marginality, criticality and train children to be socially sensitive? The textbooks seem to be products of various ways in which the state level teams have grappled with these issues. There are exceptions where there is some kind of a resolution in these respects. Like the one EVS Class III textbook from Andhra Pradesh (which is not free of anomalies) in the small pool of selected books, there could be more in a larger sample. However, the trend indicates that several rigorous

review exercises would be required to make the textbooks suited to address ‘exclusion’ critically.

In these respects, the questions that have framed the discourse on ‘school knowledge’ (Young, 1971; Apple, 2000) continue to hold ground. How do the principles of selecting and sorting constitute school reality? Whose knowledge or experience becomes socially legitimate in schools? Whose interests do the schools serve and how? In what ways can schools and pedagogic practice assume a critical transformatory social function? How to bridge the social gaps and strive for the ideals of social justice, equality, fraternity, liberty and democracy, through school curriculum? These questions, among many other things, highlight that the functions that schools perform and the roles they assume are not just ‘pedagogic’. Schools are social institutions (Beteille, 2005), and their pedagogic and academic agenda revolve around their social functions – which are much more contested even when the debates appear to concern only the pedagogic aspect.

REFERENCES

- APPLE, M.W. 2000/1993. *Official knowledge: Democratic education in a conservative age* (2nd ed.). Routledge, New York.
- BALA, R. 2001. *Patthya pustakon ki rajniti*. Shiksha Vimarsh, pp. 19-25.
- BATRA, P. 2009. Reclaiming the space for teachers to address UEE teaching-learning quality deficit. *Education For All mid-decade assessment*. NEUPA, New Delhi.
- BETEILLE, A. 2005. The school as an institution. In R. Kumar, A. Sethi and S. Sikka (Eds.), *School, society and nation: Popular essays in education* pp. 166-178. Orient Longman.

- BHADU, R. 2007. *Patthya pustakon ke antarpath*. Shiksha Vimarsh. pp. 60-63.
- DELHI HISTORIANS' Group. (2001). Communalisation of education: The history textbooks controversy. New Delhi.
- DHANKAR, R. 2012. Curriculum framework in search of a coherent epistemology: A case study of Indian National Curriculum Frameworks. Philosophy of Education Society of Great Britain, Annual Conference. New College. Oxford.
- GANESH, K.N. 2005. *National Curriculum Framework-2005: A note*. Social Scientist, 33(9/10), Debating Education. pp. 47-54.
- GOI. 1993. Learning without burden. Report of the National Advisory Committee (Chairman: Yash Pal), MHRD, New Delhi.
- KRISHNA, M. 2012. Pedagogic practice and the violence against Dalits in schooling. In C. Sleeter, S. B. Upadhyay, A. K. Mishra and S. Kumar (Eds.), School education, pluralism and marginality: Comparative perspectives pp. 54-81. Orient Blackswan, New Delhi.
- KUMAR, K. 1983. Educational Experience of Scheduled Castes and Tribes. *Economic and Political Weekly*, 17(36-37), 1566-1572.
- _____. 1996. Learning from conflict. Orient Blackswan, New Delhi.
- _____. 2004. Quality of education at the beginning of the 21st century: Lessons from India. Background paper for EFA report 2005, UNESCO.
- MAJUMDAR, M. 2004. Classes for the masses? Social capital, social distance and the quality of government school system. In D. Bhattacharya *et. al.* (Ed.), Interrogating social capital: The Indian experience (165-202). Sage, New Delhi.
- NAMBISSAN, G. 2009. Exclusion and discrimination in schools: experiences of dalit children. Children, social exclusion and development. Working paper series, 1(1), Indian Institute of Dalit Studies and UNICEF.
- NAMBISSAN, G.B. 1996. Equity in education? Schooling of Dalit children in India. *Economic and Political Weekly*, 31(16-17), 1011-24.
- _____. 2006. Terms of inclusion: Dalits and the Right to Education. In Kumar, Ravi (Ed.), The crisis of elementary education in India pp. 225-265. Sage Publications, New Delhi.
- NCERT. 2005. *National Curriculum Framework*, (Yash Pal, Chairman). NCERT, New Delhi.
- _____. 2008. Marigold: Textbook in English for Class V. NCERT, New Delhi.
- _____. 2008. Rimjhim: *Panchvi kaksha ke liye Hindi ki pathyapustak*. NCERT, New Delhi.
- NIRANTAR. 2011. Textbook regimes: A feminist critique of nation and identity – Overall analysis.
- PRATHAM. 2013. The Annual Status of Education Report (ASER). Pratham, Delhi.
- PUSKAR, P. 2012. *Bhartiya sansad mein hui bahas*. Shiksha vimarsha, 14 (5), pp. 9-23.
- RAMACHANDRAN, V. *et. al.* 2012. Inclusion and exclusion in elementary schools. Presentation of the unpublished report of a six State qualitative study, SSA, Ministry of Human Resource Development, India.
- RIGHT TO EDUCATION ACT. 2009. Retrieved from http://mhrd.gov.in/sites/upload_files/mhrd/files/free_and_compulsory_NEW.pdf
- SADGOPAL, A. 2005. On the pedagogy of writing a National Curriculum Framework: Some reflections from an insider. *Social Scientist*, 33(9/10), Debating education, pp. 23-36.
- _____. 2006. Dilution, distortion and diversion: A post-Jomtien reflection on education policy. In R. Kumar (Ed.), The Crisis of Elementary Education in India (pp. 92-136). SAGE Publications, New Delhi.
- SCERT, Andhra Pradesh. 2012. English Reader: Class IV. Government of Andhra Pradesh, Hyderabad.

- _____. 2012. Environmental studies: Class IV. Government of Andhra Pradesh, Hyderabad.
- _____. 2012. My English world: Class III. Government of Andhra Pradesh, Hyderabad.
- _____. 2012. We-our environment: Class III. Government of Andhra Pradesh, Hyderabad.
- SCERT, Bihar. 2013-14. Kopalein, Bhaag 1: Class 3. Bihar State Textbook Publishing Corporation Limited, Patna.
- _____. 2013-14. Paryavaran aur hum, Bhaag 1: Class 3. Bihar State Textbook Publishing Corporation Limited, Patna.
- _____. 2013-14. Paryavaran aur hum, Bhaag 2: Class 4. Bihar State Textbook Publishing Corporation Limited, Patna.
- _____. 2013-14. Paryavaran aur hum, Bhaag 3: Class 5. Bihar State Textbook Publishing Corporation Limited, Patna.
- SCERT, Uttarakhand. 2012-13. Hansi-khushi, Bhaag 4: Kaksha 4 ke liye Hindi ki pathyapustak. SCERT, Uttarakhand.
- _____. 2012-13. Summit: Class V. SCERT, Uttarakhand.
- SHARMA, GUNJAN. 2011. Experiencing caste in a metropolis. Paper presented at South-Asia in transition conference, Department of Sociology and Oxford Poverty and Human Development Initiative (OPHI), University of Oxford, United Kingdom.
- _____. 2013. Politics of institutional knowledge and exclusion – An inquiry into experiences of children from Dalit community. Unpublished thesis submitted for the award of PhD degree, Department of Education, University of Delhi.
- SUBRAHMANIAN, R. 2005. Education, exclusion and the developmental State. In P. Jeffery and R. Chopra (Ed.), Educational regimes in contemporary India pp. 62-81. Sage, Delhi.
- _____. 2005. Education, exclusion and the developmental State. In P. Jeffery and R. Chopra (Ed.), Educational regimes in contemporary India pp. 62-81. Sage, Delhi.
- TOOLEY, J. 2009. The beautiful tree: A personal journey into how the world's poorest people are educating themselves. Cato Institute, Massachusetts.
- VARMA, V.S. AND SHARMA, G. (Eds.) (Unpublished). Teachers in conversation: A document based on a project by Ambedkar University, Delhi and Ahvaan Trust.
- YOUNG, M.F.D. 1971. Knowledge and control. Collier- MacMillan, London.

Analysis of Errors Made by Children with Hearing Impairment

Prithi Nair*

Abstract

Making mistakes in mathematics is common and teachers usually ignore the mistake thinking children will overcome it. However, if a pattern of error is observed, it is an indication of some underlying problem in learning mathematics and should be addresses. The present study aims at identifying and addressing the errors made by children with hearing impairment in Arithmetic Diagnostic Test (ADT) for Grade -IV. The errors were analysed qualitatively for mathematical concepts like numeral concept, addition, subtraction, multiplication and division. The errors were classified as in-correct operation, poor concept, non-performers and correct response. The results of analysis revealed that children were able to attempt simple task which had concrete representation (count and write), single digit addition. However, the number of errors increased as the level of difficulty increased. The probable reasons identified for the errors were inability to understand verbal instruction, poor concept of place value, not able to read and follow instruction due to poor reading skill. The common errors identified for addition, subtraction were carrying over and borrowing problem. Multiplication and division were the poorly attempted task and word problems were not attempted or least attempted across all the concepts. The implication of the findings highlights developing a strong number concept among the children, developing their language and reading skills and empowering teachers for error analysis thus paving way for good remedial instruction.

Keywords: Error analysis, mathematics, language problems.

* Lecturer, All India Institute of Speech and Hearing, Mysore

ANALYSIS OF ERRORS MADE BY DEAF/ HARD OF HEARING CHILDREN IN MATHEMATICS

Mathematics is a subject which requires numerical and language comprehension. Teaching mathematics help students use their mathematical knowledge in solving their daily problems. Mathematical competence is an essential component in preparing numerate citizens for employment and it is needed to ensure the continued production of highly-skilled persons required by industry, science and technology (Mikulski, 2001; Steen, 2001; House 2006). Science and technology is based on mathematics. A society progresses when the citizens are highly skilled and employed. A skillful person is a technologically updated person. According to Steen (2001), mathematics does not only empower people with the capacity to control their lives but also provides science a firm foundation for effective theories and guarantees society a vigorous economy. At its most basic level, mathematics is a requirement for science, computer technology and engineering courses. A good knowledge and understanding of the subject is essential to sustain interest in the subject. Learning mathematics is not easy and if not taught properly, children lose interest in the subject ultimately leading to failure and dropout. According to National Assessment of Educational Progress, 2011, nearly two-thirds of eighth-graders scored below proficient in math. The importance of

mathematics, as highlighted above, schools must respond with effective teaching and learning of mathematics from grade one to university level (Department of Education, 2000). Despite the importance of mathematics highlighted, learners continue to fail the subject (Feza-Piyose 2012).

The reasons for failure in mathematics could be attributed to factors like low-performance in mathematics, teacher's lack of understanding of mathematical concepts, teacher's lack of concern over students error and failure to relate to real-life situation. Low performance in mathematics could be due to lack of readiness among the children. If children enter at a disadvantage age, early gaps of understanding between literacy and mathematics is widened or sustained for a longer time. School readiness is not only the meaning of reading and writing but it includes other aspects like cognitive abilities, maturation, social and emotional domains of development (Nobel, Tottenham and Casey, 2005, Ray and Smith, 2010). The non-readiness among the children for learning, impacts their independence and reflective thinking ability. The school readiness in children could be developed with the help of a good teacher. The importance of good teachers is well known. A good student's performance reveals that he has been taught by a good teacher. A teacher's knowledge can influence the learn ability of the students. Goldhaber and Brewer (1996) found that the presence of teachers with

at least a major in their subject area was the most reliable predictor of student achievement scores in math and science. They also found that, although advanced degrees in general were not associated with higher student achievement, an advanced degree specific to the subject area that a teacher taught was associated with higher achievement. Similarly, studies have found that the students taught by certified teachers scored better on the state math achievement test. The same study revealed that the math achievement of elementary students also found that students taught by new, uncertified teachers did significantly worse on achievement tests than did those taught by new, certified teachers (Laczko-Kerr and Berliner 2002). Teachers lack of concern over students error is also a factor for poor performance in mathematics. A qualified teacher in mathematics with good content knowledge, is able to identify errors in mathematics and correct it, thus helping the child with developing a strong mathematical foundation. Teachers of mathematics not only need to calculate correctly, but also know how to use pictures or diagrams to represent mathematics concepts and procedures to students, provide students with explanations for common rules and mathematical procedures, and analyse students' solutions and explanations (Hill, Rowan and Ball). The importance of a knowledgeable teacher could not be ignored keeping in mind the need of the children. Children usually tend to lose interest in any subject when

they are not able to relate it to their immediate surrounding and so are with mathematics. Other reasons contributing to low performance in mathematics are poor teaching in the lower grades, the subject is taught by the teacher who themselves don't like it, don't have a deep understanding of it and project something of a fear of it onto their students Thus making mathematics a subject of fear for children thus making considerable errors while learning it. Children tend to make mistakes while learning which should be considered as a process of learning. However, if the same mistake is repeated and a particular pattern is observed in the mistake, then the teacher need to pay attention to the type of mistake made by the child. Errors in mathematics may arise for a variety of reasons. They may be due to the pace of work, the slip of a pen, slight lapse of attention, lack of knowledge or a misunderstanding. Student errors and incorrect responses are the result of students "partial understanding" (Saxe *et al*, 2010) or correct answers to slightly different questions (Wells and Coffey, 2005). Some of these errors could be predicted prior to a lesson and tackled at the planning stage to diffuse or un-pick possible misconception. Saxe *et.al* (2010) continues that instead of considering incorrect responses as errors or mistakes to be avoided, take the position that they are often a normal part of the development of student's understanding of a topic. For developing the student's understanding of the topic, the teacher

needs to have the knowledge of what the misconception might be, why these errors may have occurred and how to unravel the difficulties for the child to continue learning. Teachers can overlook the errors made by children terming it as a regular and random error, addressing these errors and categorising them into a productive mistake is even more challenging. The solution to the problem lies in error analysis, which will help teachers not to ignore mistakes but to categorise into a more productive mistake.

Error analysis is a traditional technique in Mathematical Assessment. It involves the analysis of error patterns to identify difficulties that students may have with facts, concepts, strategies and procedures. Identifying the type of errors, allows the teacher to address learner needs more efficiently. Cox (1975), differentiates between systematic computation errors and errors that are random or careless mistakes. With systematic errors, students are consistent in their use of an incorrect number, operation or algorithm. An analysis of errors helps the teacher to identify the patterns of errors or mistakes that students make in their work, understand why students make the errors and provide targeted instruction to correct the errors. Error analysis helps the teacher to check the students' errors and categorise them. The errors are classified in mathematical areas like addition and subtraction, multiplication and division. Ashlock, (1986), Tindal and Marston (1990) classified students

errors into (a) lack of understanding of regrouping, (b) confusion of 1s and 10s in carrying and writing, (c) forgetting to regroup when subtracting 10s and 100s, (d) regrouping when it is not required, (e) incorrect operation and (f) lack of knowledge of basic number facts. Further they have classified errors occurring in multiplication and division into (a) forgetting to carry in multiplication, (b) carrying before multiplying, (c) ignoring place value in division, (d) recording the answer from left to right in multiplication, (e) lack of alignment of work in columns and (f) lack of knowledge of basic number facts. The knowledge of the type of errors made by children will give an insight into the reasons for the errors and measures to overcome the errors.

Researches have made an attempt to compile the type of errors made by the children in mathematics. Usually researchers carry out research involving the development of diagnostic test in order to identify the learning difficulties in some content area or the other and standardising them. These studies, in general, are followed by remedial teaching; there are other studies which only design a remedial teaching approach after administering a suitable standardised test (Rakhi, 2013). Studies on Chinese, Japanese, Korean and Turkish children on the usage of language for teaching mathematics shows that they use simpler words and express math concepts more clearly than English, making it easier for small children

to learn counting and arithmetic. Confusing English word names have been linked in several recent studies to weaker counting and arithmetic skills in children, thus making them prone to errors. (Article published in Wall Street journal).

Asian studies which focused on errors made by children on written mathematical tasks reports that over 50 per cent of the initial errors made were in one of the reading, comprehension and transformation categories related to word problem. It could be concluded that for most errors committed, students had either not been able to understand the word problems or if understanding has been present, they had not devised appropriate strategies for solving the given problems (Ellerton and Clements, 1992).

It could be concluded that studies on mathematical errors comprises of either designing a remedial teaching approach after administering a suitable standardised test or analysing of errors in mathematical word problems. Few studies have made an attempt to give specific insights into the test items and illustrations of student's understanding of any concept or idea. Hence, this forms the need and background for undertaking this study. The study was taken up with the objective of:

1. Administering a standardised mathematics test – Arithmetic Diagnostic Test on children with hearing impairment studying in Grade IV.

2. Analysing the errors (item-wise) on each mathematical concept made by the children in arithmetic diagnostics test.

METHODOLOGY

Subjects: A total of 25 students (12 boys and 13 girls) participated in the study. All of them were deaf and hard of hearing (pre-lingually deaf i.e., onset of deafness occurring prior to two years of age). All of them were between the age group of 11 to 13 years. Currently they were the recipients of special education service. All of them had completed Grade IV and were in Grade V at the time of the data collection. All the students were studying maths as a part of their curriculum.

The sample of 25 children was recruited from four special residential schools for the hearing impaired from Mysore (a city in Karnataka, India). All the children who have passed Grade IV and were studying in Grade V were selected for the study, this totaled to 25 children from all the four schools. The criterion for selecting the 25 children is as follows:

INCLUSION CRITERIA

1. Moderate to profound hearing loss
2. Average intelligence
3. Should be able to communicate orally or through sign language
4. Kannada as the medium of instruction.

Exclusion Criteria: No other additional disability like learning disability, mental retardation, autism and developmental delay were included.

Assessment Instruments: The Assessment instrument for the study was Arithmetic Diagnostic Test (ADT) developed by Ramaa (1994). The test intends to diagnose the specific difficulties encountered by children of Primary Schools, that is Grades I through IV while doing arithmetic sums. The test covers three major areas of arithmetic, namely, Number Concept, Arithmetic Processes (operations)—Addition, Subtraction, Multiplication and Division and Arithmetic Reasoning which is assessed at different levels through word problems and other types of problems dealing with the judicious application of the fundamental arithmetic operations in solving them. Since it is a diagnostic test, it includes sums that represent each type and sun type of tasks that fall under each of the aforementioned three major areas. Thus the test is quite comprehensive in identifying the strength and weaknesses of the children. The test is developed in such

a way that the items are appropriate to different grades of the primary school stage, cumulative and varies from each other at the minimal difference level. Each subtype of the task is represented by two items in the case of arithmetic processing and reasoning. This helps in thorough diagnosis of the difficulties faced by the children in dealing with particular subtype of arithmetic task. The sub-items and the items are arranged in the order of increasing difficulty level within the different sections of sums as well as between the sections. The test was available in English and Kannada. The Kannada version was used for the study due to its relevance with the medium of instruction of the student. Prior permission was sought from the author of the test to use the test material for the purpose of the research.

COLLECTION OF DATA

The data was collected by administering the test in the school where the

Table 1
The Technique of Collecting the Information is Given in

Sl. No.	Inclusion Criteria for Selecting the Children	Technique of selecting the children
1	Moderate to profound hearing loss	Audiological evaluation report from the school
2	Average intelligence	Standard progressive matrices : (Raven , 1983)
3	Should be able to communicate orally or through sign language	Observation and informal conversation
4	Kannada as the medium of instruction	-

students were studying. Permission was sought from the principals of the school for carrying the test. The participants were made to sit separately. Each one of the participant got individual test material. Clear instruction as to 'how to solve the questions' was given at the beginning of the test. The data was collected by administering the test in two separate sessions of 45 minutes each to avoid fatigue factor. The students used total communication as the mode of communication. Most of them were poor with their reading skills and hence the researcher had to explain with the help of spoken language or gestures and give one example for them to understand the test.

METHOD OF ANALYSIS OF DATA

The performance of the children (25 nos.) on Arithmetic Diagnostic Test-Grade IV was assessed qualitatively which aimed identifying and classifying the types of error made by the children. The types of errors were classified as 1) Incorrect operation

wherein the children performs a wrong operation, skips a step, does not follow verbal instruction. 2) poor concept: the skill for a particular concept is not developed like addition of fractions, mixed operations and division. 3) Non-performers: the children does not perform a single task and does not attempt it. 4). Correct Response: the child has performed the task with skipping any steps. 5) Careless/Random Errors: The concept is developed, but the child does simple errors, but repetition of a particular pattern is not seen. The total number of children was converted into percentages for the purpose of analysis. The results are depicted in tables 2,3,4,5,6 and the reason for deficiency is discussed below.

RESULT AND DISCUSSION

The errors in writing words for numbers were found in children. As the complexity of the task increased, they did not attempt the activity. They committed spelling errors and number errors. The children found difficulty

Table 2
Type of Error and Percentage of Children Committing Error in Number Concept

Sl. No.	Instructional Objectives (What the student is expected to do)	Nature of problem Encountered	Error/deficiency	% of children committing the error
1	Count and Write	Random / careless errors		8
2	Writing words for numbers	Non-performers	Not attempted as the complexity of the task increases.	92

3	Writing numbers for words	Poor concept	Difficulty in identification and writing when the numbers exceed two digits	80
4	Writing numbers in correct sequence	Poor Concept and Non-performers	Difficulty in writing numbers in sequence when the numbers exceed two digits	36
5	Lesser than and greater than	Poor Concept and Non-performers	Poor understanding or difficulty in following the written or spoken information	60
6	Writing numbers in an increasing order	Poor Concept and Non-performers	Poor understanding or difficulty in following the written or spoken information	52

Table 3
Type of Error and Percentage of Children Committing Error in Addition

Sl. No.	Instructional Objectives (what the student is expected to do)	Nature of problem Encountered	Error/ deficiency	% of children committing the error
1	Add the numerals (vertically)	Incorrect operation/adding (Skip a step or number and difficulty in carrying over and adding extra digit)	Forgets to add the carried digits to the next place value	64
		Poor concept	Poor understanding of the addition concept.	16
		Careless errors/Random errors		12
		Correct response		8

2	Add the numerals (horizontally)	Poor Concept (addition of fractions) and Random Errors	Not learnt procedure of adding fractions or avoiding difficult task.	100
3	Writing digits in an increasing order	Poor concept (lack of understanding of instruction)	Poor understanding or difficulty in following the written or spoken information	92
		Incorrect operation (wrong procedure)		8
4	Solving addition word problems	Incorrect operation (difficulty in reading and comprehending word problems)	Difficulty in processing verbal numerical information	92
		Non-performers		8

in following the instruction written in words. Thus many of them did not attempt activities where they had to read and follow instructions. The wordiness of mathematical problems creates difficulties for hearing students as well as those with hearing loss. The linguistic aspects of mathematics create difficulties for them (Wood, Wood, Griffith and Howarth 1986).

Forgetting to add the carried number, and difficulty in adding fractions were the problems encountered by the children in the addition concept. The error committed could be due to the working memory. Mathematical competence requires a variety of skills that encompasses different conceptual content and procedures wherein partial information

is held back and new information is processed to arrive at a solution. This requires working memory (Bisanz, Sherman, Rasmussen, and Ho, 2005). Children having problems with working memory also face problem with processing information and sentence comprehension. The concept of addition was known to them however, the error occurred when carrying over the digit.

Subtraction activity involving borrowing requires the understanding of place value and a good processing memory. The above table clearly shows that simple single digit subtraction sums were attempted by the children; however, error was identified in subtraction sums involving borrowing digits from the higher place. The errors

Table 4
Type of Error and Percentage of Children Committing Error in Subtraction

Sl. No.	Instructional Objectives (what the student is expected to do)	Nature of problem Encountered	Error / Deficiency	% of children committing the error
1	Subtract the numerals (vertically)	Random Errors		16
		Incorrect operation (no borrowing/ inappropriate borrowing)	Forgets to borrow number from the next place value or incorrect borrowing.	52
		Non-performers	Poor understanding of the subtraction concept.	24
		Correct response		8
2	Subtract the numerals (horizontally)	Incorrect Operation	Difficulty in subtractions involving fractions and number exceeding two digits	72
		Non-performers		28
3	Writing digits in decreasing order	Poor Concept	Poor understanding or difficulty in following the written or spoken information	28
		Non-performers		72
4	Solve the following problems (mixed operations)	Incorrect Operation	Not learnt the procedure of doing mixed operation sums	44
		Non-performers		56
5	Indicate whether the statement is true or false (mixed operation)	Poor Concept	Poor understanding of mixed operation or not able follow written or oral instructions	8
		Non-performers		52
		Correct Response		40

6	Solve the following word problems	Incorrect Operation	Difficulty in processing verbal numerical information	40
		Non-performers		60
		Correct Response		
7	Solve the following problems (The child is expected to fill in the missing numbers by performing the subtraction)	Poor Concept (lack of understanding of instruction)	Not learnt the procedure	8
		Random Errors		32
		Non-performers		60

could be due to poor working memory. Studies have shown that working memory is important for many aspects of mathematical performance, including use of complex arithmetic procedures that involve carrying and borrowing operations (Ashcraft, 1992; De Rammelaere, Stuyven and

Vandierendonck, 1999, 2001; Frensch and Geary, 1993; Geary, Frensch and Wiley, 1993; Hecht, 2002;

The above table clearly shows that performing multiplication related task was difficult as many children did not attempt them. However, among those children who attempted the task had

Table 5
Type of Error and Percentage of Children Committing Errors in Multiplication

Sl. No.	Instructional Objectives (what the student is expected to do)	Nature of problem Encountered	Errors/ deficiency	% of children committing the error
1	Multiplying the numbers (arranged horizontally)	Incorrect operation (difficulty with multiplying three digit numbers to another three digit numbers or multiple numbers)	Did not learn the skill of multiplying three digit numbers to another three digit numbers or more	20
		Random Errors		36
		Poor Concept	Does not know multiplication	20
		Non-performers		24

2	Write the following in an increasing order based on their products	Incorrect operation	Poor understanding of the multiplication skill or difficulty in following the written or spoken information	32
		Non-performers		68
3	Solve the following problem (mixed operation)	Poor Concept	Not learnt the skill of doing multiplication involving mixed operation	32
		Non-performers		64
		Correct response		4
4	Solve the following word problems	Incorrect Operation	Not able to process verbal numerical information	8
		Non-performers		92
5	Indicate whether the statement is true or false	Incorrect operation	Poor understanding of the multiplication skill or difficulty in following the written or spoken information	
		Non-performers		88
		Correct response		12

also done it incompletely resulting in errors like carrying out addition in place of multiplication, wrong tables and omitting sums having more than three digits. It could also be observed that 92 per cent of children did not attempt word problems or tasks which required them to read and follow instructions. This means that, for most errors, students had either not been able to understand the word problems or, if understanding had been present, they had not devised appropriate strategies for solving the given problems. Clements and Ellerton (1992), reports that language is an important factor in the development of mathematical concepts. A frequent observation in educational settings is that children with profound hearing impairments as well as deaf children quite often experience

difficulties to acquire calculation skills (Zarfaty et al., 2004; Ansell and Pagliaro, 2006).

The error in division shows that children did not learn the skill of dividing, as many children did not attempt the tasks. The task which they had attempted was classified under poor concept as they did multiplication instead of division, they did not attempt task involving mixed operations and avoided tasks involving word problems and verbal instruction, which was difficult for them to comprehend. For children to succeed in mathematics, a number of brain functions need to work together. Children must be able to use memory to recall rules and formulas and recognise patterns; use language to understand vocabulary, instructions,

Table 6
Type of Error and Percentage of Children Committing Errors in Division

Sl. No.	Instructional Objectives (what the student is expected to do)	Nature of problem Encountered	Errors/ Deficiency	% of children committing the error
1	Divide the following (children are expected to divide horizontally)	Poor Concept	Does not know division	4
		Non-performers		84
		Correct response		12
2	Divide the following vertically	Incorrect Operation	Does not know division, doing multiplication instead of division	8
		Non-performers	Does not know division when more than one step is involved.	68
		Random Errors		16
		Correct response		8
3	Solve the following problems (mixed operation)	Incorrect operation	Not learnt the skill of doing division involving mixed operation	12
		Non-performers		88
4	Solve the following word problem	Non-performers	Did not attempt as not able to process verbal information	76
		Poor concept		24

and explain their thinking; and use sequential ordering to solve multi-step problems and use procedures. Higher-order cognition helps children to review alternative strategies while solving problems, to monitor their thinking, to assess the reasonableness of their answers, and to transfer and apply learned skills to new problems. Often, several of these brain functions need to operate simultaneously

(Nathan, Lauren and Nathan, 2002). This is usually difficult with children with hearing impairment and hence they face difficulty with mathematical operation.

The other area to be focused is the pattern of errors attempted by children in word-problem. Most of the children did not attempt the task or performed it incorrectly (did addition in place of subtraction,

copied the same statement without comprehending) due to the wordiness in the verbal language of the word problems. The effect of language on mathematics performance for disadvantaged students (here children with hearing impairment) has been noted (Zevenbergen, 2000), and this suggest that difficulty is similar to hearing peers. This difficulty in understanding may be due to the development of alternative language; sign language (Frostad, 1999) that impacts on the types of understandings that students develop with regard to mathematical concepts.

CONCLUSION

Children making mistakes in mathematics is common, however, when the pattern of error is identified, an extra attention need to be paid to the performance of the children. The error analysis clearly revealed that simple number task which had concrete representation like count and write was attempted by all the children except two making random errors, but tasks like writing number names for the given numerals was not performed by 92 per cent of the children. Similarly task involving reading verbal instruction and following was also skipped by most of the children with hearing impairment. One of the important challenges in mathematics teaching is to help students make connections between the mathematics concepts and the activity. Children may not automatically make connections between the work they do

with manipulative materials and the corresponding abstract mathematics. Children tend to think that the manipulations they do with models are one method for finding a solution and pencil-and-paper math is entirely separate (Burns and Silbey, 2000, p. 60). This is true with children with hearing impairment. Due to language deficiency, children fail to understand the abstract concept like place value, which forms the foundation over which other concepts like addition, subtraction, multiplication and division is developed. Poorly developed place value concept had an effect on other concepts like addition where the children did not carry over the number to the next place value or in subtraction where they did incorrect borrowing. It was also observed that these children lack logical thinking. Because, they carried out incomplete multiplication sums. Children learn concept in such a way that they develop the ability to think mathematically thus refining their existing knowledge and construct new ideas (Haynes, 1999)

The importance of language cannot be ignored and it is clearly observed in the study, wherein the children are skipping word related problems. Pau (1995) states that in order to solve written problems correctly deaf/hearing impaired children need to correctly interpret every one of the words contained in the problem's text. In terms of verbal problems, deaf/hearing impaired children make an attempt to simplify the problems by converting them into understandable linguistic

forms. He suggests that “It is therefore vital that any teaching programme designed to improve the child’s problem-solving level should include general text-comprehension and, in particular, mathematics text-comprehension activities”. Additionally, the teachers’ role in teaching mathematics cannot be ignored. However, it is observed that, teachers tend to pay less attention in evaluating the children and identifying the errors. The reason for this could be

the fact that the impairment in the child prevents him/her from attempting the mathematical task. The teacher neglects the errors made by them thinking that it is a predisposition of the child leaving it unattended. This research also implies the needs of an effective remedial programme and establishing a base for developing an Individualised Education Programme for addressing the mathematical problems of the children.

REFERENCES

- ANSELL, E. AND C. M. PAGLIARO. 2006. The relative difficulty of signed arithmetic story problems for primary level deaf and hard-of-hearing students. In Silvia, P., Martin, L. and Korbinian, M. (Eds). Number processing and arithmetic skills in children with cochlear implants. *Frontiers in Psychology*. Vol:5doi: 10.3389/fpsyg.2014.01479.
- ASHCRAFT, M.H.1992. Cognitive arithmetic: A review of data and theory. In M.L. Meyer, V.N. Salimpoor, S.S. Wu, D.C. Geary and V. Menon (Eds). Differential contribution of specific working memory components to mathematics achievement in 2nd and 3rd graders. *Learn Individual Differences*. Apr 2010; 20(2): 101–109.doi:10.1016/j.lindif.2009.08.004.
- ASHLOCK. 1986. TINDAL AND MARSTON. 1990. In L.G. Cohen, L.J. Spenciner (Eds). *Error Analysis of Mathematics*. Excerpt from *Assessment of Children and Youth with Special Needs*, by L.G. Cohen, L.J. Spenciner, 2007 edition, p. 262-263. Pearson Allyn Bacon Prentice Hall.
- BISANZ, J., J. L. SHERMAN, C. RASMUSSEN AND E. HO. 2005. Development of arithmetic skills and knowledge in preschool children. In K.P. Raghubar, M.A. Barnes and S. A. Hecht.(Eds). Working memory and mathematics: A review of developmental, individual difference, and cognitive approaches. *Learning and Individual Differences* 20 (2010) 110–122. Retrieved from <http://acdl.crrp.nie.edu.sg/documents>.
- CLEMENTS, M.A. AND N.F. ELLERTON. 1992. February). Errors on written mathematical tasks made by Grade 5 children in two schools in Penang, Malaysia. Seminar presented at Regional Centre for Education in Science and Mathematics, Penang, Malaysia.
- COX, L. S. 1975b. Systematic errors in the four vertical algorithms in normal and handicapped populations. *Journal for Research in Mathematics Education*. In T. Geethaand and A. T. Thressiakutty (Eds). An error analysis of mathematical achievement in primary school children with hearing impairment. *Journal of Disability Management and Special Education*.3(2). Vidyalyaya Printing Press. Pp-57 , Coimbatore.
- DE RAMMELAERE S, E. STUYVEN, A. VANDIERENDONCK. 1999. The contribution of working memory resources in the verification of simple mental arithmetic sums. In M.L. Meyer, V.N. Salimpoor, S.S. Wu, D.C. Geary and V. Menon (Eds). Differential contribution of specific working memory components to mathematics achievement in 2nd and 3rd graders. *Learn Individual Differences*. Apr 2010; 20(2): 101–109.doi: 10.1016/j.lindif.2009.08.004.

- _____. 2001. Verifying simple arithmetic sums and products: Are the phonological loop and the central executive involved? In M.L. Meyer, V.N. Salimpoor, S.S. Wu, D.C. Geary and V. Menon (Eds). Differential contribution of specific working memory components to mathematics achievement in 2nd and 3rd graders. *Learn Individual Differences*. Apr 2010; 20(2): 101–109. doi: 10.1016/j.lindif.2009.08.004.
- FEZA-Piyose. 2012. Language: A cultural capital for conceptualizing mathematics knowledge. *International Electronic Journal of Mathematics Education*, 7 (2): 62-79. In S.A. Tachie and R. Chireshe (Eds). High Failure Rate in Mathematics Examinations in Rural Senior Secondary Schools in Mthatha District, Eastern Cape: Learners' Attributions. *Stud Tribes Tribals*, 11(1): 67-73 (2013). p.p.67-73.
- FRENSCH, P.A., D.C. GEARY. 1993. Effects of practice on component processes in complex mental addition. *Journal of Experimental Psychology*. In M.L. Meyer, V.N. Salimpoor, S.S. Wu, D.C. Geary and V. Menon (Eds). Differential contribution of specific working memory components to mathematics achievement in 2nd and 3rd graders. *Learn Individual Differences*. Apr 2010; 20(2): 101–109. doi: 10.1016/j.lindif.2009.08.004.
- FROSTAD, P. 1999. Deaf children's use of cognitive strategies in simple arithmetic function of linguistic, social and cultural background. In Zevenbergen, R., Hyde, M. and Power, D. (Eds). Language, Arithmetic, Word Problems and Deaf Students: Linguistic Strategies used to solve tasks. *Mathematics Education Research Journal*. Vol.13.No.3. 204-218. Retrieved from link.springer.com/article.
- GEARY, D.C., P.A. Frensch, J.G. Wiley. 1993. Simple and complex mental subtraction: Strategy choice and speed-of-processing differences in younger and older adults. In M.L. Meyer, V.N. Salimpoor, S.S. Wu, D.C. Geary and V. Menon (Eds). Differential contribution of specific working memory components to mathematics achievement in 2nd and 3rd graders. *Learn Individual Differences*. Apr 2010; 20(2): 101–109. doi: 10.1016/j.lindif.2009.08.004.
- GOLDHABER AND BREWER. 1996. Teacher quality and student achievement. Research review. Centre for Public Education. Retrieved from <http://www.centerforpubliceducation.org>.
- HAYNES, M. 1999. The mathematical world of the infant and toddler. In Ray, E. (2001). *Discovering mathematics: The challenges that deaf/ hearing impaired children encounter*. ACE Paper (11). Retrieved from <https://cdn.auckland.ac.nz> (pp.62-75).
- HECHT, S.A. 2002. Counting on working memory in simple arithmetic when counting is used for problem solving. In M.L. Meyer, V.N. Salimpoor, S.S. Wu, D.C. Geary and V. Menon (Eds). Differential contribution of specific working memory components to mathematics achievement in 2nd and 3rd graders. *Learn Individual Differences*. Apr 2010; 20(2): 101–109. doi: 10.1016/j.lindif.2009.08.004.
- HILL, H. C. AND B. ROWAN AND D.L. BALL. (In Press). Effects of teacher's mathematical knowledge for teaching on student achievement. In press at *American Educational Research Journal*.
- HOUSE J.D. 2006. Mathematics beliefs and achievement of elementary school students in Japan and United States: Results from the third international mathematics and science study. *The Journal of Genetic Psychology*, 167(1): 31-45. In S.A. Tachie and R. Chireshe (Eds). High Failure Rate in Mathematics Examinations in Rural Senior Secondary Schools in Mthatha District, Eastern Cape: Learners' Attributions. *Stud Tribes Tribals*, 11(1): 67-73 (2013). pp 67-73.
- LACZKO-KERR AND BERLINER 2002. Teacher quality and student achievement. Research review. Centre for Public Education. Retrieved from <http://www.centerforpubliceducation.org>.

- MAREE et al. 2003. MAREE K, ALDOWS, C, HATTINGH, A SWANEPOEL, A, van der Linde M 2006. Predictors of learner performance in mathematics and science according to a large scale study in Mpumalanga. *South African Journal of Education*, 26(2): 229-252. In S.A. Tachie and R. Chireshe (Eds). High Failure Rate in Mathematics Examinations in Rural Senior Secondary Schools in Mthatha District, Eastern Cape: Learners' Attributions. Stud Tribes Tribals, 11(1): 67-73 (2013). p.p 67-73.
- MIKULSKI, B.A. 2001. Amendment to the Elementary and Secondary Education Act. From <http://mikulski.senate.gov/press/01/05/2001509952.htmls> (Retrieved June 20, 2011). In S.A. Tachie and R. Chireshe (Eds). High Failure Rate in Mathematics Examinations in Rural Senior Secondary Schools in Mthatha District, Eastern Cape: Learners' Attributions. Stud Tribes Tribals, 11(1): 67-73 (2013). pp 67-73.
- MKGATO AND MJI. 2006. MAKGATO M, MJI A. 2006. Factors associated with high school learners' performance : A spotlight on mathematics and physical science. *South African Journal of Education*, 26(2): 253-266. In S.A. Tachie and R. Chireshe (Eds). High Failure Rate in Mathematics Examinations in Rural Senior Secondary Schools in Mthatha District, Eastern Cape: Learners' Attributions. Stud Tribes Tribals, 11(1): 67-73 (2013). pp 67-73.
- PAU, S. 1995. The deaf child and solving problems of arithmetic: The importance of comprehensive reading. Ray, E. (2001). Discovering mathematics: The challenges that deaf/ hearing impaired children encounter. ACE Paper (11). Retrieved from <https://cdn.auckland.ac.nz> (pp.62-75).
- RAY, K AND M. C. SMITH. 2010. The kindergarten child: What teachers and Administrators need to know to promote academic success in all children. In M. L. Sandra., M. D, Ramey, S. Zambak (Eds). Predictors of School Readiness in Literacy and Mathematics: A Selective Review of the Literature. *Early Childhood Research and Practice*. 15 (1). University of Illinois. Retrieved from <http://ecrp.uiuc.edu/v15n1/linder.html>.
- SAXE, G. B., M. GEARHART, Y. A. SITABKHAN , D. EARNEST, L. C. HALDAR, K. E. LEWIS, et al. 2010. A research-based, elementary school curriculum on integers and fractions. Paper presented at the Annual Meeting and Exposition of the National Council of Teachers of Mathematics. In McNamara, J. and Shaughnessy, M. M. (Eds). Student errors: What can they tell us about what students DO understand? Retrieved from http://www.mathsolutions.com/documents/StudentErrors_JM_MS_Article.pdf.
- STEEN, L. A. (Ed.) 2001. Mathematics and Democracy: The Case for Quantitative Literacy. New Jersey: The Woodrow Wilson National Fellowship Foundation. In S.A. Tachie and R. Chireshe (Eds). High Failure Rate in Mathematics Examinations in Rural Senior Secondary Schools in Mthatha District, Eastern Cape: Learners' Attributions. Stud Tribes Tribals, 11(1): 67-73 (2013). p.p.67-73.
- WELLS, P.J. AND D.C. COFFEY. 2005. Are they wrong? Or did they just answer a different question? In McNamara, J. and Shaughnessy, M. M. (Eds). Student errors: What can they tell us about what students DO understand? Retrieved from http://www.mathsolutions.com/documents/StudentErrors_JM_MS_Article.pdf.
- WOOD, D., H. WOOD, A. GRIFFITH AND I. HOWARTH. 1986. Teaching and talking with deaf children. In Zevenbergen, R., Hyde, M. and Power, D. (Eds). Language, Arithmetic, Word Problems and Deaf Students: Linguistic Strategies used to solve tasks. *Mathematics Education Research Journal*. Vol. 13. No.3. 204-218. Retrieved from link.springer.com/article.
- ZARFATY, Y., T. NUNES AND P. BRYANT. 2004. The performance of young deaf children in spatial

and temporal number tasks. In Silvia, P., Martin, L. and Korbinian, M. (Eds). Number processing and arithmetic skills in children with cochlear implants. *Frontiers in Psychology*. Vol.5 doi: 10.3389/fpsyg.2014.01479.

ZEVENBERGEN, R. 2000. "Cracking the Code" of mathematics: School success as a function of linguistic, social and cultural background. In Zevenbergen, R., Hyde, M. and Power, D. (Eds). Language, Arithmetic, Word Problems and Deaf Students: Linguistic Strategies used to solve tasks. *Mathematics Education Research Journal*. Vol.13, No.3., 204-218. Retrieved from link.springer.com/article.

8

An Investigation into the Conceptual Understanding of Students in the Light of Thinking Skills Approach

S.V. Sharma, S. Yadav, K.B. Rath, Ram Niwas, A. Horo, Rana Pratap*

Abstract

A study entitled 'An Investigation into the Conceptual Understanding of Students about the Subject Content in the Light of Thinking Skills Approach at Primary Level' has been conducted on students of schools of experimental and control groups. Analysis of the data through both qualitative and quantitative approaches shows performance of students of experimental group is better as compared to control group in Hindi, English, EVS and Mathematics subjects. It is envisaged that teaching-thinking skills by infusing it across curricular areas may be made an integral part of teaching-learning process in today's scenario to help students in becoming innovative problem-solvers, constructors of knowledge, thoughtful decision makers, independent thinkers and life-long learners. Present practices of designing lesson planning can be modified so as to integrate various components of thinking skills leading to create thinking classrooms.

INTRODUCTION

In recent years, there has been growing interest and much research into the ways of developing children's thinking and learning skills. Most of the educators now agree that learning to think is among the most desirable goals of formal schooling. They agree that it is, in fact, possible to increase students' creativity and innovation, critical thinking, problem-solving,

communication and collaboration capability through instruction and practice. Several promising approaches have been developed to foster thinking skills in students. These approaches fall mainly into three categories viz., independent or separate programmes, subject or domain-specific programmes and infused programmes (across-the-curriculum approach). However, several documents in the literature of thinking skills offer support for

* Regional Institute of Education, NCERT, Ajmer

infusion of thinking skill activities into subjects in the regular curriculum. In a recent analysis, Bernard *et al.* found that mixed instructional approach that combine both content and critical thinking instruction significantly outperformed all other types of instruction. It has also been found that while developing critical thinking skills among the students, pedagogy matters and collaborative learning conditions have some advantages. Newton and Newton has measured the impact of thinking skills approach in terms of those aspects of classroom interaction known to support conceptual understanding in learners such as the quantity and quality of people talk, pupil to pupil mediation and types of teacher question etc. So in this context each school system must determine what makes the most sense given their unique circumstances. Whatever approach is adopted, the methodology must ensure that the 21st century skills are meaningful to all types of learner and learning transfers beyond the context in which it occurs. Educators are not alone in their concern about the urgency of teaching and learning of different thinking skills. Various organisations and government all over the world are now more concerned than ever to promote life skills needed in fast changing world. It is now realised that 'higher order thinking skills' are required, in addition to basic skills, because individuals cannot 'store' sufficient knowledge in their memories for future

use. In England the revised National Curriculum included thinking skills in its rationale, stating that thinking skills are essential in 'learning how to learn'. In the United States, "a national survey of employers, policy makers, and educators found consensus that the dispositional as well as the skills dimension of critical thinking should be considered an essential outcome of a college education". The Conference Board of Canada expressed the need for Canadians to improve critical thinking skills to strengthen Canada's innovation profile and competitive advantage in the knowledge-based global economy. In recent years, a number of articles, books, reports, seminars have highlighted the importance of 'Higher Order Thinking (HOT) skills' and hence appear in the support of teaching thinking. In India, the *National Curriculum Framework* has strongly advocated the development of life skills such as critical thinking skills, interpersonal communication skills, decision-making/problem-solving skills, and coping and self-engagement skills is very critical for dealing with demands and challenges of everyday life. Many teachers now admit this fact that 'teaching for thinking' and 'quality learning' is desirable. If we accept that we need to prepare our students to a greatly different future than we have known, then our understanding of the focus of education also needs to shift. This includes shift in the role of learner and teachers and changes in their teaching practices and corresponding shifts in assessment.

To become a thinking school, a whole school approach will be necessary whereby all stakeholders are fully committed to the school's aims and how they can best be achieved. Staff will need to be specially trained and methods will need to be introduced into the curriculum for teaching the skills of thinking, and associated cognitive and meta-cognitive strategies. In the 'knowledge society' of 21st century, the idea of thinking children, thinking classrooms, and thinking schools is essential to achieve the mission of education. Keeping above in view, the present study entitled 'An Investigation into the Conceptual Understanding of Students about the Subject Content in the Light of Thinking Skills Approach at Primary Level' has been conducted in two CBSE-affiliated schools of Ajmer district of Rajasthan. The state aims to promote the thinking skills such as critical thinking, analytical thinking, reflective thinking, integrative thinking and creative thinking of students at primary level.

OBJECTIVES

- To develop instructional materials, strategies and activities (i.e., thinking lessons, thinking tools); to use and to integrate it into the classroom to teach different thinking skills viz., critical thinking, analytical thinking, reflective thinking, integrative thinking and creative thinking by the primary teachers.
- To examine the feasibility of instructional materials, strategies

and activities in enhancing different thinking skills in present time-frame of primary school.

- To train and equip primary school teachers with innovative instructional strategies and assessment techniques to promote and assess students' learning growth at primary level.
- To see the effect of thinking skills approach on students' conceptual understanding about the content of Hindi, English, EVS and Mathematics subjects.

RESEARCH QUESTIONS

- What types of methods, strategies, activities (in school both inside or outside the classroom), interactions, communications and assessment techniques did the teacher practice and integrate into everyday teaching to create thinking classrooms and ultimately thinking schools?
- To what extent such practices affect various thinking, meta-cognitive and social skills?
- To what extent these skills affect the performance of students during continuous and comprehensive evaluation process?
- To what extent this approach is feasible for teachers in infusing current curriculum transaction process?

METHODOLOGY, DESIGN, SAMPLE AND RESEARCH TOOLS

The quasi-experimental pre-test, post-tests control group design was chosen to conduct the present study on

the students of Class V of schools of experimental and control groups. The study purports to find out the effect of innovative instructional material, strategies and activities on different thinking skills of students of primary schools. The sample was collected from the two primary CBSE-affiliated schools of Ajmer district of Rajasthan. One of them was Demonstration Multipurpose (DM) School, Ajmer and other one was Kendriya Vidyalaya (KV)-I, Ajmer. DM School, Ajmer was taken as experimental group and KV-I, Ajmer was taken as control group. Primary school teachers of experimental group were oriented regarding the innovative instructional strategies and approaches and assessment techniques with a view to promote and monitor thinking skills of the students, whereas the teachers of control group were not oriented regarding aforesaid. In order to stimulate students' thinking and develop their social skills during both inside and outside the classroom, different activities like poster making on different themes of Hindi, English, EVS and Mathematics subjects for Class V (outside the classroom) and worksheets on different themes of Hindi, English, EVS and Mathematics subjects (inside the classroom) were placed for the students so that they could work individually or in group in the school whenever they get time. Finally, before the conduction of the experiment, students of Class V of experimental group and control group were oriented regarding the

use of different graphic organisers. After this, thinking based test items in the form of research tools for pre-tests and post-tests were developed and administered on the students of Class V in respect of Hindi, English, EVS and Mathematics subjects of schools of both the groups. After collection of the data, a minute analysis was carried out through both qualitative and quantitative approaches. Size of the sample was 34 and 35 in experimental group and control group, respectively.

INSTRUCTIONAL MATERIALS

Innovative instructional materials in respect of Hindi, English, EVS and Mathematics subjects were developed by the experts and practicing teachers in workshop mode. They developed subject-wise instructional materials and strategies (i.e., thinking lessons and thinking tools) to teach different thinking skills viz., critical thinking, analytical thinking, reflective thinking, integrative thinking and creative thinking in the classroom situation with existing curriculum time-frame. Details of instructional materials, strategies, tools and classrooms activities (inside and outside) are given in reference. Teachers of experimental group have used these materials, strategies, tools and activities in their teaching-learning process. Students' involvement in one of the activities conducted by a teacher of experimental group during teaching-learning process is delineated as follows:

DATA ANALYSIS



Innovative instructional materials, strategies, tools and activities (for inside and outside classroom activities) in respect of Hindi, English, EVS and Mathematics subjects were used during teaching-learning process by the teachers in the school of Experimental Group (EG). Teachers of primary school of experimental group were oriented regarding the instructional strategies and assessment techniques with a view to promote and monitor thinking skills of the students of Class V. Finally, before the conduction of the experiment, the students of Class V of experimental group and control group were oriented regarding the use of different graphic organisers. After this, thinking based test items for different test levels (pre-test to post-tests) research tools were administered on students of both the groups in respect of Hindi, English, EVS and Mathematics subjects for Class V. It is, worthwhile to mention over here that the teachers of school of control group did not use innovative instructional materials developed

by us for the classroom transaction. Afterward, quantitative and qualitative analysis of the data was carried out. Responses of the students of both the groups were categorised into three categories, viz., Acceptable Responses (AR), Unacceptable Responses (UAR) and Not Responded Responses (NR). Analysis of the data in terms of percentage of average accepted responses of students of experimental group and control group for Hindi, English, EVS and Mathematics subjects has been carried out and percentages of average accepted responses of students of both groups were calculated and their respective graphical representations are shown in Figures 1-4 for Hindi, English, EVS and Mathematics subjects. Primarily attention was focused to accepted responses of students of both the groups.

IMPLICATIONS

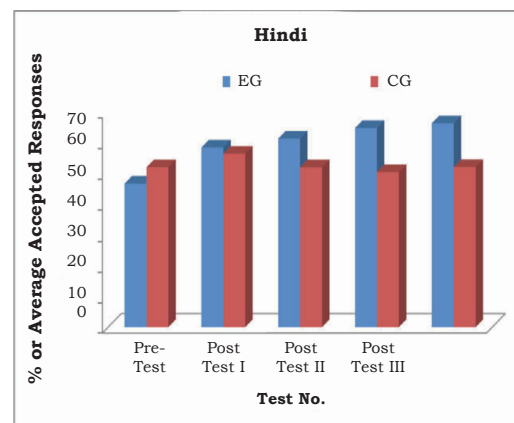


Fig. 1 Percentage of average accepted responses of students of Class V: Hindi

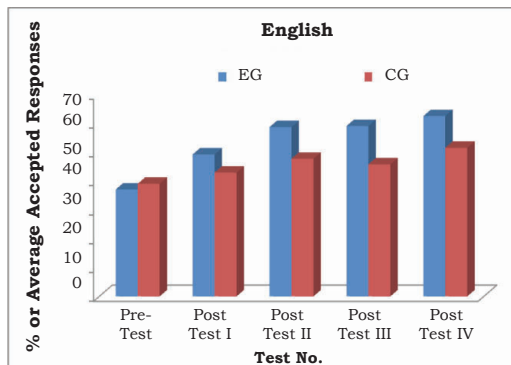


Fig.2 Percentage of average accepted responses of students of Class V: English

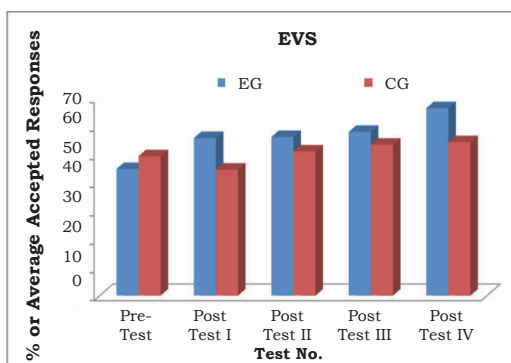


Fig. 3 Percentage of average accepted responses of students of Class V: EVS

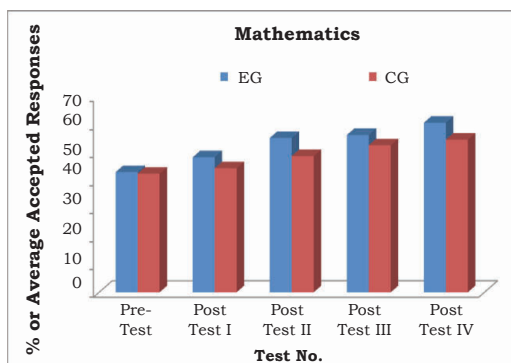


Fig. 4 Percentage of average accepted responses of students of Class V: Mathematics

It is evident from the Figures 1-4 that performance of the students of control group is better in all the pre-tests administered on the students of Class V, whereas the performance of students of experimental group is better in all the post-tests administered on the students of Class V (Figures 1-4). Quantitative and qualitative analysis of the data of experimental and control groups shows that there exists a difference in performance of students of two groups in all the subjects (Hindi, English, EVS and Mathematics, Class V) at primary level. Students of control group performed better in all the pre-tests administered on them. Performance of students of experimental group is found to be better in all the post-tests administered on them. There is an increase in the average percentage of accepted responses of the students. However, it is in larger proportion to the students of experimental group. It was noticed that most of the questions based on higher order thinking were remain unresponded in case of control group whereas experimental group attempted these questions and responded most of them correctly. This forms a strong background to make use of the innovative instructional materials and strategies, and inside and outside classroom activities during the teaching-learning process. It is, worthwhile, to mention here that in school of experimental group teachers have used innovative instructional materials developed on subjects Hindi, English, EVS and

Mathematics for Class V and inside and outside classroom activities and strategies during the teaching-learning process. Also primary school teachers of experimental group were oriented regarding the use of instructional materials and strategies and assessment techniques using graphical tools with a view to promote and monitor thinking skills of the students. As a result of the orientation, all the teachers of primary section of school of experimental group designed thinking based test items in the respective subjects that (Hindi, English, EVS and Mathematics) that they teach for the summative assessment i.e., first term, second term and final term of students of Class V). In order to stimulate students' thinking and develop their social skills during both inside and outside the classroom, different activities like poster making on different themes of Hindi, English, EVS and Mathematics for Class V (outside the classroom) and worksheets on different themes of Hindi, English, EVS and Mathematics (inside the classroom) were placed for the students so that they could work individually or in group in the school whenever they get time. In addition to this, audio-video recording of the teachers transacting subject content using innovative approaches in the classroom (in primary section of school of experimental group and video recording of students of Class V working outside the classroom has been done. Also feedback from the students and teachers has been

collected. Accordingly additional input to the teachers was given. Whereas in the school of Control Group (CG) neither teacher used exemplar instructional materials for transaction of content of Hindi, English, EVS and Mathematics subjects nor they were oriented regarding aforesaid. Keeping aforesaid in view, the following recommendations are made:

- The school is one of the places where children are supposed to learn, to think and get various platforms which enable them to make full use of their potential. In today's fast changing world, where progress and advancement is going on at a rapid pace, one can-not, therefore, afford to be lagged behind. Hence, they look for a school which boasts of innovative ways of teaching, where learners at the end of the school days feel that they are ready to face the challenges of the 21st century. It is, therefore, recommended that learners must be equipped with thinking skills such as critical thinking, analytical thinking, reflective thinking, integrative thinking and creative thinking, innovation, problem solving, communication and collaboration which can help them to become innovative problem-solver, constructors of knowledge, thoughtful decision-maker, independent thinker and life-long learner.
- As teachers/ teacher educators, the challenge is to match the needs of the learners to a world that is

- changing with rapid pace. To meet this challenge, there is a need to become strategic learners. It is, therefore, suggested that teachers should act as strategic learners by deliberately expanding perspectives and updating their approaches.
- Most of the teachers and teacher educators now agree that learning to think is among the most desirable goal of formal schooling and it is, in fact, possible to increase learners' creativity and innovation, critical thinking and problem-solving, communication and collaboration capability through instruction and practice. It is, therefore, recommended that innovative approaches/models/infused programmes (across the curriculum approach) have to be developed to foster thinking skills in the students.
 - It is now realised that 'higher-order thinking skills' are required, in addition to basic skills, because individuals cannot 'store' sufficient knowledge in their memories for future use. Information is expanding at such a rate that individuals require transferable skills to enable them to address different problems in different context, at different times throughout their lives. It is, therefore, recommended that the curriculum for school education should emphasise on 'higher-order thinking (HOT) skills' in its rationale, stating that thinking skills are essential in 'learning how to learn'.
 - It is recommended that there is a need of well organised teaching-learning strategies for classrooms that invites and supports 'teaching for thinking' and 'quality learning'. To become a thinking school, a whole school approach is exercised necessarily wherein all stakeholders are fully committed to the school's aims and how they can be achieved superbly. Accordingly, teachers need to be specially trained and methods need to be introduced into the curriculum for teaching the skills of thinking and associated cognitive and meta-cognitive strategies. Also innovative instructional materials and strategies (i.e., thinking lessons, thinking tools, resource materials i.e., print, video and audio) for primary teachers to teach different thinking skills such as critical thinking, analytical thinking, reflective thinking, integrative thinking and creative thinking are suggested in present time-frame of primary school to achieve the mission of education in the 'knowledge society' of 21st century and to exercise the idea of thinking children, thinking classrooms and thinking schools.
 - Many teachers and teacher educators now admit the fact that 'teaching for thinking' and 'quality learning' is desirable to a great extent. If we accept that we need to prepare our students to a greatly different future than we have known, then our understanding of the focus of education also needs to

- shift in the role of learner, teachers and changes in their teaching practices and corresponding shifts in assessment. It is, therefore, recommended that the focus on holistic assessment of students through school-based continuous and comprehensive evaluation is very much expected to be practiced.
- It is recommended that primary school teachers must be oriented/trained and equipped with innovative instructional materials, strategies, activities and continuous comprehensive evaluation /assessment techniques to promote and monitor thinking skills of students at primary level to create thinking classrooms and ultimately leading to thinking schools. Teachers must try to infuse continuous comprehensive evaluation /assessment techniques in the current curriculum transaction process to assess learners' learning growth.
 - Use of graphical tools for designing assessment items of different subjects such as Hindi, English, EVS and Mathematics and assessing students' learning growth in terms of learning indicators is recommended and it can be accomplished in terms of learning indicators. For example, basis of learning indicators for assessment of learning at primary stage may be taken as –

Indicators	Needs improvement	Satisfactory	Outstanding
Active participation of students in the activities related within and outside the classroom situations.			
Demonstration of students in learning beyond the classroom.			
Engagement of the students in new strategies without prompting them by the teacher.			
Students' response to the teacher's questions. Elaborate and explain their learning concepts.			
Involvement of students in planning, self-monitoring and evaluating their learning.			
Demonstration of the ability to initiate, locate and evaluate information from multiple sources by the students and motivation within and outside the classroom/school.			

Students seek/explore information from different sources and apply in new situation.			
Active involvement of students in learning tasks.			
Students ask higher order questions during the teaching- learning process.			
Students reflect supporting information from valid and reliable sources.			
Students demonstrate learning beyond classroom by discussing with colleague and teacher.			
Final work includes clearly stated main ideas logically and coherently connected to supporting information and to analyse and synthesise it.			

The innovative instructional strategies/practices are considered to be helpful to facilitate learners' conceptual change, improve their thinking skills and develop quality learning among students. These strategies are helpful to make existing teaching-learning process more effective. It is, therefore, recommended that workshops can be organised for in-service teachers to develop insight about innovative instructional materials, strategies, practices and assessment techniques and how to make them work in their school with an existing curriculum and time-frame.

CONCLUSION

It may be concluded from the findings of the present study that there is a need of well organised teaching-learning strategies that support

'teaching for thinking' and 'quality learning' to make thinking classrooms. Teaching thinking skills by infusing it across curricular areas assist the students to become life-long learners and independent thinkers. Present practices of designing lesson planning, instructional materials and strategies need to be modified in the light of thinking skills approach to achieve the mission of education in the 'knowledge society' of 21st century and to put into effect the idea of thinking students, thinking classrooms and thinking schools.

ACKNOWLEDGEMENTS

Authors gratefully acknowledge the financial support provided by the authorities of the NCERT for conducting present research study. Authors also sincerely acknowledge the support of Head Master, DM

School, Ajmer and I/c Primary Section, DM School, Ajmer and Principal, KV-I, Ajmer and teachers of the sample schools in administering pre-and post- tests to the students. Authors would like to express sincere gratitude to the experts (Professor. H.

C. Jain and Dr D.S. Mishra) and the teachers (Dr Renupama Mahapatra, Mr Abhishek Bhardwaj, Mr Seeta Ram Meena and Mr Amer Singh Meena) for their active participation in workshop for developing research tools and instructional materials.

REFERENCES

- ADEY, P. AND M. SHAYER. 2002. *Learning Intelligence*, Open University Press. Buckingham.
- BERNARD, R. M., et al. 2008. *Thinking Skills and Creativity*, 3, 15-22 doi:10.1016/j.tsc.2007.11.001.
- CEDERBLUM, J. AND D.W. PAULSEN. 2006. *Critical Reasoning: Understanding and criticizing arguments and theories*, 6th edn. Thomson Wadsworth. Belmont, CA.
- CRAFT, A. 2005. *Creativity in Schools: Tensions and Dilemmas*. Paperback, Published by Routledge, New York.
- DFEE AND QCA. 1999. *The National Curriculum Handbook for Primary Teachers in England*, London: www.standards.dfes.gov.uk/schemes3.
- DICTIONARY.COM. 2013. "critical thinking," in Dictionary.com's 21st Century Lexicon. [http://dictionary.reference.com/browse/critical thinking](http://dictionary.reference.com/browse/critical%20thinking).
- ENNIS, ROBERT. 2002. "A Super-Streamlined Conception of Critical Thinking" <http://faculty.education.illinois.edu/rhennis/SSConcCTApr3.html>.
- FISHER, ALEC AND SCRIVEN MICHAEL. 1997. *Critical Thinking: Its Definition and Assessment*, Centre for Research in Critical Thinking (UK) / Edgepress (US). ISBN 0-9531796-0-5.
- FISHER, R. 2005. *Teaching Children to Think*, (2nd Ed) Stanley Thornes. Cheltenham.
- GAMMIL, D. 2006. "Learning the Write Way". *The Reading Teacher*. 59 (8): 754.
- HIGGINS, S. V. BAUMFIELD AND D. LEAT. 2001. *Thinking Through Primary Teaching*. Chris Kington. Cambridge.
- MCGUINNESS, C. 1999. *From Thinking Skills to thinking classrooms: a review and evaluation of approaches for developing pupils' thinking*. London: DfEE, (Research Report RR115).
- MULNIX, J. W. 2010. Thinking critically about critical thinking. *Educational Philosophy and Theory*. doi: 10.1111/j.1469-5812.2010.00673.x.
- NCERT Textbooks (English and Hindi version) of Hindi, English, EVS and Mathematics for Class V.
- NEWTON, L.D. et al. 2000. *Thinking Skills and Creativity* 7(3): 165-176.
- SHARMA, S.V., SARYUG YADAV, K.B. RATH, R. NIWAS, A. HORO AND R. PRATAP. 2014. Project Report 'Thinking School: An Experiment'. Regional Institute of Education. NCERT, Ajmer.
- TWARDY, R. Charles. (2003). Argument Maps Improve Critical Thinking. *Teaching Philosophy* 27, 2.

9

Programmes and Practices in Contextualising the Curriculum for Primary School Students

Sofia K.M.*

Anil Kumar K.**

Abstract

The term “localising” (or contextualising) curriculum has become a central concept in primary education. The National Curriculum Framework (NCF, 2005) has clearly stated it as of situating learning in the context of the child’s world, and of making the boundary between the school and its natural and social environment porous (p.30). This attempt at contextualising curriculum to improve the quality of education becomes imperative for those who have not benefitted from the traditional curriculum. The present study is set in the primary schools in the coastal area of Beypore of Calicut district in Kerala. By focussing on localising curriculum, the researcher explores the programmes made by the educational functionaries, and the practices adopted by the schools and teachers for contextualising the curriculum. The study also concerns the participation and the responses of learners and their parents about the need for a shift from general textbook-based instruction to the localised text in primary classes recommended by NCF (2005) for a more participatory localised curriculum. It concludes by stressing the immediate need of contextualising the curriculum for a meaningful and efficient teaching-learning process, and for decentralised planning and programmes to materialise it.

INTRODUCTION

Contextualising the curriculum carried out with the aim of situating learning in the context of the child by fading the boundary between textbook and the local environment of the child. There

are many studies that emphasise the cultural, social and linguistic background of the child as s/he tries to learn. Earlier it was believed that children from the minority, ethnic and lower economic groups have problems

* M.Ed Scholar, RIE (NCERT), Mysore

** Associate Professor, RIE (NCERT), Mysore

in school because they were unable to integrate with mainstream life and they were described as culturally handicapped. Today we reject this 'cultural deficit model' and believe that no culture is deficient, but there may be differences between the students' home culture and the expectations of the school (Ormod, 2000). Following this, there has been consensus that curriculum should be designed to suit the needs and interests of the children and that the child ought to get ample opportunities to gather experiences through her/his own culture and mother tongue. Sreedhar (1999) and Hayes, Mills, Cristie and Lingard (2007) have observed that the reason for alienation leading to the child dropping out of school with a different cultural background is the cultural and linguistic mismatch in knowledge, texts, and practices between home or community and the school. Kelly (1999) and Hawes and Stephen (1990) argue that for basic education to be viable in practice, it must be rooted in a society and a culture which learners can comprehend. An education which is alien to the child often leads to a dangerous form of half-learning because it has little connection with their daily lives and experiences. Vygotsky (1978) also holds that meaning-making happens by building links between school knowledge (abstract concepts) and everyday knowledge. Nambissan (2001) has raised the same question and found that this has an important implication for the education of children from *Dalit*

and *Adivasi* communities. A number of Indian policy documents have also emphasised the need for addressing cultural and linguistic factors at least in the first few years of schooling.

Some countries have introduced a localised curriculum for children who are socially and educationally disadvantaged in primary education which encourages the schools to address issues of educational backwardness (Sinyama, 2011). In countries like Australia, USA and Britain, ethnic teachers are taking up the role of a cultural expert to contribute in the development of curriculum and the locus of curriculum decision-making is moving to individual schools with teachers and principals as key decision-makers (Hawthorne, 1990). These studies reiterate the need for evolving a curriculum and pedagogical practices grounded in the cultural specificity of the tribal, rural, urban, other ethnic groups and communities hoping that it can ensure positive changes in the learners and the community through joyful learning through the involvement of the school with the local people, their festivals, functions and life styles.

CURRICULUM FRAMEWORKS FOR SCHOOL EDUCATION

Curriculum can be defined as a totality of experiences that a child should get for the optimum growth and development of the potential endowed in that child. All the curriculum frameworks, especially the National Curriculum Framework for Secondary

Education (NCFSE, 2000) and the *National Curriculum Framework (NCF-2005)* have emphasised that the pluralistic nature of Indian society needs to be reflected in the pedagogical approaches since there is no one universal way in which learners learn. The NCFSE (2000) brought out by NCERT stressed the importance of a constructive paradigm and viewed the child as a constructor of knowledge and has re-emphasised the active role children have to play in processing the knowledge. This document also highlights the relevance of the immediate environment in treating the learning of languages, mathematics, and environmental studies not as different subjects, but in an integrated way in the primary classes. It further demands a shift from the traditionally oriented cognitively focused approach of education to a more holistic education which places learning within the context of the learner's total experiences. The NCFSE infact states that in order to respond to the educational deprivation of *Dalits*, *Adivasis* and minorities, there is a need to integrate socio-cultural tribal perspectives and to show concern for their linguistic specificities and pedagogic requirements (NCERT, 2000, p.8).

The *NCF* (2005) further elaborated these ideas in the light of the theories of Piaget and Vygotsky which showed learning as a social process of collaboration. It was a monumental work in the Indian educational scenario as it gave importance to

addressing different cultural groups in the educational process. To achieve this end, the document emphasised the importance of contextualising the curriculum in primary education by taking into consideration the process of learning in a constructive classroom as a collaborative processing of knowledge by the individual child. It gives us deeper insight in addressing the problems that are encountered by the state of Kerala in the present educational context as it provides wide scope for utilisation of the personal experiences of learners in day-to-day school activities. Expressing concern over the neglect of the child's local context in the present school practices the *NCF* (2005) states:

We emphasise the significance of conceptualising education or situating learning in the child's world, and of making the boundary between the school and its natural and social environment porous. This is not only the local environment and child's own experiences are the best entry points into the study of disciplines of knowledge, but more so because the aim of knowledge is to connect with the world (p.30). It further elaborates the significance of contextualising education: of situating learning in the context of the child's world (p. 30). So at the primary stage, the child should be engaged in joyfully exploring the world around and harmonising with it (p. 48). Stress must be laid on access to locally developed discourses and texts. The document stresses the idea that learning and knowledge

gets its significance only in child's community and local environment through interaction with it. In a constructivist issue-based curriculum, the local experiences of the learner is quite important. A curriculum becomes more meaningful when the local issues are reflected well in the learning materials and the lessons. Therefore, it's an approach to learning that responds to local needs, allowing learners to learn more about, and build awareness about those natural resources and environmental issues that directly affect them. Making this their focus stress must be put on the need to localise knowledge and curriculum practices. The curriculum revision programme in Kerala, Kerala Curriculum Framework (KCF-2007) was conceptualised on the basis of the recommendations of the *NCF* (2005). KCF (2007) also emphasises what is stated in *NCF* (2005) on localising curriculum.

THE CONTEXT OF THE STUDY

The setting of the study is a coastal area and two schools close to sea are taken as cases. The people around these schools belong to the fisherman community, mainly from the Muslim religion, with their own ways of life, imparting knowledge, values and skills to the children, according to their culture and traditions. They are a group of people living on a narrow strip of land along the length of Kerala's coastline depending exclusively on the sea for livelihood resembling

an urban slum configuration. Aarti (2012) has stressed the importance of understanding the fisherman community as a distinctive group of people with their own way of life and a distinctive culture, and to understand the special relationship that they share with the sea and the environment. If one were to take account of the quality of life in the Kerala state, which has been the hallmark of high progress in literacy and education, they have been left behind. The literacy level and educational attainment of fisher-folk is much lower than that of the general population (Department of Fisheries, 2005 quoted in Aarti, 2012). The only other occupational group in a similar circumstance is the tribal communities who live on the hilly environs of the state and depend mainly on the forests for their livelihood. These are the only communities which depend on natural common property resources for their living. The adverse socio-economic condition of fisher-folk are perpetuated more by their poor and low standards of educational attainments when compared to the rest of the population. According to the report on the Education Development Index (EDI) prepared by the National University of Educational Planning and Administration (NUEPA), New Delhi based on the District Information System for Education (DISE), Kerala topped the EDI among 21 major states in India for the primary and upper primary levels of schooling in the year 2006-2007.

Table 1
Gender-wise Distribution of Fisher-folk by Level of Education in Kerala State

Category	Male	Female	Total
Illiterate	6.4	7.6	7.0
Up to primary	20.9	18.5	19.7
Upper primary	26.5	23.1	24.8
Secondary	38.3	39.6	39.0
Higher Secondary	5.9	7.2	6.5
Graduate	1.9	4.0	2.9
Post Graduate	0.1	00	0.04
Others	-	-	-
Total	100	100	100

Source: Fisher-folk in Kerala, 2007

The table shows the fisherman community fall behind the general population in participation of educational activities in Kerala. According to Drez and Sen (1989), some of the economic, social and cultural characteristics specific to fishing communities have placed restrictions on its members achieving a level of 'capabilities' commensurate with that of members of other communities in Kerala. For a child in this community to go to school implies being kept away from fishing. The role of religion and the position of fishermen in Kerala society have been examined in considerable detail by Houtart and Nayak, (1988) quoted in Kurien, (1995). Although all the marine fishing communities have over the

centuries adopted Hinduism, Islam or Catholicism, their prior social status and the nature of their occupation continue to bestow them with a low status even within their respective new religious groupings. Kurien adds that despite the remarkable contribution of Muslims, Hindus and Catholics towards high quality education in Kerala, the benefits of these have not percolated to their own fishing communities.

The above table shows that the majority of the community depends on fishing and allied works to meet their livelihood. Consequently the community's skills are restricted to these jobs without having to develop them further.

Table 2
Occupational Profile of Fisherman Community in Kerala

State	Active as % of Total occupied	Active and allied as % of total occupied	Other than fishing as % total occupied
Kerala	64.4	94.1	5.9

Source: Fisher-folk in Kerala, 2007

RATIONALE OF THE STUDY

The study tries to examine the programmes and practices in contextualising the curriculum for primary school students following the recommendations of NCF (2005) and KCF (2007) under the authority of District Education Department in the Bepore region of Calicut district in Kerala. More specifically it tries to explore the nature of programmes designed by educational functionaries to execute the recommendation of NCF (2005) to localise the curriculum, and whether the teachers are getting any support in cluster meetings regarding this and how it is understood and practiced by them. It also looks into the responses of learners and parents toward it. The study has significance in the context of Kerala, which by far has been undergoing reforms in the field of education, especially in the case of NCF (2005). Further Kerala's attempts to accommodate the above recommendations has been appreciated by prominent educationists like Kumar (2010) who says that Kerala and Bihar are the only states that have developed their own frameworks through the same kind of social deliberation that NCERT had mobilised, and hence these two states offer the best examples of progress along the lines of NCF (2005).

The NCF (2005) has been in the process of implementing its major recommendations in school education since its commencement. Kerala has been in the forefront by implementing creative reforms like constructive issue based classrooms, and Continuous

and Comprehensive Evaluation (CCE) in school education. It is time, as we approach a decade of reforms, to examine those reforms that are followed after the NCF in the context of Kerala's education. This research is based on the felt need gathered from the experiences of the researcher as a primary school teacher in this area. The researcher's experiences have been contributed by the opinions of the teachers in her school as well as by those in neighbouring schools during cluster meetings. Since the teachers are supposed to promote all students in primary classes the grading points that the children got cannot tell the depth of their backwardness. Calicut district has 71 km coast line which is 12.03 per cent of the total length of coast line in Kerala. The estimated fishermen population of the village was 2801 during the year 2006-2007. There are seven primary schools in the area out of which four are government schools and three are aided schools. Among these schools, two schools are very close to the sea and they are G.L.P.S. Bepore West and G.L.P.S. Bepore South. The majority of the students studying in the academic year 2011-12 in these two schools are from the Muslim religion. There are 135 students with 6 teachers in G.L.P.S. Bepore West, out of which, 130 students are from the fisherman community. All the teachers including the head teacher reside very far from the school. Some of them are new appointees also. There are 110 students in G.L.P.S. Bepore South, out of which, 34 students

are from the fisherman community. Five teachers are working in this area including the head teacher. People who live near the school have a distinct culture compared to that of their neighbouring area. Their educational status is far below that of those who live in other parts of the district. Their poor educational status gets reflected in high absenteeism, poor language skills, low motivation to study, increasing rate of dropouts in secondary education, low rate of enrolment in higher secondary education. They give less importance to education and that is reflected in the limited participation of learners in educational activities and parents in Parent Teacher Association (PTA) meetings. They also lack facilities to sit and learn at home, and the kind of leisure that they get is distracting rather than supportive of school. The researcher's experience shows that the curriculum-based texts mainly address issues related to the majority population and hence the pictures shown in the text and some concepts (like agriculture, Onam festival, village, forest etc.) are beyond the experiential orbit of the children in this area. As the child is brought up in a different cultural background other than the mainstream, the child may not be able to connect her/his every day experiences with the curriculum knowledge-based as it is on a common set of cultural definitions and symbols oriented around the mainstream. The study claims that the concept of localising/contextualising has many implications for all students and

it is especially important for those who are still in the disadvantaged circumstances.

Review of researches on education of minorities conducted during the period from 1993 to 2000 has revealed that only a few studies have been conducted in this area (Yadav, 2006). Most of the studies have dealt with the problems of education of Muslims only. Moreover studies which focused on the problem of curriculum also show that very few studies have so far been conducted focusing on curriculum implementation. Teachers' role in implementation also needs careful study as they are the principal consumers in the field of education. Mohan and Perras (2011) show that the opportunities for teachers to plan for implementation and provision of technical support were important for promoting curriculum implementation in the schools.

This qualitative study does not focus directly on student learning, but rather examines such efforts made by the educational functionaries and teachers in the coastal areas of Beypore. This critical evaluation will help us to rectify the existing problems of the on-going programmes and also to make the implementation process more effective. Hence there is a need to investigate classroom and school practices and the efforts of educational functionaries in the light of the *NCF* (2005) and *KCF* (2007) that might contribute to more equitable, improved outcomes for all students, especially for children in the coastal area. In the case of schools in the coastal area,

it seems to be important to ensure the quality of education and the participation of parents, teachers and learners in learning process.

OBJECTIVES OF THE STUDY

The following are the objectives of the study:

- To explore the programmes made by the educational functionaries for contextualising the curriculum for the coastal areas of Calicut district.
- To explore the practices adopted by schools and teachers in contextualising the curriculum at primary school level.

METHODOLOGY

Case study method was used for the study. Two schools, namely GLPS Beypore West and GLPS Beypore South were taken as cases. The cases were taken on the criteria of high percentage of student population coming from the coastal area. These case studies cover the experiences of people as members of the community. Data of the study were collected through semi-structured interviews. The students, parents, teachers, resource persons and educational functionaries related to the schools in the area of Kozhikode district were the participants of the study. The familial social and cultural factors which shaped this process were studied in detail. A sketch of the geographical territory, which was the playground of this whole experience, was made. Thematic analysis technique is used for the analysis of data.

RESULTS AND DISCUSSION

The analysis of the results has yielded some significant findings pertaining to the contextualisation of the curriculum at the primary level in the coastal areas. The major findings are systematically presented in the order of the objectives of the study.

The first objective was to explore the programmes made by the educational authorities for contextualising the curriculum for the coastal areas of Calicut district. For that the analysis of the interviews of the District Institute of Educational Training (DIET) faculty and Resource Persons (RP) were done and it has yielded the following results.

The educational functionaries have identified this area as backward by putting forth many reasons and have acknowledged the need of contextualising the curriculum for students of coastal areas. One of the resource persons has addressed the problem of the mismatch between life and school and told that formal instructions were given to teachers for contextualising the curriculum. He added:

Children in the coastal area are from different background than that of children from mainstream culture with less exposure to outside world with life in congested areas. What they may get from school is different from what they have habituated. This is an important reason for their lack of interest in learning. In order to develop interest linking the text with the children's experiences and environment is very essential.

Most of the educational functionaries opined that the revised state textbooks developed during 2007 following the recommendations of NCF (2005) and KCF (2007) is an open-ended one with many slots for teachers to contextualise the learning in accordance with the experiential orbit of the child. They mentioned about some isolated efforts made by educational authorities. One of the participants told about a project under taken by *Panchayath* and later by Block Resource Centre (BRC) for the construction of a local text. They made a local resource mapping as there were many historically important places in Feroke followed by a list of local resource persons and a local resource place like Chaliyaamkotta, Mannur and made a local text based on that. He remembered it as a start to form local texts under BRC level. Setting this an example they told teachers also can do similar things. Another resource person viewed that the revised textbook is flexible enough to add all these changes and the teachers can do a lot in this regard if they are supported with additional materials like local text and discourses. All these can contribute to make learning more effective.

They admit that there is an insufficiency in the centralised organisation of planning and the implementation of programmes in acknowledging the diversity in population and culture as the State Council of Educational Research and Training (SCERT) is the main

functionary in the implementation of the recommendations in the state. DIET is also taking an important role in this process. All cluster meetings are designed based on a common module prepared by State Resource Group (SRG) and they give training to District Resource Group (DRG) members. The DIET and DRG members are giving trainings for Block Resource Persons and they train teachers. So training is common for all the teachers and opportunities are given for them to discuss their problems and thus they can seek solutions also. As it is common, there is no space for special module or training. Most of the RPs and DIET faculty argued that the main responsibility of contextualising the curriculum is on the teachers' shoulders. There were no other cluster level organised programmes specifically for this area. At present the programmes designed for the educational empowerment of children in the coastal area are Fisheries school, Remedial teaching and Padanaveedu under SSA. Padanaveedu is proposed for children, who do not have the right ambience to study in their homes which have only one room and is full of noise, to sit together and study with the assistance of an Educational Volunteer appointed by *panchayath* and BRC. They will be provided with honorarium. One of the respondents has added that there are two Padanaveedus run with 22 and 18 children in this region. The absence of an organised system was clear from the words of a RP and he agreed that

there is a need of localised curriculum, but it is still a utopian concept.

All of the participants reported that there are multiple reasons for the educational backwardness of children in the coastal area and all these contribute to lack of interest among children and it is not because they are less intelligent. They have acknowledged the need of special planning and directions from the part of educational functionaries to equip the teachers for this task. Regarding this a resource person has noted that it will be good if special trainings were given for teachers working in this area with additional support materials specifically designed for them.

The analysis of the interviews with the educational functionaries shows that the issue of contextualising the educational programmes is acknowledged well in the context. They have identified the various causes of backwardness of the fishermen population in education. There is an inner dynamics among these factors and the backwardness in education in this area. Like other coastal areas in Calicut district, Beypore also is an economically backward region. An economically backward community or group will not have the motivation to engage voluntarily in educational process. This backwardness orients the people to engage totally in the activities that can meet their livelihood. The lives of the people totally revolve around fishing and related jobs. Their culture is rooted in these activities. This creates an atmosphere where every child born in this region naturally

becomes a fisherman. In such a context, it is obvious that education gets less importance; it lies in the periphery of their life. This has been the scene for decades in this area. In this scenario the existing education system has an important duty to do in the society. The primary focus of the system should be to ensure the voluntary and active participation in the process. To meet this goal, the education system should be culturally sensitive. But the existing system is not addressing this seriously. Education doesn't have an entity separated from the socio-cultural process. There is a remarkable mismatch between the life and education system of the people living in coastal area. The students in this area are often labelled as less motivated and disinterested which ultimately results in dropouts and poor performance.

Even though Kerala is very eager to absorb the developments in the field of education and to implement the desirable trends, it is yet to absorb the spirit of *NCF* (2005) showed in culture in the educational processes. By acknowledging the importance of contextualising the curriculum, the educational functionaries admit that its materialisation is in the process still after 7 years of *NCF* (2005). Teachers are given open-ended textbooks to contextualise it according to the local needs. Some of the current programmes implemented for coastal area show that they still view educational backwardness as a product of economic backwardness. The centralised system followed in planning

and implementation is less open to address the issues of contextualising curriculum. Since it operates from top to bottom, local level concerns become beyond the purview of its functioning. The issue of educational backwardness in the coastal areas is not given any special attention. It is also taken as issues of Scheduled caste and scheduled tribe groups. There is a need of a system which works in a more decentralised way.

The second objective was to explore the practices adopted by school and teachers in contextualising the curriculum at the primary level. Analyses of the interviews of teachers, students and parents have brought the following results. Acknowledging the issue of the need for contextualisation, the majority of the teachers have told that when they try to localise the content with examples from child's immediate environment they have observed desirable changes in their participation level. They expressed concern over the textbook which they were using as it doesn't have any direct relationships to the life of the child and the respondents opined that it will be better if the textbook could incorporate changes in accordance with the diversity of their culture. Some of the respondents tend to generalise the issue as common among all children and have not yet acknowledged the issue of the need to be culturally-specific. One of the teachers has said that in each lesson there will be a part for child to add named as *entevaka* (my part). She added that when assignments or home

work were given as continuation of the textbook activities, most of the parents are not helping because the parents don't know how to help their children. One of the teachers also echoed the problems of a centralised system and added:

Textbook is designed for whole Kerala. So there must be some problems or else we should have different textbooks for different areas. It will be good if there are one or two lessons at least related to the life in coastal area.

They expressed their limitations in bringing the child's context always into the classroom by saying that, as they do not belong to this area they are not aware of many of their cultural specificities. Another teacher added that if they had a local text we would be able to overcome some of these limitations. One of the teachers remembered that discussions used to happen on this topic but they don't know about its progress and unless and until a local text is there, at least as an additional support it will be difficult for a teacher who is new to this area. Teachers have observed that contextualising can be done especially when they teach environmental studies because while teaching such subjects the teachers can use many examples from their own immediate environment if they are culturally-sensitive. They have also added mathematics to be such a subject. The teachers said that they were using direct examples from the life of the children and they were engaging the children with their own experiences while beginning a lesson.

This could allow indigenous knowledge to come into the classroom. They have identified the need for local efforts, school level efforts and the need for training for contextualisation.

One of the teachers expressed the opinion that local people could work as resource persons in the efforts of contextualising curriculum as teachers are not familiar with their culture. However, the schools have done very little in this regard. It demands collective effort at the school level, cluster level and panchayath level from teachers and educational authorities. They expressed their wish of being able to take more field trips. But the main constraints in doing such work are lack of cooperation from parents and finance also is a problem. One of the teachers in GLPS Bypore West has argued that they have done some surveys and simple projects related to different kinds of work and they have found out that most of the people in the area are doing work related to sea fishing. Another teacher has added that some assignments have been given related to ice making and coir making which are very familiar in that area. A survey has been done related to the income of Kudumbasree; a self help group in Kerala. Children have participated well in all these activities. In that way students have collected information regarding the history of the school and the importance of their place and have included it in their manuscript library. The isolated efforts of the teachers were very successful and it has materialised in the form of magazines like Piravi

and Olangal. Another has said that they have not received any training related to the method of bringing the local text into the classroom in cluster meetings. One of the respondents has stressed that training is very essential. The important thing is the construction of a textbook which gives importance to local resources in the sub-district level. He has also added that as schools in this area are mainly government schools teachers are transferred now and then and this has an adverse effect on the learning process. It reasserts the importance of a local text for all learning processes, especially in a coastal area. Moreover as the teachers do not belong to that area, training is also very essential. At present no training has been given to the teachers for contextualising curriculum and teachers demand training and supportive materials in a decentralised way.

The interviews with parents also have given the same results. One of the parents said that in textbook-based homework they are not always capable of helping whereas those related with their immediate environment, they are able to help and the children even show interest in doing their home work. But all of them were convinced that there may be greater improvement in the children's learning if the textbook is founded on their own life and environment. Majority of the parents have said that if textbooks were related to the immediate environment of the child where she/he lives their parents would help them well. They have also

added that now many of the parents are not able to help because they don't know these things.

Majority of the students also have the opinion that if the textbooks were related to their life and environment, they could learn easily and exams also will be easy. They also said that they conducted surveys on the use of plastics within their locality and all of them participated well in that activity.

The experience of teachers working in the coastal area stresses the need for contextualising curriculum. They identify it as a crucial factor for an effective teaching-learning process. The current concept of open-ended textbooks does not meet the need of coastal area. Teachers are instructed to contextualise but they have not been given any training. As a result, they are doing it within their limitation with no coordinated efforts. Since the open-ended textbooks cannot make concrete results in teaching process, teachers demand local texts instead of open-ended textbooks. The importance of local level efforts is visible in contextualising the curriculum. It can be done at panchayath level by organising and coordinating programmes. If needed, schools can further modify according to their student population and their culture. Local people can work as resource persons in the efforts of contextualising curriculum. Teachers wish to get training so as to take efforts in the direction of contextualising the curriculum.

Students' active participation ensures the quality of any educational

system. If the system is not addressing their experiential life, their participation will be minimal and that will produce a weak system of education. The design of curriculum and pedagogic practices has implications in the parents' participation in educational process. If the text is totally devoid of the culture and social life of people the parents cannot be a part of the child's learning process. The local textbook can ensure joint efforts of learning which will transform the educational process to a community process. Area like Beypore invites a shift in the interest of people in education. The primary thing to do in areas like this is to create interest in the people to make their children educated. For that they also need roles in the process. If the textbooks do not acknowledge the knowledge the students possess they become an outsider in the learning process. All these reiterates the need of decentralised programmes and planning from the educational functionaries by making the text localised text and taking local people as cultural experts.

CONCLUSION

Anchoring on localising curriculum, the present study was an attempt to examine the programmes and practices for primary school students with respect to the recommendations of *NCF* (2005) and *KCF* (2007). Although these documents have succeeded in spreading the idea of localising curriculum among different stakeholders of education it has to be transformed as a functional system and this transformation

requires a decentralised mode of planning and execution. The findings of this study revealed the need of more contextualised, decentralised efforts for its successful implementation.

The educational backwardness of many communities like the fishermen community in Kerala demands fast action internalising the true spirit of the recommendations.

REFERENCES

- AARTI, K. 2012. Traditional Fisher folk of Kerala - Part I. India Water Portal. V.16, No.4.
- CALICUT UNIVERSITY. 2007. Fisher folk in Kerala: Primary Survey. Department of Economics. Calicut.
- DEPARTMENT OF FISHERIES. 2005. Marine fisheries of Kerala. <http://www.fisheries.kerala.gov.in/>.retrieved on the 7th of August 2012.
- DREZ, J. AND A. SEN. 1993. Hunger and Public Action, Oxford University Press, New Delhi.
- HAWES, H. AND D. STEPHENS. 1990. Questions of quality. In M. J. Kelly (Ed.), *The Origins and Development of Education in Zambia*. Image Publishers, Lusaka.
- HAWTHORNE, R. D. 1990. Analysing School Based Collaborative Curriculum Decision Making. *Journal of Curriculum and Supervision*. V.5, No.3, P. 279-286.
- HAYES, D., M. MILLS, P. CHRISTIE AND B. LINGARD. 2007. *Teachers and Schooling: Making a Difference*. Allen and Unwin. Australia.
- HOUTART AND NAYAK. 1988. Challenges of a culture in transition in Kerala Fishermen. *Culture and Social Organisation*. P. 1-18. Belgium.
- KELLY, M. J. 1999. *The Origins and Development of Education in Zambia*. Image Publishers Limited. Lusaka.
- KUMAR, K. 2010. It was a remarkable experience protecting academic integrity from political attacks. *The Hindu Newspaper*.
- KUMAR, S. D. 2008. Kerala tops primary education index. *The Times of India*.
- KURIEN, J. 1995. The Kerala Model: It's Central Tendency and the Outlier. *Social Scientist*. V.23, No.1/3, pp. 70-90.
- MOHAN, S., D. PERRAS. 2011. Curriculum Implementation and Teacher Participation. *Edutracks*, V.10, No.2.
- _____. 2011. Curriculum Implementation and Teacher Participation. *Edutracks*, V.10, No. 2.
- NAMBISSAN, G.B. 2001. Social Exclusion, Children's Work and Education. Kabeer, N., et al. (Eds). *Needs Versus Rights? Child Labour and the Right to Education in South Asia*.
- NCERT. 2000. *National Curriculum Framework for Secondary Education*. New Delhi.
- _____. 2005. *National Curriculum Framework*. New Delhi.
- ORMORD, E. J. 2000. *Educational Psychology*. Prentice Hall, Inc, New Jersey.
- SCERT. 2007. *Kerala Curriculum Framework*. Thiruvananthapuram.
- SINYAMA, I. 2011. *Enabling Social Learning as a Response to Environmental Issues Through Teaching of Localised Curriculum in Zambian Schools*. M.Ed dissertation. Rhodes University.
- SREEDHAR, M.V. 1999. Reaching the Unreached. Enabling Dalit Girls to Get Schooling. *Manushi*. V.111, pp. 10-19.
- VYGOTSKY, L. S. 1978. *Mind in Society: The Development of Higher Psychological Functions*. Cole, M., John-Steiner, V., Scribner, S. and Souberman, E., (Eds.). Harvard University Press. Cambridge.
- YADAV, N.S. 2006. *Sixth Survey of Educational Research*. 1993-2000, Vol.1. NCERT. New Delhi.

10

School Management – a Case Study of Municipal Corporation of Delhi (MCD) School

P. D. Subhash*

M. Siraj Anwar**

Abstract

Effective management of a school plays pivotal role in bringing desirable changes in the overall functioning of the school and in achieving the aims and objectives set by the curriculum planners and administrators. This study critically analyses the functioning of the school management system in a Municipal Corporation of Delhi (M.C.D.) School. The study reveals that Municipal Corporation of Delhi (M.C.D.) makes serious efforts to provide proper directions to head teachers and teachers in managing the school activities in a better way. However, it also points out the lacunae existing and the need for the improvement of the management of curriculum. The study also recommends the necessity of combined efforts of teachers, parents, members of Vidyalaya Kalyan Samiti, local community members and M.C.D. officials for attaining the educational objectives.

Effective school management plays a pivotal role in achieving educational goals, developing good learning environment, motivating all the persons involved in the implementation of school activities and ensuring the academic performance of the school. Municipal Corporation of Delhi (M.C.D.) makes earnest efforts to provide free and compulsory primary education for all the children of 5-11 age group residing in its jurisdiction which covers

entire area of Delhi except certain areas falling under the jurisdiction of New Delhi Municipal Committee and Delhi Cantonment Board. The M.C.D. serves an important social role in the education of the children belonging to the low income groups as they have opened primary schools in their area to ensure admission of such children at a manageable walking distance from the place of her/his residence. Every year, the

* Assistant Professor, PMD, NCERT

** Professor, PMD, NCERT

department conducts house-to-house survey to find out non-school-going (out-of-school) children and facilitate their parents/guardians to enrol these children back in the nearby schools. Various projects/ programmes and welfare schemes have been launched to give added impetus to achieve the educational goals and also to serve as an incentive to the children of weaker sections with a view to minimise drop-outs and absenteeism.

De Grauwe (2000) pointed out that the quality of education depends primarily on the way schools are managed, availability of resources and the capacity of the schools to improve teaching-learning process. The success of a school is influenced by the quality of leadership provided by the head teacher. Grissom and Loeb (2011) also concluded that the principals' organisation management skill consistently predicts students' achievement growth and other success measures. Kalra (1997), Agarwal and Goswami (2005) and Vashishtha (2010) pointed out that the role played by the head of the institution is crucial in the overall functioning of the institution. The head of the institution should be well experienced in the areas of school management viz., curriculum, institutional and financial management, exercising administrative control and fostering human relationship.

All the efforts of the M.C.D. become meaningful only when the Head Teachers of the schools implement the vision, objectives and guidelines in proper ways. The Head Teachers

of the M.C.D. schools are expected to play key role in school management by planning, organising, controlling and evaluating the entire process of the school. It is their duty to assign works, replenish resources, and control and oversee the entire functioning of the school.

Talbert (2009) emphasised the necessity of effective school management practices to ensure success in fulfilling the high demands of public school accountability. The study focused on the innovative practices in their school management and curriculum management. Govinda (2002) pointed out that one of the core areas of the school functioning is the management of academic activities that includes curriculum management. Curriculum management involves a wide range of tasks, such as preparation of a detailed calendar of activities, construction of a time table, equal distribution of classes to teachers, involvement of teachers in developing an effective approach to curriculum transaction, evaluation of student performance, etc. The study was designed to analyse the various aspects of curriculum management followed by the M.C.D. schools.

Management of human relationship determines the level of participation and contributions of all the persons involved in the school management. Effective management of human relationship coupled with good motivation enhances the entire process of school management. Yolcu (2011) pointed out that the socio-economic levels of schools

influence the participation of parents in school administration. Buliver and Chrispeels (2011) also support the view and conclude that when parents participate in leadership development, they are empowered to effect changes that benefit their children through individual and collective actions. Mohanty (2010) established that a good number of children belonging to poor income families do not attend school regularly because they have to support family income and also take care of their younger siblings.

Khaparde, Srivastava and Meganathan (2004) found that the successful schools are characterised by participative management system, granting autonomy to people and at the same time making them accountable for successful completion of tasks, following democratic method of decision-making, giving priority to welfare of the students, maintaining supportive relationship with teachers, attempts to establish linkage with the parents, adoption of innovative pedagogical methods and evaluation techniques and recognising good work of teachers.

Keeping in view the importance of M.C.D. schools in providing quality education to the children belonging to poor economic background, the study was undertaken to bring to light the school management system existing in the S.D.M.C. Primary Co.Ed. School, Adchini, New Delhi in detail and also to suggest ways and means to overcome the difficulties faced by the school in the area of school management to ensure quality education.

OBJECTIVES OF THE STUDY

THE FOLLOWING ARE THE OBJECTIVES OF THE STUDY

- To analyse the role and functions of head masters, teachers and other school functionaries in planning and management of various activities in the S.D.M.C. Primary Co.Ed. School, Adchini, New Delhi;
- To study the innovative practices adopted by the school with regard to school management;
- To analyse the activities of the school for the management of human relationship;
- To study the curriculum management in the school; and
- To analyse the motivation techniques used by M.C.D., principals, teachers and staff for achieving the set goals of the school.

RESEARCH QUESTIONS

The study was conducted to answer the research questions: 1) How do the head teachers of M.C.D. schools plan and manage, financial, infrastructural, academic (teaching-learning and student evaluation), and human resources?; 2) How do teachers, parents, students and others feel about various management practices of M.C.D. schools?; 3) What is the nature of interpersonal relationship amongst the teachers, the students and other functionaries?; 4) What are the innovations in classroom management in these schools?; and 4) To what extent these schools are

able to establish relationship with the parents and the community?

METHODOLOGY AND TOOLS USED FOR THE STUDY

The investigators used case study method to understand different dimensions of the school management techniques adopted by the M.C.D. school. The research data was collected from diverse sources by the researchers with the help of personal interviews, observation of persons/events and analysis of official documents. The tools used for the study were: Information schedules for collecting data related to school profile, head teacher profile, teachers' profile, interview schedules for head teachers, teachers, students and parents and classroom observation schedule for observing school and classroom activities.

ANALYSIS AND INTERPRETATION OF DATA

MANAGEMENT OF SCHOOL ACTIVITIES

S.D.M.C. Primary Co.Ed. School, Adchini, New Delhi was established in 1949. The school is situated in an urban area with good infrastructural facilities. The area served by the school is Katwaria Sarai, Adhchini, Malwiya Nagar and Saket in South Delhi. National Institute of Education of the NCERT, Shree Aurobindo Asharm Society and the I.I.T. Delhi are adjacent to the school. Children from low-income families are studying in the school. Most of the parents of

the children are *rikshawalas*, security guards, daily labours and such low-income groups. The children of the NCERT and the I.I.T. staffs are also studying in the school.

M.C.D., through the zonal meeting of the head teachers clearly informed/suggested the duties and responsibilities and the goals to be achieved by the schools within the time frame. During the meeting the head teacher discussed about all the works assigned by the M.C.D. and also the problems faced by the school. After the zonal meeting, a staff meeting was convened by the head teacher in every month to give information and to share the decisions of the zonal meeting.

The teachers are given responsibilities and each teacher is made in-charge of one classroom and some other responsibilities like cleanliness, maintaining plants, mid-day-meal etc., is assigned to each teacher.

The school constituted Vidyalaya Kalyan Samiti consisted of a P.T.A. member, a nominated member of the councillor, a member from the resident colony of region and a local government employee, the principal and two teachers, etc. But the *Samiti* did not play much role in the management of the school. The involvement of parents and students were also poor in the management of the school. Thus the head teachers managed the school with the help of the directions from M.C.D. and also with the support of the teachers.

The principal managed the school finance with the help of teachers in an

Table 1
Duties of the Teachers

S. No.	Teachers	Duties Assigned
1	The head teacher	Finance
2	Class V teacher	Students fund, teaching material and laboratory
3	Class IV teacher	Nursery and library in-charge
4	Class II teacher	Mid-day-meal
5	Class I teacher	Payment of bills, admission and supply of uniforms

effective way. The money for various activities of the school was withdrawn from the bank by the principal. Concerned teachers distributed the money to the parents for school uniform, books and other things.

THE CURRICULUM MANAGEMENT

The school followed a single teacher classroom. Teaching-learning process was based on the teaching-notes prepared by the teachers. Mostly the teachers followed lecture method and they did not follow any innovative teaching-learning techniques. Teachers are found using the blackboard effectively during the class works. The teacher asked the students to divide themselves into groups consisting of 4 to 6 students. The students would continue to work in the same groups for the classroom, library and laboratory activities and for outdoor playing, physical education classes and various competitions. Teachers were very punctual but some of the students came late in the class.

The teachers did not follow the time table strictly; activities were conducted according to the interest of the students. The head teacher

was very much concerned about the classroom activities and health of the students. The head teacher made regular visit to the class and even took classes in the absence of the teachers. Teachers gave attention to every child and usually checked their home works, writing skills and other academic aspects.

Teachers maintained a diary which includes lesson plans and other preparatory works. The principal used to check the diary every week and also marked her suggestions on the diary. The Class Vth teacher said that the school possesses a good number of teaching aids, viz., science kits given by the M.C.D. and Mathematics kit supplied by the U.G.C. The S.S.A. also financially supports for purchasing teaching aids. The teachers decided everything related to the class.

The courtyard of the school is used as a playground and the physical activities like running, ball play, etc., are conducted there. The teacher who was under physical education training by the M.C.D. gave physical education classes to the students. There are two libraries in the school. One library is established by two NGOs - *Katha*,

and *Navshrishti*. They constructed a separate room for the library activities. Once in a week, a librarian visits them and issues one book for each child for a period of seven days. The library books are provided by the M.C.D.. Before the purchase of library books, school would send a list of books needed for the school for the consideration of M.C.D.. Most of the time, the school suggested the name of books and M.C.D. tries to purchase it.

There is a computer room with six computers but no specialised computer teacher is appointed to provide computer training. During our school visit, none of the computers was working. Even though the Head Teacher complained about it repeatedly, the M.C.D. authority has not yet taken any action on it.

Unit test are conducted monthly. Overall, three unit tests are conducted. Half-yearly examination is also conducted by the class teacher. The result is shared with the students and their guardians.

The head teacher said *“Guardians are informed about the weak students. For remedial teaching, students are taught separately. Extra time is given to such students. As well as students are taught in group also. Guardians are given suggestions to take care. Children also go for tuition at Aurobindo Aashram. Aurobindo Aashram doesn’t charge any fees for tuition from poor students”*.

The head teacher said *“low performing students are those students whose parents do not pay attention or*

give time to students. Most students come from poor background. Both parents of poor students are working. Some students themselves do not pay interest in studies”.

Teachers’ also suggested that curriculum should be easy and different because the children studying in the M.C.D. schools were from different socio-economic background. According to them, teaching of the three Rs was needed first, instead of teaching international things. They also suggested that the Class I textbook was not appropriate for the M.C.D. students.

HEAD TEACHER’S DREAMS ABOUT THE SCHOOL

The Head Teacher wanted more participation of parents in the school activities and their support in the education of children. Most of the children were absent during the examination. It should be changed. The parents and children were ready to come to school only when there is distribution of money, uniform and other incentives. It was her priority to motivate the children to come to school and wanted to make teaching the most pleasing thing in the school.

TEACHERS’ MISSION AS A TEACHER

The teachers’ mission as a teacher was to make their students good human beings, teach nicely, to persuade their students to excel, give them good support and also inculcate ethical values among the students. They liked to spend time in school. It was a

moment of happiness for them if the children are able to remember things that she taught.

MID DAY MEAL

Mid-day-meal is supplied by an NGO, 'Ekta Shakti Foundation', which provided cooked food to different M.C.D. schools of the city. The utensils for mid-day-meal are brought by children themselves from their home. If any child does not bring, they use the school utensils.

The students said that they got quality food regularly. The Head Teacher tasted the food before it was served. Sweepers served the food for the children and if sweepers were absent, the principal assigned the duty of serving to some senior students. They said that they got sufficient food. The principal informed the authority that if there was any shortage of food, it should be brought to the school within 20 minutes. The students did not like 'chole' and 'halwa'. However, children were satisfied with the mid-day meal programme.

MANAGEMENT OF HUMAN RELATIONSHIP

RELATIONSHIP AMONG TEACHERS

The principal said *"the teachers are very regular and cooperative. Apart from teaching, they are also involved in preparation of time table, conduct of examination and preparation of results, etc"*. The teachers perform responsibilities related to keeping records of funds, maintaining of records, budget from

M.C.D., distributions of scholarship, free uniforms of the students, etc. Whatever assignment is given we have to complete that. She added further *"teachers are satisfied with the work. They are also cooperative and keep good relationship among them. I try to understand and try to sort out their problems. A few teachers are coming from very far off places like Najafgarh. I personally discuss with them their problems. The teachers are punctual. As such there is no problem"*.

RELATIONS WITH STUDENTS

In the M.C.D. schools a single teacher managed one class throughout the year. The whole year the teacher would be attending each and every student in the class. So their relationship was always good and the teacher knew all the problems, strength and weakness of the students. Hence, the teachers were able to plan strategies to solve personal and academic problems of the students. Most of the time, the students shared their personal problems with the teachers.

The Class 1 teacher said *"The relation between teachers and students are very good that the students can share any problem with teachers at any time. The students are not scared of teachers. They usually share their personal problems. The students in the classroom have different cognitive level that the teacher has to pay extra effort to increase the achievement of the students. The teacher conducts group work making them into small groups according to their cognitive level and taught them separately.*

Special home works are given to gifted students and special questions are included in the test for catering the gifted students”.

RELATIONSHIP WITH PARENTS

Parent Teacher Meeting is held frequently in two-three months. However, only a few parents attended the meeting. But at the time to collect money, for example i.e., scholarship or money for uniform, all the parents turn up.

The Class 1 teacher said that most of the parents were uneducated and they thought that there was less work for government school teachers and the involvement of parents in the school activities were meagre. The academic progress of the students reached the parents through report card. After the term examination, the parents would come and discuss about the achievement of the students. The parents were intimated if any problem occurred. She said that she had been working in the school for the last 22 years and that she had never seen the active involvement of parents in the school activities because they consider that it was a government school and that there was no need of parental involvement

EXTERNAL SUPERVISION AND SUPPORT

The Head teacher said “M.C.D. Commissioner, Deputy Commissioner are the officials who may visit for inspection any time. This is very rare but School Inspector visits regularly at least once in a month for supervision”. She expresses that “a School Inspector

comes for supervision once in a month. He is very negative in his approach. Sometimes he uses very foul language also. In his presence, my heartbeat increases. I cannot stand in his presence. Sometimes wrong replies come to my mind, which again irritate him”. The head teacher said “whatever work is left, it gets completed at the time of supervision. Cleanliness is also maintained. Regular supervision is beneficial therefore, it should be regular. However, if any fault is found during supervision, principal should not be held”

The Class V teacher opines “monthly meeting of all the M.C.D. authority, committees like Vidyalaya Kalyan Samiti and PTA and the staff of the school is necessary for the better functioning of the school”. The teachers and others are informed about the feedback given by the supervisors and inspectors. The teachers informed that the school is getting good support from SSA.

DISTURBING THINGS IN THE SCHOOL

Frequent government requirements like the list of the students belonging to SC/ST/OBC category, results of the students and visiting different places for other official purposes are disturbing elements while engaged in classroom teaching. Teachers also found that road-crossing was a major problem for the students and suggest that a security be posted to help children to cross the road. They said that administrative work and absence of sweeper are the most distributing things in the school. The teachers

had to do a lot of administrative work which prevented them from teaching more than half an hour continuously. The age group of the students was also different in the same class that we could see five year old and nine year old students in the same class. So, it is very difficult to handle the different age group in the same class. They expressed that it was very difficult to follow the period system.

DROPOUT

As for students, the elder child had to look after the younger siblings and they also had to do household works. Boys usually went for work to look after the family. Migration of the parents to the village also causes dropout.

STUDENTS' OPINION ABOUT THE SCHOOL

The students said that they liked to study, especially Hindi and English. They also liked to play in the school. The students expressed that since there was only one teacher teaching them throughout the day in the same class, she used to become tired. They were satisfied with the school. They thought that the experience they get from the school would help them to achieve their aims in life.

PARENTS' OPINION ABOUT THE SCHOOL

Parents opined that their children school infrastructure, atmosphere, classrooms, playground, teachers,

school friends, and the mid-day-meal. The parents said that their children are happy go to school every day. They like the teachers for their caring nature: the teachers ask children about work done at home, about the breakfasts they have, whether parents help them or not in their studies, how long they sit for study at home, and so on. One of the mothers pointed out that her child did not like the teaching methods used by the teachers in the classroom. One parent said, "The teachers usually write some matter on the blackboard and ask students to copy it without explaining. They do not even explain the word meanings or the crux of the texts, etc". They want the teachers to teach using various teaching methods and provide good atmosphere in the class. Parents want some improvements in the school like the renovation of the playground to be covered with grass beds to save children from getting injured, planting trees in the school premise, removal of garbage from the school campus, appointment of a specialised physical education teacher, and improving teaching styles and methods. Parents felt the need of some additional academic support for their children in subjects such as Mathematics, English and Hindi.

CONCLUSIONS AND SUGGESTIONS

It is evident from the above discussion that the children from poor income families are studying in the M.C.D. school. Seasonal dropout was the main problem faced by the school because

of the shifting of their family from one place to another for getting job. The Head Teacher played the key role in the management of the school. All the activities related to the management of the school were discussed in the zonal meeting conducted by M.C.D.. After the zonal meeting, a staff meeting was convened by the head teacher in every month to give information and to share the decisions of the zonal meeting.

Parent Teacher Meetings were held frequently. However, the attendance was very poor. Achievements of the students, disbursement of uniform, cleanliness of the students, and special problems like stealing, and quarrels among students, etc., were discussed in the meetings. There was no active involvement of parents in the school activities because they considered that it was a government school and there was no need of parental involvement.

The infrastructural facilities in the classrooms were good. The head teacher was very active and concerned about the classroom activities and health of the students. Most of the students who were enrolled in Class I did not have proper pre-school education and they faced problems in reading and writing. The head teacher and teachers opined that Hindi and English textbooks of Classes I to V was of high standard.

Teachers maintained a diary which included lesson plans and other preparatory works. The principal used to check the diary every week and also marked her suggestions on it. Parents were informed about the

poor performance of their children. Most of the low performing students were those students whose parents did not give time to their children. The teachers did not follow the time table strictly; activities were conducted according to the interest of the students. Physical education was one of the most neglected parts of the curriculum.

Library activities were good in the school and there was a separate room for the library. Maintaining of computers was another neglected part. The teachers also pointed out other disturbing things in the school like, various queries from the government, crossing the Adhchini road by children to enter the school, administrative work which prevented them from teaching more than half-an-hour continuously, difficulties in handling children of different age-group in the same class, chances for child trafficking since the school is situated near to the main road, etc.

Mid-day-meal is supplied by an NGO, "Ekta Shakti Foundation" and everybody was satisfied with the distribution of the meal. The teachers performed responsibilities related to keeping records of funds, maintaining of records of distributions of scholarship, free uniform of the students, etc. The students and parents had very limited role in the management of the school.

The school was evaluated systematically by the M.C.D. Commissioner, Deputy Commissioner and the school inspector. The school

inspector visited the school at least once in a month for supervision. The teachers tried to complete the pending works before the supervision. The school did not have much relation with the community. The Vidyalaya Kalyan Samiti did not play much role in the school. The school followed participatory management system. The teachers helped the principal in the management of the school and completion of the works like mid-day-meal programme, preparation of chart paper, paying bills, admission, etc.

The principal always encouraged teachers and gave suggestions to the teachers for the accomplishment of various duties assigned. A single teacher managed one class throughout the year so that the teacher-pupil relationship was always good and the teachers knew all the problems, strength and weakness of the students. Hence, they were able to plan strategies to solve personal and academic problems of the students. Most of the time, the students shared their personal problems with the teachers.

The teachers showed dissatisfaction in the overall management of the school. They said that a combined effort by the M.C.D. authority, committees like Vidyalaya Kalyan Samiti, the PTA and the staff of the school was missing in the school. The principal is overburdened with different kinds of work including the classroom teaching. There was an atmosphere of freedom in the day-to-day management of the school. Teachers had enough freedom

and the principal never interfered unnecessarily. The principal was always ready to accept the new ideas suggested by the teachers. Parents felt that additional academic support was necessary for their children in the subjects such as Mathematics, English and Hindi.

Based on the major findings of the study, it is felt that there is a need to chalk out strategies to involve parents, members of Vidyalaya Kalyan Samiti and local community members in the management and other activities of the school. It is better to conduct awareness campaign for the illiterate parents regarding the importance of education and also importance of parental involvement in the education of their children. The teachers need specific inputs and training for dealing with lateral entry students. It is also evident that most of the time the teachers used lecture method. Hence it is necessary to train teachers to enrich them with the innovative methods of teaching-learning process and also the use of teaching aids. Also, it should be ensured that these strategies are implemented in the classrooms through effective feedback mechanism. They may also provide adequate training to teachers for equipping them with skills required for handling computer and enhancing the use of educational technology in the schools.

For better functioning of the school, it is better to appoint supporting staff to address the issue of extra clerical and administrative duties of

the head teachers and the teachers, make a centralised system for the maintenance of computers, carpentry and plumbing works, etc., in the schools, and also to identify the disturbing things in a particular school and chalk out specific strategies to deal with it.

REFERENCES

- AGARWAL, R. AND M. GOSWAMI. 2005. A study of institutional academic performance of principals. *Journal of All India Association for Educational Research*. 17(3-4), 23-25.
- DEGRAUWE, A. 2000. Improving school management: A promise and a challenge. *International Institute for Educational Planning Newsletter*. 18, 1-3.
- GRISSOM, JASON A. AND LOEB, SUSANNA. 2011. Triangulating principal effectiveness: How perspectives of parents, teachers and assistant principals identify the central importance of managerial skills. *American Educational Research Journal*. 48 (5), 1091-1124.
- GOVINDA, R. 2002. Role of head teachers in school management in India: Case studies from six states. NIEPA. New Delhi.
- KALRA, ALKA. 1997. Efficient school management and principals. A.P.H. Publishing Corporation, New Delhi.
- KHAPARDE, M.S., SRIVASTAVA, A.K. AND R. MEGANATHAN. 2004. Successful school management in India: Case studies of Navodaya Vidyalayas. *Educational research for Policy and Practice*, 3, 243-265.
- MOHANTY, SUNIL BEHARI. 2010. *Journal of All India Association for Educational Research*. 22 (1), 1-6.
- TALBERT, DALE A. 2009. A secondary analysis of the impact of school management practices on school performance. (ERIC Document Reproduction Service, ED530459).
- VASHISHITHA. 2010. Better management of schools: Role of head teachers, *Edwision*, 1(2), 1-6.
- WELLISCH, JEAN B., MACQUEEN, H. ANNE, CARRIERE, A. RONALD AND DUCK, A. GARY. 1978. School management and organisation in successful schools. *Sociology of Education*. 51, (July). 211-226. Jstor org.
- YOLCU, HUSEYIN. 2011. Decentralisation of education and strengthening the participation of parents in school administration in Turkey: What has changed? *Educational Sciences: Theory and Practice*. (ERIC Document Reproduction Service, EJ936308)

Pt. Madan Mohan Malviya

Vanclana Mishra*

Knowledge of Sanskrit classics, wide acquaintance with English history and literature, deep study of the condition of the masses and researches in current finance and commerce, all helped to adorn his discourses. The Pandit's interests are nation-wide and are not confined to politics or education. Every good public cause has his sympathy and support.

— Bharat Ratna Dr M. Visweswaraya

Abstract

Born in Allahabad, in 1861, emerged a spark, was a man who challenged the mightiest empire in the world with an extreme force of his moral strength and the power of his rhetoric and eloquence. He stood to protect his country's spiritual and intellectual heritage that would lift his country out of the darkness and lead it to the era of self-respect and modernity. He was a man with elevated ideals and supreme human values. He can be honestly marked as one of the brightest stars ever to shine in this universe. He loved his country with a fiery passion and served its people with great and selfless devotion. He wanted to inculcate a feeling of brotherhood and goodwill in every individual. In his lifetime, he had great achievements. He played multiple roles all over his lifetime like as an educationist,



* JPF, Department of Elementary Education, NCERT, New Delhi

spiritual leader, politician, social reformer, patriot, legislator and a great human being. He was the founder of the Banaras Hindu University. On his 153rd birth anniversary, this great educationist and freedom fighter, was chosen for the Bharat Ratna award, the country's highest civilian honour this year.

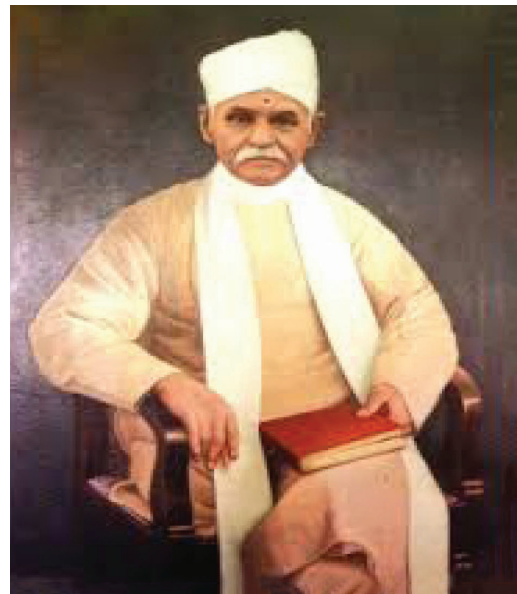
This paper is a tribute to the great soul with a focus on some of his contributions. This paper includes significant parts of his life, works and education that prove him as a great educationist and one of the great men of the century.

INTRODUCTION

Madan Mohan Malaviya was born in Allahabad on December 25, 1861. He was a great educationist, pioneer, an eloquent rhetorician, a national leader. He was elected four times as the President of Congress. He was a great social reformer, a religious leader of secular order who always worked without greed, a model of nobility, and above all a substantial nationalist. His ancestors were poor but had a social status. His education began at the age of five when he was sent to a *pathshala*. He was a diligent boy, who completed his graduation from the Calcutta University in 1884. He was appointed as a teacher where he was very popular among his students. In the meeting of second Congress session, he delivered a speech which made the audience speechless and spell-bound. He took part in numerous activities like the freedom struggle movements, promotion of industries, the economic and social development of the country, education, religion, social service, development of Hindi language and many other issues of national importance throughout his life. He was given with the title of *Mahamana* by Gandhiji.

MULTIFACETED PERSONALITY

He had a great desire to devote himself for the service of the nation. He also attained the degree of Law in 1891 and became an advocate in the High court. His great enthusiasm always impressed people to whomsoever he spoke in the Congress sessions. He was elected as the President of the



Congress committee in 1909, 1918, 1932 and 1933. He tried his best to popularise the national cause for the sake of the country. He was a strong

supporter of the Congress, although he founded the *Hindu Mahasabha* in 1906. According to its supporters, it was established to oppose the “divide and rule” policy of the British Government. As a journalist, he started a Hindi weekly, *Abhyudaya* in 1907 and made it a daily in 1915 and also Hindi monthly, *Maryada* in 1910. He started an English daily- *Leader* in 1909. Malaviya was the editor of Hindi weekly, the *Hindustan* and *Indian Union*.

He was also the Chairman of the Board of Directors of the *Hindustan Times* for many years. He participated in many debates with the aspiration on so many important issues like the prohibition of recruitment of Indian labour to the British provinces, nationalisation of railways, etc. He also worked for the industrial development of the country.

MALAVIYAJI’S VISION FOR EDUCATION

Malaviyajji was a great educationist and worked immensively for free and compulsory primary education. The Banaras Hindu University is the best example of his keen interest that he took to provide education to all. He visioned that by this university and its education would stand as a solid basis of primary and secondary education. He had a great and dynamic vision for spreading education amongst the masses.

The concept of globlisation from the vision of Madan Mohan Malaviya could be seen in the following version



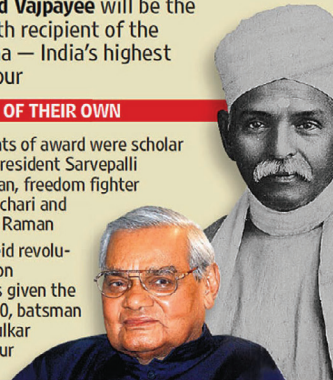
Instituted in 1954, the award is conferred “in recognition of exceptional service/performance of the highest order”

INDIA’S PRIDE

Malaviya and Vajpayee will be the 44th and 45th recipient of the Bharat Ratna — India’s highest civilian honour

IN A LEAGUE OF THEIR OWN

- First recipients of award were scholar and former president Sarvepalli Radhakrishnan, freedom fighter C Rajagopalachari and scientist C V Raman
- Anti-apartheid revolutionary Nelson Mandela was given the award in 1990, batsman Sachin Tendulkar got the honour in 2013



“And the creator and benefactor of the world, the universal soul moving in all, brought together his all children of the east and the west, and induced their mind to that unanimity which meanest good and right understanding directed them to raise this home of universal learning in the capital town of the lord of universe”.

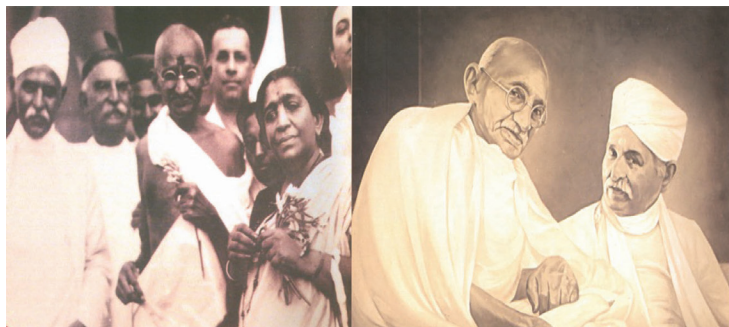
(Printed in copper plate, 1916, BHU)

Malaviya’s prayer was—

“May Saraswati , inearned in the shurti-heart of wisdom , ever bloom and shine with worship from her humane children, may they ever assiduously imbibe the vital milk of knowledge flowing from her sweet breast of science and philosophy: may all hearts turns to act as good alone: may all hearts be filled with love of supreme.”

(Printed in copper plate, 1916, BHU)

He had a vision for reshaping the education system in all spheres. He laid the foundation for the emergence of India as an educational power. He



firmly believed that “Education was the best solution for the welfare of the people”.

It is the only tool that would be helpful to solve all the problems of people such as communal bitterness, ignorance and discrimination. He admitted that education in India was imparted to certain sections of society and knowledge was the most important instrument for the development of nation. The people lacked resources for attaining education. Malaviyaji’s educational philosophy did not have any boundary of geographical limitations and therefore, believed in the philosophy of “Vasudhaiva Kutumbakam”.

He was persistent to combine religion with education to bring India to its past glory. He wanted to develop the national spirit among each and every individual. He claimed that the weaker sections of the society did not get education because of lack of awareness. There were so many misinterpretations of religion that did not allow children to study in the same school. He had a hope that if the people had knowledge about vedic scriptures and ancient books, they

would be able to come out of these issues of untouchability and discrimination on the bases of religion. He stressed a lot on the education of girl child with that of boy child.

He wanted that people should understand the value

of education as the roots of progress. He claimed that primary education must be made compulsory as it was in other foreign countries, then only the masses would understand the value of education. He propounded that education must not only be based on books, but should be for allround development.

Pandit Malaviya further addressed the question of untouchability in the light of education: ‘There will not be a Hindu of the orthodox type who will not sit with a member of the depressed classes as a brother and a fellow-citizen if he has been educated’.

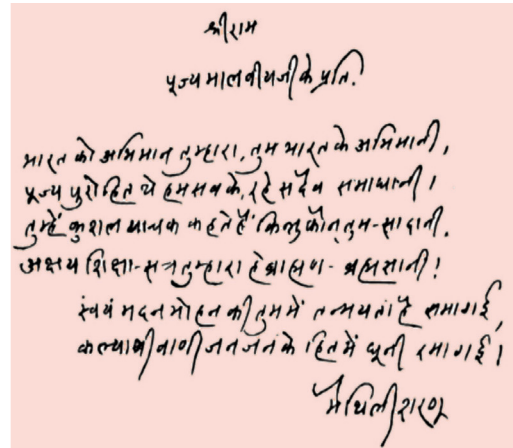
(The honourable Pt. Madan Mohan Malaviya, his life and speeches)

He wanted to spread education that would help students in living a good life. If maximum numbers of people were educated then development would take place along several axes rather than in only one. Mahamana argued that education limited to men would limit the goals of education, but if the same was given to women, a significant change could rather be attained. He marked that the things taught by a mother is many more

times effective than that of the father. Therefore, women should be at least educated to the extent that they can teach their children basic teachings of life. Mother's can inculcate all the basic ideas of religion and society to make them a better human being. He said that women should be imparted education as they were preparing the future nation makers.

**FEW LINES BY NATIONAL POET
LATE MAITHILI SHARAN GUPTA FOR
MALAVIYAJI**

Malaviya's multitudinous services to the nation were substantial and pronounced, but he himself was an extraordinary personality than what he



could achieve. There is a need for the maintenance of his vision in modern perspective and outlook, following his footprints, in order to bring a drastic change in the development of our nation.

REFERENCES

BAKSHI S.R.1991. Madan Mohan Malaviya—the Man and his ideology. pp. 245. Anmol publication. New Delhi.
CHATURVEDI. SITA RAM.1980. Adhunik Bharat Ke Nirmata, Pandit Madan Mohan Malaviya. Information and Publication Divisions. Ministry of Education. G.O. New Delhi
JOSHI. S. S. 1961. Mahamana Malaviyaji Birth Centenary. All India Malaviya Centenary Celebration Committee, B.H.U., Varanasi.
PARMANAND.1985. Mahamana Madan Mohan Malaviya. Vol. 2, pp. 457. Malaviya Adhyayan Sansthan, B.H.U.
TIWARI. U.D. 2007. A short Biography of Mahamana Pandit Madan Mohan Malaviya, pp. 53. Published by Mahamana Malaviya foundation. Varanasi.

Internet Sources

www.currentscience.ac.in/vilumes/101/08/1091.pdf
www.malaviyamission.org/.../Champion-of-Development-Detail.php?id=3
[http://shodhganga.inflibnet.ac.in/bitstream/10603/17636/13/13_chapter per cent205.pdf](http://shodhganga.inflibnet.ac.in/bitstream/10603/17636/13/13_chapter%20per%20cent205.pdf)

Swachh Bharat Swachh Vidyalaya

The poster features a large, central photograph of a young girl with braided hair, wearing a blue school uniform, smiling. To her right, there are four smaller inset photographs showing school children engaged in various activities: one shows a school building with a green wall and a gate; another shows children in uniforms participating in a tree-planting activity; a third shows children sitting at a table, possibly in a classroom or workshop; and the fourth shows a girl in a school uniform working at a table, possibly related to the Swachh Bharat Mission.

Swachh Bharat
Swachh Vidyalaya

Emblems at the bottom include:
1. The State Emblem of India.
2. The logo of the Ministry of Education, Government of India, with the motto 'सर्वे पठन्ते, सर्वे पाठन्ते' (Sarve Pathante, Sarve Padhante).
3. The logo for 'RIGHT TO EDUCATION' and 'SARVA SHIKSHA ABHIYAN' (Education for All).
4. The logo for 'सर्वशिक्षा अभियान' (Sarva Shiksha Abhiyan) with the motto 'सर्वशिक्षा सर्वशिक्षा' (Sarva Shiksha Sarva Shiksha).

WATER, SANITATION AND HYGIENE IN SCHOOLS

Swachh Bharat: Swachh Vidyalaya is the national campaign driving 'Clean India: Clean Schools'. A key feature of the campaign is to ensure that every school in India has a set of functioning and well maintained water, sanitation and hygiene facilities. Water, sanitation and hygiene in schools refers to a combination of technical and human development components that are necessary to produce a healthy school environment and to develop or support appropriate health and hygiene behaviours. The technical components include drinking water, handwashing, toilet and soap facilities in the school compound for use by children and teachers. The human development components are the activities that promote conditions within the school and the practices of children that help to prevent water, hygiene and sanitation related diseases.

School sanitation and hygiene depend on a process of capacity enhancement of teachers, community members, SMCs, Non-Governmental Organisations (NGOs) and Community Based Organisations (CBOs) and education administrators. Water, sanitation and hygiene in school aims to make a visible impact on the health and hygiene of children through improvement in their health and hygiene practices, and those of their families and the communities. It also aims to improve the curriculum and teaching methods while promoting hygiene practices and community

ownership of water and sanitation facilities within schools. It improves children's health, school enrolment, attendance and retention and paves the way for new generation of healthy children. It is the role of policy-makers, government representatives, citizens and parents to make sure that every child attends a school that has access to safe drinking water, proper sanitation and hygiene facilities. This is every child's right.

The benefits of water sanitation and hygiene to school children

- The provision of water, sanitation and hygiene facilities in school secures a healthy school environment and protects children from illness and exclusion. It is a first step towards a healthy physical learning environment, benefiting both learning and health. Children who are healthy and well-nourished can fully participate in school and get the most from the education. Hygiene education in schools help promote those practices that would prevent water and sanitation related diseases as well as encourage healthy behaviour in future generations of adults.
- Girls are particularly vulnerable to dropping out of school, partly because many are reluctant to continue their education when toilets and washing facilities are not private, not safe or simply not available. When schools have appropriate, gender-separated facilities, an obstacle to attendance

- is removed. Thus having gender segregated toilets in schools particularly matters for girls. Gender norms and physiology make privacy more important for girls than boys, and biological realities mean that girls need adequate sanitary facilities at school to manage menstruation. Basic facilities that provide for good hygiene and privacy, along with sensitive health promotion assist girls to stay in school and complete their education.
- Hygiene in school also supports school nutrition. The simple act of washing hands with soap before eating the school mid-day-meal assists to break disease transmission routes. Children get the nutritional benefits intended, rather than ingesting bacteria, germs and viruses. Studies show that when hand washing becomes part of a child's daily routine, the benefits to health are evident and the practice does not easily fade.* School is therefore an ideal setting for teaching good hygiene behaviours that children can also carry home.

SOME FACTS ABOUT WATER, SANITATION AND HYGIENE IN SCHOOLS

Research shows that the presence of water, sanitation and hygiene in schools results in a number of benefits

for children, especially girls and also their teachers.

- An overall increase in enrolment by 12 per cent in primary schools (Grades 1-5) and 8 per cent in upper-primary schools (Grades 6-8), leading to lower dropout rates,
- Increased female enrolment with younger girls and boys experiencing larger benefits than older children,
- Increased retention of female teachers, and
- More students presenting for exams with higher pass rates.**

WATER, SANITATION AND HYGIENE: FEW GLOBAL EVIDENCES

- A study undertaken in Bangladesh revealed an 11 per cent increase in girls' enrolment mainly due to the provision of sanitary latrines (I.R.C., 2007).
- A water, sanitation and hygiene in schools evaluation in Kenya indicated that girls were absent less in schools where there was more hand washing and a very high toilet use. The association suggests that in one way or another, the successful implementation of the Water, Sanitation and Hygiene Package in a school can significantly reduce girls' absenteeism, a substantial and highly desirable impact from the project (I.R.C., 2009a).
When water, sanitation and hygiene

* Valerie A. Curtis, Lisa O. Danquah, and Robert V. Aunger (2009). Planned, motivated and habitual hygiene behaviour: an eleven country review. *Health Educ. Res.* 24: 655-67

** In Alwar District, India, school sanitation increased girl's enrolment by one-third, and improved academic performance for boys and girls by 25 per cent (UN *Water*, 2008).

are missing from a girl's school experience, studies indicate that:

- Up to 12 per cent of the school year missed by girls is during their menstruation (WHO, 2009).
- In Uganda, 1 in 3 girls missed all or part of a school day during their menstrual cycle (Kirk and Sommer, 2006).

BENEFITS OF HAND WASHING

- Hand washing at critical times—including before eating or preparing food and after using the toilet - can reduce diarrhoea rates by almost 40 per cent (3IE, 2009).
- Hand washing in institutions such as primary schools and daycare centres reduce the incidence of diarrhoea by an average of 30 per cent (Cochrane, 2008).
- Hand washing promotion in schools can play a role in reducing absenteeism among primary school children. In China, promotion and distribution of soap in primary schools resulted in 54 per cent fewer days of absence among students compared to schools without such an intervention (Bowen *et al.*, 2007).

KEY COMMITMENTS FOR SWACHH VIDYALAYA

India's strong commitment to providing schools with adequate water, sanitation and hygiene facilities is supported by legislation and is championed by the Honourable Prime Minister and supported by the Right to Education Act (2009) which

necessitates ensuring drinking water and sanitation facilities in schools. The national flagship programmes, *Sarva Shiksha Abhiyan* (SSA) and the *Nirmal Gram Puraskar* also support this requirement. The Ministry of Drinking Water and Sanitation (MDWS) national sanitation guidelines provide for additional sanitation facilities in schools, including incinerators for menstrual hygiene management through the NGP incentive. Following are the key policy initiatives by Government of India.

Constitution

- Article 21-A “free and compulsory education of all children in the age group of six to fourteen years as a Fundamental Right”.

Legislation

- Right of Children to Free and Compulsory Education (RTE) Act, 2009.
- The RTE Act, 2009 provides a legally enforceable rights framework with certain time targets that Governments must adhere to. The Schedule to the RTE Act lays down the norms and standards (including drinking water and sanitation) for a school building. A school building has to be an all-weather building comprising at least one classroom for every teacher, barrier free access, separate toilets for boys and girls, safe and adequate drinking water facility for all children.
- Supreme Court directive to all states to prioritise school toilets and drinking water.

Policies and programmes

- *Sarva Shiksha Abhiyan* (SSA), is Government of India's flagship programme for achievement of Universalisation of Elementary Education (UEE) in a time-bound manner. Water, sanitation and hygiene infrastructure facilities are provided in all new schools.
- The mid-day-meal programme is a nutrition programme which reaches almost 10 crore children daily, in 12 lakh schools. Group hand washing with soap before mid-day-meal is promoted across the country in order to enhance the nutritional outcomes.
- *Rashtriya Madhyamik Shiksha Abhiyan* (RMSA) launched by Ministry of Human Resource Development,
- March, 2009, to enhance access to secondary education and to improve its quality. Besides it also lays emphasis on secondary schools to conform to prescribed norms of providing access to quality physical infrastructure like good classrooms, quality toilet infrastructure and drinking water provisions, and norms of removing gender, socio-economic and disability barriers.
- *Kasturba Gandhi Balika Vidyalaya* (KGBV) aims at ensuring access and quality education to girls from disadvantaged groups belonging to SC and ST population, by setting up residential schools at upper primary level. Infrastructure support to these centres includes safe drinking water and toilet facilities as per the prevailing SOR rates.

STATUS OF HYGIENE IN SCHOOLS

Findings of an assessment conducted in 540 schools in nine states in India on Mid Day Meal (MDM) Programme reveal that:

- Only (51 per cent) of the schools have a designated hand washing space and in 44 per cent of the schools observed, the hand washing space was being used.
- Only close to one in ten (12 per cent) of schools had soap/detergent available at the hand washing space.
- Nearly half (49 per cent) of the students washed their hands using only water. Only two out of five (42 per cent) students use soap/detergent. (*Source: Hygiene Practices in Schools during mid-day-meals, UNICEF-India Study, 2009*).
- Survey conducted in 392 schools in seven states in India reveal that nearly one-third (32 per cent) of the children wash hands with soap before eating. (*Source: PAHELI Survey by Pratham under United Joint Programme on Convergence (UNJPC, 2012)*).
- Girls must be taught menstrual hygiene management by female teachers in a sensitive and supportive manner and also take steps to encourage and support girls during menstruation so they do not miss school. This involves menstrual hygiene education sessions at school, along with steps to ensure that girls have a private place to wash and change their clothes. Existing facilities

will be used in some cases; in other situations, a new facility will need to be constructed. Other steps that can be taken to support girls include stockpiling extra sanitary pads and clothes (such as school uniforms) for emergencies, along with enhanced training programmes for teachers.

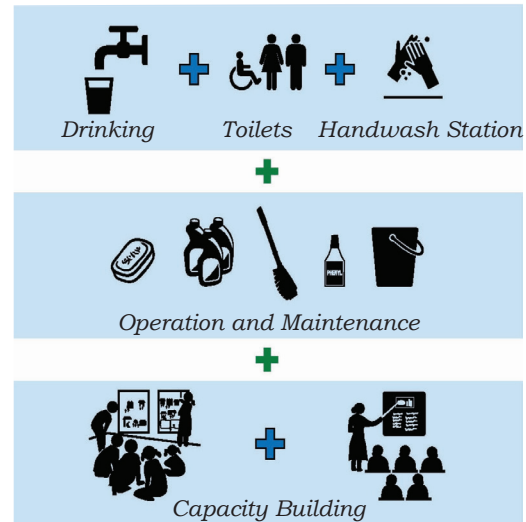
ENHANCED CAPACITIES

- It is essential that capacities are improved at various levels within the sector, to develop the right mix of skills, knowledge and experience to facilitate, finance, manage and monitor water, sanitation and hygiene programmes in schools effectively. For example, teachers and SMCs need to understand ways of ensuring equitable use and maintenance of facilities, making sure hygiene is adequately promoted and that monitoring of these elements take place regularly at the school level. Furthermore, new learnings need to be infused in the sector, along with newer ways of programming and implementing a water, sanitation and hygiene programme in schools.

SWACHH VIDYALAYA – THE ESSENTIAL ELEMENTS

Every school in the country must have a set of essential interventions that relate to both technical and human development aspects of a good Water, Sanitation and Hygiene Programme. Following is a set of these essential elements:

A Minimum Swachh Vidyalaya Package



Sanitation

- Separate toilets for boys and girls, with one unit generally having one toilet (WC) plus 3 urinals. The ratio to be maintained is preferably one unit for every 40 students.
- Menstrual hygiene management facilities including soap, adequate and private space for changing, adequate water for cloth washing and disposal facilities for menstrual waste, including an incinerator and dust bins.

Daily hand washing with soap before mid-day-meal

- Sufficient group hand washing facilities allowing groups of 10-12 students to wash hands at the same time. The hand washing station should be simple, scalable and sustainable, relying on usage



of minimum water. These hand washing facilities can be developed using local materials.

- Group hand-washing with soap sessions are conducted before the mid-day-meals are served, and are supervised by teachers, who emphasise good hand washing techniques. The hand washing sessions are used as an opportunity for delivering hygiene messages,

especially the message that hands should be washed at two critical times: before eating and after using the toilet. The sessions can also be used to deliver messages on sanitation and drinking water safety. Adequate time allocation (preferably 10-12 minutes) before the mid-day-meal time, to ensure that every child and teacher can wash hands with soap, conveniently.



Drinking water

- Daily provision of child-friendly and sustainable safe drinking water and adequate water for hand washing. In addition water for school cleaning and also food preparation and cooking. Safe handling and storage of drinking water should be practised throughout the school.

Operation and maintenance (O and M)

- All water, sanitation and hand-washing facilities need to be clean, functional and well maintained to ensure that the intended results are achieved and capital investments made in installing these systems are not lost. Annual Maintenance

Contracts can be issued, which will include regular maintenance of facilities, regular supply of cleaning materials, consumables like soap, disinfectants, brooms, brushes, buckets etc. The AMC may include identification of repair tasks and arrangement for repair facilities. Alternatively some local arrangements can be made, which can include appointment of local sweepers/cleaners, appointed by the school/district, who are provided with a regular supply of consumables.

- Regular/daily inspection of water and sanitation facilities by an appropriate group of persons as appointed by the SMC.

Behaviour change activities

- Water, sanitation and hygiene behaviour change communication activities should be part of the daily routine of all children. Hygiene messages may be integrated into the textbook curriculum or may be imparted through supplementary reading materials, activity-based learning methodologies or even during the morning assembly sessions.

BEHAVIOUR CHANGE FOR WATER, SANITATION AND HYGIENE: ENSURING SUSTAINABILITY OF INTERVENTIONS

Effective behaviour change is vital to the success and sustainability of all water, sanitation and hygiene interventions. Specific to the school setting, behaviour change must include improvements in hand washing practices, better maintenance and use of toilet facilities

and the use of safe drinking water, and improved menstrual hygiene amongst adolescent girls.

Behaviour change is often reflected under the term 'hygiene promotion', and the focus of many hygiene promotion strategies is improving knowledge on issues related to sanitation and hygiene practices. The rapid educational and cognitive development of school-aged children can require multiple behaviour change approaches within a single school. Also, the fact that children are an essential link between the school and home environments, presents unique opportunities for school-based behaviour change programmes. Children have the potential to bring health education messages and practices to the home environment, expanding the potential impact of schoolbased interventions to parents, communities and non-school-going children. Schools are a natural learning environment, making school children potentially more receptive to behaviour change and behaviour change education. It is theorised that many personal hygiene practices are largely learned and acquired during childhood, suggesting that changes among school children can lead to a lifetime of improved practices.

Another important factor is implementing hygiene education that promotes life skills.

Main Components of School-based Behaviour Change

Changing hygiene behaviour is not easy, and often, too much emphasis is given to promoting knowledge, without

that knowledge being translated into appropriate skills and attitudes towards hygiene. Life skills-based hygiene education focuses on all three aspects: knowledge, skills and attitudes. Child-to-child approaches are often a fundamental component of behaviour change strategies in schools. Child-to-child strategies involves leveraging peer pressure and norms to encourage behaviour change. Unlike the traditional behaviour change approach that relied on providing knowledge and building information, life skills-based hygiene education helps children develop and practice proper hygiene. Life skills-based learning is accomplished through interactive sessions that promote sharing between students and encourage group behaviours.

Daily supervised hand washing with soap before mid-day-meals session is a concrete example of a life skill-based behaviour change approach, where all students as a group wash their hands with soap at least once a day, before meals. This group activity in school is designed to reinforce the habit of good hygiene behaviour, and uses the positive power of social norms and peer encouragement to strengthen healthy actions. Behaviour change around toilet use is also centred on group activities on a daily basis, where the focus is on keeping existing toilets clean through a daily routine of maintenance.

A curriculum for behaviour change is also a considered option and has proven to be very useful. Many states

in India have incorporated behaviour change components of water, sanitation and hygiene into school textbooks and as supplementary reading materials. These are regularly taught in schools as a part of the academic sessions, and during special classes of the week. In addition, one of the most effective channels of disseminating hygiene messages is during morning assembly. Prayer time is often used by schools to check cleanliness amongst students, spread the message of hygiene through songs and skits etc.

OPERATION AND MAINTENANCE: DAILY, WEEKLY, FORTNIGHTLY, MONTHLY, SEASONAL AND YEARLY MAINTENANCE

School Maintenance Schedule

Some members of the SMC as well as school teachers will have to take responsibility for maintaining the school Operation and Maintenance (OandM) schedule. A schedule of periodic visits will have to be planned for the District/ BRC/CRC staff to check if the maintenance schedule is being followed in right earnest. For this purpose, will designate a supervisor (at the suitable level) to visit centres and make adequate observations for appropriate follow-up actions. A general checklist of maintenance schedule is as follows:

Daily maintenance

- General cleaning of indoor floors of the entire school complex including toilet and kitchen.

- Cleaning of any water-logging in the entire school premises.
- Dusting of general storage, desks and benches and toy/book storage for children.

Weekly maintenance

- Check for all leaky taps, valves, flushing cisterns etc.
- Check for any blockage in the drains, sewage pipes and waste water pipes.
- Check for loose locks and shutters of all the doors, windows and almirah etc.
- Loosening of fine sand with a shovel wherever required.

Fortnightly maintenance

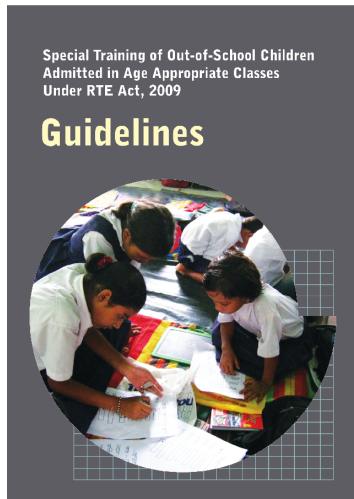
- Cleaning of dust from all appliances and walls etc.
- Remove dumped rubble/debris/building waste from the premises.
- Observe any water logging in open areas.
- Check for clogged drains on the ground, courtyard and water outlets from courtyards.

- Remove stains and marks on the enamel painted portions of the walls (especially corners and edges) door, window, almirah shutters with damp cloth/mild detergent dampened cloth.

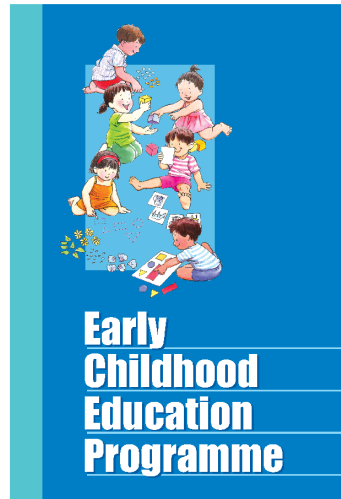
Monthly maintenance

- Check for any damp marks on the walls, ceilings and floor.
- Check for any termites in the building.
- Check for proper hardware operation of all doors, windows and almirahs.
- Check for any cracks on walls and roofs.
- Check if main water storage tank cover and outlets are leaking and the stored water is clean.
- Check if all the manhole covers/inspection chamber covers are properly in place and not damaged.
- Check if the First Aid kit is up-to-date and the medicines are within their expiry date. Replenish as per need.

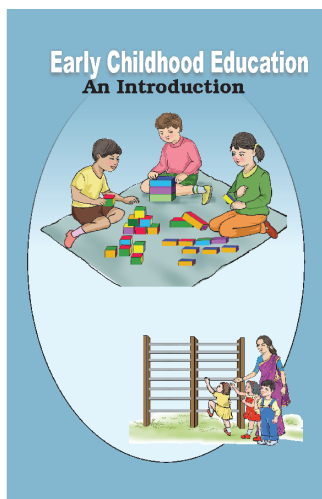
Some other NCERT Publications



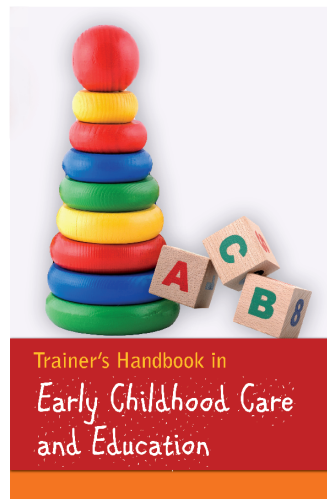
₹ 47.00/pp 54



₹ 195.00/pp 300



₹ 25.00/pp 38



₹ 110.00/pp 224

For further enquiries, please visit www.ncert.nic.in or contact the Business Managers at the addresses of the regional centres given on the copyright page.

TO THE CONTRIBUTORS

The Primary Teacher invites you to write articles, field notes and reports that impact elementary education. The focus may be on issues and concerns that you are sensitive to, which you feel should be shared with other teachers working at the grassroots levels.

- Each article should be about 1500 to 3000 words.
- Each article should have a short abstract in about 150 words.
- Use simple and non-technical language in keeping the clientele in mind, which is the primary teacher.
- The articles should have a friendly and communicative tone.
- The articles must be sent in two copies of the piece along with the soft copy (CD/e-mail).
- The photographs and illustrations should be sent in JPEG format having a resolution of at least 300 dpi.

The papers may be sent to:

Academic Editor
The Primary Teacher
G. B. Pant Building, NCERT
Sri Aurobindo Marg
New Delhi – 110016
e-mail: primaryteacher.ncert@gmail.com

MY PAGE...

This column would contain your letters and feedback where you can put forward your responses, suggestions and expectations from the articles, papers and columns presented in *The Primary Teacher*. You may have issues, concerns and doubts related to teaching-learning processes, classroom practices, syllabus, textbooks, evaluation patterns, research pursuits, etc. These could also reflect the concerns of many others working in this area. Please feel free to raise these issues in this column. You could also ask specific questions that would have baffled you.

Regd. No. 28935/76



विद्यया ऽ मृतमश्नुते



एन सी ई आर टी
NCERT

राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्
NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING