The Primary Teacher is a quarterly journal, brought out by the National Council of Educational Research and Training (NCERT), New Delhi. The journal intends to give practising teachers and concerned administrators authentic information about the educational policies being decided on and pursued at the central level. It also provides a forum for the discussion of contemporary issues in the field of education. The major features of The Primary Teacher are:

- Educational policies concerning Primary Education
- Questions and Answers
- States Round-up
- Illustrated material for classroom use.

A copy of this issue costs ₹65.00. Annual subscription is ₹260.00

Contribution: Articles and papers written by the school teachers in English are welcome. Each published article would be paid for. Two typed copies of the articles along with soft copies on a floppy or a CD should be sent in for consideration.

The opinions expressed in The Primary Teacher are those of the authors. This journal merely provides a platform to those who have a background in primary education.

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.
THE PRIMARY TEACHER
Volume XXXIX Number 3
JULY, 2014

CONTENTS

Editorial 3

ISSUES AND POLICY PERSPECTIVE
1. Equity Issues in the Context of the RTE Act, 2009  AJIT MONDAL 5
2. Performance Indicators (PINDICS) for Elementary School Teachers – A Means for Self-appraisal  PADMA YADAV 15
3. Attitude of Primary Teachers towards In-service Training  MANUJ KUMAR CHUTIA 31

RESEARCH
4. Effect of Integration of Arts on Achievement of Learners in Social Science  ASHA K.V.D. KAMATH 39
5. Status of Continuous and Comprehensive Evaluation (CCE) at Elementary Schools of Khorda District of Odisha  PRABHAT MANJARI SARANGI 47
7. Collaboration in Inclusive Education  BHARTI 70
8. Emotional Intelligence and Teaching Styles of Primary School Teachers  GAURANG TIWARI 79

BOOK REVIEW
What is RTE? Some Ways of Making Education Accessible  VARADA MOHAN NIKALJE 105

FROM THE STATES
Elementary Education in Rajasthan 107

DID YOU KNOW
National Early Childhood Care and Education (ECCE) Policy 113

MY PAGE 128
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!
Teacher Accountability

The National Policy on Education (NPE 1986) emphasised on universal access and enrolment, universal retention and substantial improvement in the quality of education to enable all children to achieve essential levels of learning. The access and enrolment figures show significant improvement over the years, but the quality of education, particularly the learning achievement of children is still low. Not only did the national achievement surveys conducted by NCERT (2012, 2014) report low achievement of students, self assessments by states also indicate low achievement of students in primary classes. Uttar Pradesh in its Annual Work Plan and Budget (AWP&B, 2014-15) reports that 18.2 per cent children in Class III cannot even read letters of the alphabet; 16 per cent can read words but not Class I textbook; 13.4 per cent cannot even recognise numbers between 1 and 9 and 41 per cent can recognise numbers up to 9 but not two digit numbers. Himachal Pradesh reports (AWP&D 2014-15) that 20 per cent students of Class III were at word recognition level; only 50 per cent students attained Class III level competencies; 40 per cent children in Class III cannot identify numbers and 70 per cent students cannot do multiplication sums. The situation is almost identical in other states. The quality monitoring conducted under SSA reveals that teachers also rate the performance of their students as low, that is, below desirable levels of learning. Haryana teachers graded 34 per cent children of Class III as ‘C’ in language and 36 per cent in mathematics. In Class V, 33 per cent got ‘C’ grade in language and 39 per cent got ‘C’ grade in mathematics. Grade ‘C’ means marks below 30 per cent. Uttarakhand teachers rated 39 per cent students as grade ‘C’ in language and 38 per cent students as grade ‘C’ in mathematics.

The Annual Work Plan and Budget (AWP&B) and quality monitoring data show that attendance of both students and teachers is good. Himachal Pradesh reported average teacher attendance as 87.3 per cent. Haryana reported average attendance of students as 89.8 per cent at primary and 89.6 per cent at upper primary stage. The disturbing question here is: why do students not learn at school in spite of the fact that attendance of both students and teachers is good? This question has been raised at various forums with teachers, educational functionaries, students and parents. Teachers say that most students in government schools are first generation learners and do not receive guidance for learning at home. Moreover, teachers are often assigned election duties. Teachers have the additional responsibility of mid-day meal. Some teachers blame non-detention policy for low achievement of students in Classes III and V. On the other hand, students complain that some of the teachers do not turn up to teach even when they are present in the school.
The use of guidebooks and mechanical copying of questions and answers from the blackboard is a common practice in almost all government schools. The general perception of parents is that teaching in government schools is not good and teaching in private schools is good. This perception may be one of the reasons for children being moved from government schools to private schools. The educational functionaries state that lack of teacher accountability in government schools is the reason for poor performance of students. RTE Act, 2009 and all major programmes of the government such as SSA are input driven. With no examinations, no failure and non-detention policy, there is no way to check teachers’ performance. The issue of teacher accountability therefore, needs serious attention.

The next pertinent question is: what is the mechanism to assess teacher performance in government schools? The inspector of schools generally inspects the teacher diaries. The diaries are neatly written and beautifully decorated; apparently sincerely and systematically. Teacher diaries are signed by the principal of the school. The teacher appraisal tools/scales developed by state and national level organisations like SCERTs and NCERT ask teachers to assess themselves by answering questions with phrases such as ‘uses child centered activity based learning strategies’, ‘uses resource materials like teacher guide, source book, etc. in addition to textbooks’, ‘assess student learning and provides immediate feedback for improving teaching learning’ etc. These tools provide self-assessment with respect to teaching. Sadly enough learner achievement finds no place in these tools. It is presumed that if these processes are followed learning will take place. The quality monitoring data reveals that teachers give only desirable responses to these items and not what they actually practice in schools.

Student learning is directly related to teacher effort. Two factors that influence student learning are teacher effort and teacher competence. The teacher effort and professional competence are positively correlated. Student achievement is one of the determinants of teacher performance. Therefore, student learning/achievement should find place in teacher assessment tools/methods. We are not suggesting that teacher’s accountability be in terms of marks/grades of students. The teacher should at least report what inputs were provided and what each child has learnt (in qualitative terms) at the end of each term/year, and also the reasons for non-learning/failure of students. Teachers must ensure that their students do not get ‘C’ grade or fail. Students’ success is teacher’s success. Students’ failure is teacher’s failure.

—Academic Editor
ABSTRACT

One of the most debatable issues in the global context is to provide free, compulsory, universal elementary education to all children, irrespective of caste, creed, colour, religion and all other social stratifications across the globe. Education is a basic human right and has been recognised since the adaptation of the Universal Declaration of Human Rights (1948, UNO). Since then numerous international treaties have reaffirmed this right and supported entitlement to free, compulsory and universal elementary education for all children. The right to education was finally made a fundamental right of Indian children in the 6–14 age groups to get free and compulsory education. It was enshrined in the Indian Constitution as a Directive Principle of State Policy in the Article 45 before the 86th Amendment, 2002. It was the visualisation of the Founding Fathers of the Indian Constitution that took almost 59 years to translate into reality. The Constitution (86th) Amendment Act introduced new Article 21A – “the State shall provide free and compulsory education to all children of the age of 6–14 years, in such a manner as the state may, by law determine”. The Right of Children to Free and Compulsory Education Act, 2009, commonly known as RTE Act came in force with effect from 1st April, 2010. The enforcement of the Right to Education Act brings the country closer to achieving the objectives and mission of the EFA (Education for All) and MDGs (Millennium Development Goals), especially MDG2 on (Universal Primary Education) and MDG3 on (gender equality) by 2015 and hence is a historic step taken by the Government of India. This article intends to explore the provisions for equity issues related to gender disadvantaged and weaker sections of the society in the RTE Act, 2009.

Key Words: Human Rights, Right to Education, Underprivileged Sections, Equity, Development
Introduction

Education is a human right and essential for realisation of all other human rights. It is a basic right which helps the individual to live with human dignity. It is for this reason, perhaps that framers of the Constitution realised the importance of education and thus imposed a duty on the state under article 45 as one of the Directive Principles of State Policy to provide free and compulsory education to all children until they complete the age of 14 years within 10 years from the commencement of the constitution. The framers expected that the government would make effective and honest implementation of this directive and abolish illiteracy from the country but their expectation remained in vain. Later, the National Education Policy of 1968 talked of a free and compulsory education but the Right to Education Act came into effect only in April, 2010. The government took more than six decades after independence to provide free and compulsory education as a fundamental right for all children in the age group of 6-14 years. It is now a matter of satisfaction that the RTE Act is the first Central legislation in the landscape of Indian elementary education that puts the responsibility of ensuring enrolment, attendance and completion of elementary education by all children on the government. The title of the RTE Act incorporates the words ‘free’ and ‘compulsory’. ‘Free education’ means that no child, other than a child who has been admitted by his or her parents to a school which is not supported by the appropriate Government, shall be liable to pay any kind of fee or charges or expenses which may prevent him or her from pursuing and completing elementary education. ‘Compulsory education’ casts an obligation on the appropriate Government and local authorities to provide and ensure admission, attendance and completion of elementary education by all children in the 6-14 age groups.

Main Objectives of the Study

1. To give a brief historical account of the Right to Education Act, 2009 and its salient features.
2. To explore the provisions for equity issues in the RTE Act, 2009.
3. To find out the provisions for the disadvantaged and weaker sections of India under the RTE Act, 2009.
4. To suggest some pragmatic steps for implementing those provisions related to gender equity and underprivileged sections.

Methodology and Data Collection

The present study has been executed by adopting the historical research method. The study has been developed by an analysis of a variety of primary and secondary sources of data. These sources include reports, periodicals, monographs, newspapers, pamphlets, records, theses, dissertations, journals and other research studies. The primary sources used in the development of the study consisted mainly of the RTE Act, 2009, official reports and publications.
of different national and international organisations.

**Right to Education: a Historical Account**

The Right to Education Act came to its present form after the concerted efforts of many groups and agencies in the country. The first law on compulsory education was introduced by the State of Baroda, in 1906. This law provides education for boys and girls in the age group of 7-12 years and 7-10 years, respectively. In 1911, Gopal Krishna Gokhle unsuccessfully moved a Bill for compulsory education in the Imperial Legislative Council. The Legislative Council of Bombay was first amongst the provinces to adopt a law on compulsory education. In spite of all these efforts, universalisation of education in the country was poor due to lack of control over resources. Thereafter, National Policy on Education, 1968 was formed and implemented. It was the first official document evidencing Indian Government’s commitment towards elementary education. Thereafter, the country witnessed the National Policy on Education in the year 1986. In this policy also, Right to Education was not recognised. Again, emphasis was given to the universalisation of elementary education. In the year 1990, the policy was reviewed by the Acharya Rammurthy Committee. The committee recommended that right to education should be included as a fundamental right in Part III of the Constitution. However, this recommendation was not implemented immediately. But, on the basis of the committee’s recommendation, National Policy on Education, 1992 was formulated.

In 1992, in the case of Mohini Jain vs State of Karnataka, the Supreme Court of India held that right to education is concomitant to fundamental rights enshrined under Part III of the Constitution and that every citizen has a right to education under the constitution. Subsequently, in the case of Unnikrishnana, J.P. vs State of Andhra Pradesh, the Supreme Court held that “though right to education is not stated expressively as a fundamental right, it is implicit in and flow from the right to life guaranteed under Article 21 and must be construed in the light of the Directive Principles of the Constitution. Thus, ‘right to education’, understood in the context of Article 45 and 41 means (a) every child/citizen of this country has a right to free education until he completes the age of fourteen years and (b) after a child/citizen completes 14 years, his right to education is circumscribed by the limits of the economic capacity of the State and its development. The landmark judgements of the Hon'ble Supreme Court and initiatives from many other agencies forced the government take initiatives in this direction. In 2002, Indian Constitution was amended which states that the state shall provide free and compulsory education to all children of the age of six to fourteen years. This is the
86th amendment of the constitution. In 2005, a draft Right to Education Bill was circulated but could not get its final shape because of the apprehension that Government may not be able to bear the high financial costs involved in implementing the act all throughout the country. Later on, the bill was placed before the Rajya Sabha in December, 2008. The Bill was then returned to a Standing Committee on Human Resource Development. After the formation of UPA II Government, the bill was finally passed by the Rajya Sabha on 20th June, 2009 and by the Lok Sabha on 4th August, 2009. The Right of children to Free and Compulsory Education Act, 2009 received assent of the President of India on 26th August, 2009. With the Right to Education Act, 2009 coming into force, India has joined the league of over 130 countries which have legal guarantees to provide free and compulsory education to children. According to the UNESCO’s Education for All Global Monitoring Report 2010, about 135 countries have constitutional provisions for free and non-discriminatory education for all.

The Salient Features of the RTE Act, 2009

The title of the RTE Act incorporates the words ‘free and compulsory’. ‘Free education’ means that no child, other than a child who has been admitted by his or her parents to a school which is not supported by the appropriate Government, shall be liable to pay any kind of fee or charges or expenses which may prevent him or her from pursuing and completing elementary education. ‘Compulsory education’ casts an obligation on the appropriate Government and local authorities to provide and ensure admission, attendance and completion of elementary education by all children in the 6-14 age groups. The main features of the Act are as follows:

- Makes Elementary Education Free.
- Makes Elementary Education Compulsory for the State to provide.
- Mandates education of children along their peer age group (“age-appropriate”); provides for “special training” to facilitate age appropriate education.
- Sets quality norms for all schools.
- Sets qualification and working norms for Teachers in all schools.
- Mandates curriculum in all schools to be in consonance with Constitutional Values.
- Mandates a system of evaluation that is free of the oppression of annual exams.
- Enhances role of PRIs in implementation as well as grievance redressal.
- Mandates participation of civil society in the management of schools, makes teachers accountable to parents and the community.
- Democratises education delivery in the country by mandating
25 per cent reservation for children from weaker sections in private schools.

- Separates agency for implementation of Act (Education Department, MHRD) from agency charged with monitoring the implementation of the Act (NCPCR).
- Calls for a fixed student-teacher ratio;
- Will apply to all of India except Jammu and Kashmir;
- Provides for 25 per cent reservation for economically disadvantaged communities in admission to Class One in all private schools;
- School infrastructure (where there is problem) to be improved in three years, else recognition cancelled;
- Financial burden will be shared between state and central government.

**Equity in School Education – a Concept**

The concept of equity in school education is poorly defined. Equity means different things to different people. The OECD (2012) recognises two dimensions: **fairness and inclusion** to equity in education and sees them as intertwined. Equity as fairness implies that personal or socio-economic circumstances, such as gender, ethnic origin or family background are not obstacles to educational success. Equity as inclusion means ensuring that all students reach at least a basic minimum level of skills. Equitable education systems are fair and inclusive and support their students to reach their learning potential. Equity means equal opportunity for all children to complete elementary education irrespective of their gender, religion, caste, socio-economic, cultural or linguistic background and geographical location. Equity also means creation of conditions in which the children from disadvantaged sections and weaker sections girls of the society, children of SC, ST and Muslim community, and children with disabilities etc., can avail of the opportunity (MHRD, 2011). The RTE Act integrates gender and other social disadvantages both explicitly and implicitly in its different sections for quality and equity. Equity has been seen as an integral part of the agenda on improving quality in the context of the RTE Act.

**Key Provisions Related to Gender Equity and Underprivileged Sections**

Education is the most potent tool for socio-economic and social mobility and a key instrument for building an equitable and just society. That’s why the RTE Act attempts to ensure that all children get the optimum opportunity to enrol in schools, acquire and complete elementary education, irrespective of their gender, caste, socio-economic, cultural or linguistic background and geographical location.
The Act contains specific provisions for disadvantaged groups, such as child labours, migrant children, children with special needs (CWSN), or those who have a disadvantage owing to social, cultural, economical, geographical, linguistic, gender or any such factor. Different sections of the Act refer to gender issue either explicitly or implicitly.

**Section 3(1)** of the RTE Act, 2009 Chapter II states: Every child of the age six to fourteen years shall have a right to free and compulsory education in a neighbourhood school till completion of elementary education.

**Section 3(2)** states: For the purpose of sub section (1), no child shall be liable to pay any kind of fee or charges or expenses which may prevent him or her from pursuing and completing the elementary education.

It is worth mentioning here that in the first chapter of the Act ‘child’ has been defined as “a male or female child of the age of six to fourteen years”. The Act further points out that “child belonging to disadvantaged group” will include groups having disadvantage owing to social, cultural, economical, geographical, linguistic, gender or such other factors as specified by the government.

**Section 8(c)** of RTE Act states while clarifying the duties of appropriate government: The appropriate government shall “ensure that child belonging to weaker section and the child belonging to disadvantaged groups are not discriminated against and prevented from pursuing and completing elementary education on any ground”. In fact articles like these are clear indication of the objective to do away with any kind of disparity on the ground of gender. The main objectives of the gender concern of RTE Act, 2009 are not only to enable to keep pace with boys in education but to bring a basic change in the status of women in the society.

However, RTE Act, 2009 integrates gender and other social disadvantages in its concern for quality and equity. It is seen as a part of the quality agenda. Gender does not operate in isolation but in conjunction with other social categories. This results in girls’ facing multiple forms of disadvantages. In order to address gender and equity issues in regard to RTE, a strong conceptual understanding of the issue is really necessary. Gender should not be taken as a stand-alone category segregated from other issues of discrimination. The dimensions of location (rural, urban), caste, class, religion, ethnicity, disabilities etc., intersect with gender to create a complex reality. Curriculum, textbooks, pedagogic practices need to capture the entire web of social and economic relations that determine an individual’s location in the social reality and shape her life experiences. Developing such an understanding is necessary to reach all the children who are still out of school. Civil society interventions would be crucial here. Despite significant improvement in the enrolment of girls, girls from
disadvantaged communities continue to form the bulk of out-of-school children. Therefore, access continues to be an equity issue in the case of girls which RTE tries to address.

Teachers are to play a very important role in implementing the mission of RTE Act, especially so in case of gender equity. If teacher is not sensitised to actively dispel traditional perceptions regarding gender or caste roles, she is unlikely to take measures to help girl students to pursue education which is equitable and free from anxiety. The teachers’ own pattern of communication with children, seating arrangement in the classroom, allotment of works among the children may serve to reinforce or dispel societal perception about the appropriate role and place of girls. The RTE Act (2009) emphasises the importance of teachers’ training which would enable teachers to promote inclusive classroom practices. The emphasis on professional training as a requisite qualification for recruitment of teachers in RTE, Act, 2009 (Section 23 sub-Sections 1 and 2) tries to ensure empathy of teachers towards every child. It clearly states (24[d]) that it is the duty of a teacher to assess the learning ability of each child and accordingly supplement additional instructions, if any, as required and [e] hold regular meetings with parents and guardians and apprise them about the regularity in attendance, ability to learn, progress made in learning and any other relevant information about the child.

Girls from SC, ST and minor communities and from families below poverty line usually face greater challenge in continuing education after the primary level. Localised context has to be analysed and a policy needs to be developed on the basis of such analysis to provide support to girl children to bring back girls who dropout of school without completing primary education. Community support and monitoring play an important role here. The RTE Act, 2009 has provided scope for community to intervene in smooth functioning of the school. The act requires each school to constitute a School Management Committee consisting of the elected representatives of the local authority, parents or guardians of children admitted in such school and teachers. The act makes it mandatory that fifty per cent of members of such Management Committee shall be women (Section 21[1]). The School Management Committee shall monitor the work of the school, prepare development plan and thereby monitor use of allocation of grant and its use. The fifty per cent women members are expected to safeguard the interest of their girl children and protest against any kind of discrimination on the basis of gender (Section 21[2]).

RTE Act, 2009 tries to involve all local stakeholders by making local authority responsible to ensure that the child belonging to any disadvantaged group may not be discriminated against and prevented from pursuing and completing elementary education.
Section 9 states that every local authority shall maintain records of children up to the age of fourteen years residing within its jurisdiction, in such manner as may be prescribed (sub-section-d); ensure and monitor admission, attendance and completion of elementary education by every child residing within its jurisdiction (sub-section-e); provide infrastructure including school building, teaching staff and learning material (sub-section-f); provide special training facility specified in Section 4 (sub-section-g); provide training facility for teachers (sub-section-j); monitor functioning of the schools within its jurisdiction (sub-section-l) and so on. Section 10 of RTE Act, (2009) makes it mandatory for the guardians to ensure admitting their children to school – It shall be the duty of every parent or guardian to admit or cause to be admitted his or her child or ward, as the case may be, to elementary education in the neighbouring school. Other provisions of RTE Act, 2009 to ensure girl child’s right to education are provision of good quality education that includes equity issues, curriculum development in conformity with constitutional stipulations, training and enrolment in age appropriated classes which will largely apply to girls, especially from disadvantaged communities.

However, mere sensitisation of teachers and involvement of local authority and community to safeguard the rights of the girl child may not be enough and classroom practices would need to be monitored and grievance redressal mechanisms have to be established at the school and other levels. RTE Act (2009) provides for grievances too. Section 31 under Chapter VI: (1) The National Commission for Protection of Child Rights constituted under Section 3, or as the case may be, the State Commission for Protection of Child Rights constituted under section 17, of the Commission for Protection of Child Rights Act, 2005, shall in addition to the functions assigned to them under that Act, also perform the following functions, namely : a) examine and review the safeguards for rights provided by or under this Act and recommend measures for their effective implementation; b) enquire into complaints relating to child’s right to free and compulsory education; c) and take necessary steps as provided under sections 15 and 24 of the said Commissions for Protection of Child Right Act. In addition to this Section 32(1) clearly states that notwithstanding anything contained in section 31, any person having any grievance relating to the right of a child under this Act may make a written complaint to the local authority having jurisdiction and Section 32(2) mandates that after receiving the complaint the local authority shall decide the matter within a time period of three months.

Currently the Sarva Shiksha Abhiyan (SSA) is being implemented as a Centrally Sponsored Scheme in partnership with State Governments for universalising elementary
education across the country. Bridging gender and social category gaps in elementary education is one of the four goals of SSA. These provisions have been aligned with the legally mandated norms and standards and free entitlements mandated by the RTE Act.

**Tasks Ahead**

Despite many gains under the RTE-SSA programme, education faces several challenges. A matter of particular concern is the steep dropout-rate after the elementary level. The increasing enrolment gap from elementary to secondary or higher secondary suggests that the gains at the elementary level have not yet impacted the school sector as a whole. Now is the time to turn from inputs and focus on the challenges related to retention, bridging of gender and social gaps in enrolment levels and enhancement of learning levels of all children. Some of the suggestions for minimising gender disparity and strengthening the RTE-SSA programme for Disadvantaged and Weaker Sections are as follows:

- It is necessary to involve the Panchayati Raj Institutions (PRIs) in rural areas for implementing the RTE Act. Parents, teachers, professionals, social workers and NGOs should assist the government in this regard.
- Particularly in rural and poor areas, People’s representatives – MPs, MLAs, PRI members should be made responsible for smooth functioning of the schools in their areas.
- The quality of teachers is the backbone of any teaching programme. Teachers need to have at their disposal a deep fund of empathy, commitment, conviction and ability and motivation to persevere; of knowledge and resources to respond and create meaningful educational experiences for all children.
- Seminars, Workshops, Conferences, Orientation programmes should be organised for building awareness of all the stakeholders of education about the RTE Act, 2009.
- To effectively implement the RTE, the Human Resource Development Ministry, Labour Ministry, Women and Child Development Ministry and Rural Development Ministry have to work together with a common goal.
- The quality of Mid Day Meal (MDM) needs to be improved, which will attract children of the weaker sections of the society. Acts like Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) should be more comprehensive so that rural people can’t employ their children in any labour work instead of sending them to schools.
- In the rural areas, the school hours and the duration will have to be adjusted according to the needs of the community.
• Students coming from Scheduled Castes and Scheduled Tribes are also likely to be deficient in scholastic areas. The school may put emphasis on providing some remedial education programmes. Adoption of instructional strategies, such as peer group learning, monitoring assistance, diagnostic testing and tutoring would help to improve the educational levels of these learners.

**REFERENCES**


Performance Indicators (PINDICS) for Elementary School Teachers – A Means for Self-appraisal

Padma Yadav*

ABSTRACT

Performance Indicators (PINDICS) are designed to assess the performance and progress of elementary school teachers. These indicators have been developed by National Council of Educational Research and Training (NCERT) on the request of Ministry of Human Resource and Development (MHRD) for implementation of Sarva Shiksha Abhiyan (SSA) and Right to Education (RTE) Act, 2009. Every teacher ought to be competent in teaching that means, having rich knowledge base, favourable attitude towards teaching and learning, and innumerous skills for learning and transaction. High-quality teacher performance is essential for ensuring quality school education. Teachers should make continuous efforts to improve their performance. This tool PINDICS is mainly developed for helping teachers understand their performance level. By using this they will also be aware of their roles and functions and the expectations from them as an effective teacher. Teachers should use PINDICS as a self-development tool and continuously make efforts to reach the higher level and try to upgrade their performance. It can also be used by the administrators/supervisors/Head of the Institutions to appraise their teacher’s performance and should not be used for harassing teachers in any way.

Introduction

PINDICS is based on the provisions in sections 24, 29 and the schedule specifying norms and standards for schools in the RTE Act, 2009, NCF-2005 and SSA Framework-2011. It has been further fine-tuned using the feedback received from the NCERT study entitled, ‘In-service Education for Teachers (INSET)–Impact on Classroom Transaction’ conducted in 2010-11 and try-out with primary and upper primary school teachers.
from Delhi, Haryana and comments received from state level officers from SCERT and SPO, teacher organisations and teacher education professionals.

PINDICS consists of Performance Standards (PS), Specific Standards (SS) and Performance Indicators (PI). Performance Standards are the areas in which teachers perform their tasks and responsibilities. Under each performance standard there are some specific tasks which teachers are expected to perform. These have been termed as ‘Specific Standards’. From Specific Standards, Performance Indicators have been derived.

**Performance Standards (PS)**

Performance Standards communicate expectations for each responsibility area of the job performance. The following Performance Standards have been identified:

- Designing Learning Experiences for Children
- Knowledge and Understanding of Subject Matter
- Strategies for Facilitating Learning
- Interpersonal Relationship
- Professional Development
- School Development
- Teacher Attendance

A three-tier approach has been followed to implement PINDICS to assess the progress of practitioners.

Teachers themselves may use PINDICS for assessing their own performance and to make continuous efforts to reach the highest level. At the second level, these can also be used for teacher-appraisal by the supervisory staff/mentor to assess and to provide constructive feedback for the improvement of teacher performance. At the third level, CRC personnel may assess the data for further improvement of teacher’s performance, planning teacher training programmes at cluster level and for monitoring school development activities.

**Guidelines for Teachers**

Self-assessment by the teacher should be done at least twice in a year, one ending first quarter and the second, ending third quarter.

Teachers are required to complete the Teacher Identification Information given on the first page of the PINDICS.
**Academic Qualification with Subjects**

Senior Secondary
Graduation
Post-Graduation
Professional Qualification
Teaching Experience
Teaching: Class Subject
Class Subject

No. of days of In-service Education Programmes attended during last five years

Achievements, (Awards/Distinctions) if any

Teachers are expected to read each performance indicator carefully and reflect on it in the context of her/his classroom practice and give rating in the appropriate box placing herself/himself on a point on the four point scale according to her/his performance against each indicator. Each performance indicator is rated on four point scale ranging from 1 to 4 indicating the levels of performance. The rating points are:

1. Not meeting the expected standard
2. Approaching the expected standard
3. Approached the expected standard
4. Beyond the expected standard.

A teacher can be rated as beyond the expected standard if she/he performs tasks in an innovative way and makes extra efforts for improving student performance.

**Example:**

**A Teacher can read the indicators as given below while rating herself/himself**

I use textbooks and other relevant documents while planning for designing learning experiences.

I use record of student’s performance for designing learning experiences.

I plan for engaging children in learning activities while designing learning experiences.

I collect and prepare relevant teaching-learning materials for designing learning experiences.

**Heads of the Institutions can read the indicators as given below while rating a teacher.**

She uses textbooks and other relevant documents while planning for designing learning experiences.

She uses record of student’s performance for designing learning experiences.

She plans for engaging children in learning activities while designing learning experiences.

She collects and prepares relevant teaching-learning materials for designing learning experiences.

According to NCF–2005 role of teacher is as a facilitator. Teacher is expected to design learning experiences.
The teacher can self-assess and can rate herself. If she finds she was not aware of the things she was supposed to do for designing learning experiences for children and she discovers that she is not meeting the expected standard then she can tick or rate herself on the score 1, and in the observation column she can write that she was not aware of the documents she should refer for designing age appropriate and developmentally appropriate activity. She must have plans for engaging children in learning activities.

<table>
<thead>
<tr>
<th>Specific Standards</th>
<th>Performance Indicators</th>
<th>Not meeting the expected standard</th>
<th>Approaching the expected standard</th>
<th>Approached the expected standard</th>
<th>Beyond the expected standard</th>
<th>Observation (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning for designing learning experiences for all</td>
<td>Use(s) textbooks and other relevant documents while planning</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Use(s) record of students performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Plan(s) for engaging children in learning activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Collect(s) and prepare(s) relevant teaching-learning materials</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
or arrange the training programmes for teachers like her. This tool can also be helpful for the Head of the Institution, as they know their teachers work and they can regularly observe and rate the teacher's performance with the help of Performance Indicators listed. They should take into account the teacher filled PINDICS for assessing their needs and for providing support in the desired areas. Teachers should not be penalised or humiliated instead they should be supported and guided for self-development. Sometimes it may happen that teacher is beyond the expected standard but has rated herself as approaching or approached the expected standard. Then Head of the Institution can also rate her as 4 and mention in his report at the space provided in the tool. It can also happen that some teachers are overconfident, and they may rate themselves at 4, though they are not so, then it will be a challenge for Head of the Institution to deal with such cases. Heads can ask for evidence and support and guide them to understand their needs and direct...
them to participate in orientations and training programmes.

In order to teach all students’ according to their needs; teachers need to understand subject matter deeply so that they can relate one idea to another for children. They are expected to have deep knowledge of the subject matter / content and they should be able to use their knowledge for helping children learn through concrete examples and activities. If they have in-depth subject knowledge then they can easily relate the ideas well and may also be able to help children understand the course content without undue pressure. As a result children may learn better and teachers may also be able to complete the syllabus on time (demanded by Right to Education (RTE) Act, 2009). If teachers know the content well and are sensitive towards children’s learning then they would surely correct the errors made by children and make an effort for improvement. Some teachers have in-depth subject knowledge but are not able to teach.

Performance standard No. 2 is based on knowledge and understanding of subject matter. Teacher needs to reflect on self. She can introspect and see if she is able to make use of clear and appropriate examples to teach abstract concepts to children making use of her knowledge base then she can rate herself 3, i.e., approached the expected standard. If she thinks that she is making efforts then she can rate as 2, i.e., approaching the expected standard. But if the teacher feels that certain concepts are not clear to her for teaching to children and needs clarity, then she can mention in the observation column that support is required to understand the concepts, theories or principles. Then it will be the supervisor’s or Head’s role to help and support the teacher. Cluster Resource Coordinator (CRC) can collect this information from school and organise training programme accordingly.

<table>
<thead>
<tr>
<th>Performance Standard No. 3: Strategies for Facilitating Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific Standards: Enabling learning environment and classroom management</td>
</tr>
<tr>
<td>Performance Indicators: Use(s) available space in the classroom and school adequately</td>
</tr>
<tr>
<td>Not meeting the expected standard</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>Maintain(s) cleanliness and safety of children in the classroom</td>
</tr>
<tr>
<td><strong>Performance Indicators (PINDICS)</strong></td>
</tr>
<tr>
<td>-------------------------------------</td>
</tr>
<tr>
<td><strong>Display(s) teaching learning material in the classroom for ready use</strong></td>
</tr>
<tr>
<td><strong>Display(s) work of students in classroom/school</strong></td>
</tr>
<tr>
<td><strong>Arrange(s) furniture and room space for organising different activities</strong></td>
</tr>
<tr>
<td><strong>Encourage(s) self-discipline, punctuality and regularity</strong></td>
</tr>
<tr>
<td><strong>Act(s) immediately to address problems of discipline such as bullying, abuse etc.</strong></td>
</tr>
<tr>
<td><strong>Treat(s) all children in a fair and consistent manner</strong></td>
</tr>
<tr>
<td><strong>Do(es) not resort to physical punishment and mental harassment of children</strong></td>
</tr>
<tr>
<td><strong>Identifie(s) irregular students and makes effort to improve their attendance</strong></td>
</tr>
<tr>
<td><strong>Identifie(s) potential dropouts in the class and makes special efforts to prevent dropout</strong></td>
</tr>
<tr>
<td><strong>Utilise(s) school time effectively</strong></td>
</tr>
<tr>
<td><strong>Learning strategies and activities</strong></td>
</tr>
<tr>
<td><strong>Provide(s) opportunity for all children participation in discovery, exploration and experimentation</strong></td>
</tr>
<tr>
<td><strong>Communication Skills</strong></td>
</tr>
<tr>
<td>-------------------------</td>
</tr>
<tr>
<td>Acknowledge(s) students’ responses and encourages their participation</td>
</tr>
<tr>
<td>Respond(s) to students verbal and non-verbal cues</td>
</tr>
<tr>
<td>Encourage(s) children to question</td>
</tr>
<tr>
<td>Use(s) different resource materials like teacher guide, source book, etc., other than textbook for effective transaction</td>
</tr>
<tr>
<td>Make(s) use of ICT appropriately</td>
</tr>
<tr>
<td><strong>Listen(s) to children patiently</strong></td>
</tr>
<tr>
<td>Use(s) simple language</td>
</tr>
<tr>
<td>Use(s) home language of children wherever needed</td>
</tr>
<tr>
<td>Demonstrate(s) legible writing</td>
</tr>
<tr>
<td>Exhibit(s) concern, care and respect for the students while communicating verbally/non-verbally</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Assessment and Feedback</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Assess(es) student’s learning and provide immediate feedback for improving learning and performance</td>
</tr>
<tr>
<td>Maintain(s) students’ profile of learning and performance (record of different tests/assignments/written work/Projects, anecdote etc.)</td>
</tr>
<tr>
<td>Share(s) students’ progress with parents and students’</td>
</tr>
</tbody>
</table>
Types of learning strategies, the facilitator (teacher) will use, depends on purpose, content and the children in the classroom. Teachers’ role is to create enabling environment for children so that children can learn on their own; discover knowledge for themselves. For this teacher as a facilitator/teacher needs to make use of space available in the classroom and school adequately; maintain cleanliness and safety of children in the classroom; display teaching-learning material in the classroom for ready use; display work of students in classroom/school; arrange furniture and room space for organising different activities; encourage self-discipline, punctuality and regularity; act immediately to address problems of discipline such as bullying, abuse etc.; treat all children in a fair and consistent manner; does not resort to physical punishment and mental harassment of children; identify irregular students and make efforts to improve their attendance; identify potential dropouts in the class and make special efforts to prevent dropout; utilise school time effectively.

A good teacher uses variety of teaching-learning strategies like child-centered, activity based learning strategies; provides opportunity for child participation in discovery, exploration and experimentation; acknowledges students’ responses and encourages their participation; responds to students verbal and non-verbal cues; encourages children to question; uses different resource materials like teacher guide, source book, etc., other than textbook for effective transaction; makes use of ICT appropriately.

The communication skill of a teacher needs to be very strong. They are expected to listen to children patiently; use simple language; make use of home language of children wherever needed; demonstrates legible writing; exhibits concern, care and respect for the students while communicating verbally/non-verbally.

An effective teacher makes use of continuous and comprehensive evaluation for assessment of children’s learning and provides constant immediate feedback for improving learning and performance. Maintains students’ profile of learning and performance (record of different tests/Assignments/written work/projects, anecdote etc., and shares students’ progress with parents and students’.

Teacher is expected to read the performance indicators given as above and rate herself. Heads and supervisors can also rate the teacher if they observe the following indicators during classroom observation.
### Performance Standard No. 4: Interpersonal Relationship

<table>
<thead>
<tr>
<th>Specific Standards</th>
<th>Performance Indicators</th>
<th>Not meeting the expected standard</th>
<th>Approaching the expected standard</th>
<th>Approached the expected standard</th>
<th>Beyond the expected standard</th>
<th>Observation (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship with students</td>
<td>Show(s) respect and care towards students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Easily approachable to children (without fear and hesitation)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recognise(s) and appreciates students contribution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship with Colleagues</td>
<td>Show(s) respect towards colleagues</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Appreciate(s) other colleagues for their contribution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cooperate(s) and collaborate(s) with the members of the staff in conducting school activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establish rapport with parents/community</td>
<td>Involve(s) members of the community for organising different activities and programmes in the school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Participate(s) in the community activity such as cultural and social programmes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Teachers are expected to respect and care children. She should be easily approachable to children. If students contribute in enhancing teaching-learning process, school development programmes, maintenance and upkeep of school, garden, morning assembly, etc., then teachers’ should recognise and appreciate the efforts of children. There should be respectful
atmosphere in the school. Teachers should respect each other. Appreciate colleagues for their contribution in various fields of social development; cooperate and collaborate with the members of school staff in conducting school activities. She should be able to involve the members of the community for organising different activities and programmes in the school. She should

<p>| Performance Standard No. 5: Professional Development |
|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|</p>
<table>
<thead>
<tr>
<th><strong>Specific Standards</strong></th>
<th><strong>Performance Indicators</strong></th>
<th><strong>Not meeting the expected standard</strong></th>
<th><strong>Approaching the expected standard</strong></th>
<th><strong>Approached the expected standard</strong></th>
<th><strong>Beyond the expected standard</strong></th>
<th><strong>Observation (if any)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-study participation in in-service education programmes</td>
<td>Update(s) subject knowledge through self study</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Participate(s) in In-service Education Programmes as per need and requirement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Participate(s) and contribute(s) regularly in Cluster Resource Centre/Block Resource Centre meetings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engagement in innovation and research</td>
<td>Engage(s) herself/himself in an innovative and research activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Participate(s) and present(s) papers in regional, state, national and international level seminars</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Publishe(s) articles/papers in various Journals, magazines etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contribute(s) in developing of teaching-learning materials</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
also participate in the community activity such as cultural and social programmes. Teachers can use the above indicators for introspection and rate her performance accordingly. If she feels that orientation is required for understanding the involvement of parents and community in education of children and her participation in community programmes then she should mention in the observation column. It is duty of the Head or Supervisor or CRC to help and support teacher. Similarly Head or supervisors can also appraise teachers’ performance by observing her relationship with children, colleagues, parents and community.

Teacher should constantly work hard for her professional growth. Update her subject knowledge through different sources regularly. She should participate in the In-service Education programmes organised by different Departments according to her need. She should participate in her own Departmental, Cluster Resource Centre or Block Resource Centre meetings to keep her updated. If the teachers are doing it then its fine

<table>
<thead>
<tr>
<th>Performance Standard No. 6: School Development</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Specific Standards</strong></td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>Contributes to the organisation of school activities</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

1 2 3 4
otherwise, they should make efforts in direction of self improvement and it should be the duty of the Head teacher or CRC to support and guide the teacher.

Contribution of teachers to organisation of school activities is important. Head teacher cannot do all work alone, support of teachers is required. Teachers are required to organise and participate in the School Management Committee (SMC) meetings and organise and participate in other meetings also from time to time. She should contribute in the organisation of school programmes like morning assembly, cultural programmes, sports and games, celebration of cultural and national festivals. She should also contribute in beautification of school, gardening, organising health and hygiene programmes, distribution of mid-day meal, etc.

<table>
<thead>
<tr>
<th>Performance Standard No. 7: Teacher Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Specific Standards</strong></td>
</tr>
<tr>
<td>-------------------------</td>
</tr>
<tr>
<td><strong>Regularity and Punctuality of Teachers</strong></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Teacher attendance not only in the school but also in the classroom is of utmost importance. She is expected to arrive and leave the school according to school time. She should helping children learn regularly. If teacher is regular and teaches in class regularly, student’s attendance also goes up. Children also learn the values like punctuality and regularity from their teachers. So the teachers can self check if they are regular, punctual and if they are regular and punctual, then, are they teaching in the class regularly?

**Compilation of Data received from PINDICS**

Teacher can assess her twice in a year. She can further work out total score on the performance standard (area) by adding scores on each indicator of the standard and prepare a descriptive report on the basis of her/his assessment. The report may also include the areas in which help is required.
Guidelines for Head Teacher/CRCC/Nodal Head Teacher/BRCC

Assessment by Head teacher/CRCC/Nodal head teacher/BRCC should be carried out twice in a year keeping following points. One who is assessing is expected to:

- use teacher’s self-assessment record;
- observe actual classroom processes;
- have dialogue with teachers, students and SMC members to supplement teacher’s report;
- prepare a descriptive report based on self-observation and report collected from the teacher;
- discuss the report with the teacher concerned to improve his/her level of performance;
- link information from teacher’s assessment using PINDICS with information about student attendance, curriculum coverage and student learning outcomes from Quality Monitoring Tools (QMTs);
- complete Teacher Performance Sheet and Consolidation Sheet – CRC level for onward transmission to BRC.

Nodal Head Teacher or CRCC can collect the information of each

Teacher Assessment Sheet – By CRCC/Nodal Head Teacher

Name of Teacher: ____________________ School: _______________________
Year: ___________ Cycle (I or II): _________________

<table>
<thead>
<tr>
<th>SL. No</th>
<th>Performance Standards</th>
<th>Consolidated Rating of teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Not meeting the expected standard</td>
</tr>
<tr>
<td>1</td>
<td>Designing Learning Experiences</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Knowledge and Understanding of Subject Matter</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Strategies for facilitating learning</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Interpersonal Relationship</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Professional Development</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>School Development</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Teacher Attendance</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Grand Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overall performance</td>
<td></td>
</tr>
</tbody>
</table>
Are teacher’s self motivated? Are they making efforts to improve themselves? etc.

This table provides information up to cluster level. This collected information can be flow upwards level viz., Block, District or to State level.

Cluster Resource Centre Coordinator’s Consolidation Sheet

Name and Address of Cluster: ________________________________

Total No. of School in Cluster: _________________

Total No. of Teachers in the Cluster: _________________________________

Year: _________________ Cycle(I or II): ___________________

<table>
<thead>
<tr>
<th>SL. No.</th>
<th>Performance Standards</th>
<th>Number of Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Not meeting the expected standard</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>Designing Learning Experiences</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Knowledge and Understanding of Subject Matter</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Strategies for facilitating learning</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Interpersonal Relationship</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Professional Development</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>School Development</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Teacher Attendance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overall Performance</td>
<td></td>
</tr>
</tbody>
</table>

Implications and Way Forward

Quality of teachers can be improved. Teachers themselves can monitor their progress and work for self improvement. Head of the Institution
can play the role of facilitator and provide support to teachers in their professional growth. The gap between teaching competencies expected and practiced can be addressed very easily through PINDICS.

PINDICS will be used by all the teachers for their self-assessment. All States and UTs may use it to assess the level of teachers’ performance in their States and UTs. It may be translated in various Indian languages.

Acknowledgements to PINDICS development core committee:
Professor Parvin Sinclair, Director, NCERT, New Delhi (Chairperson); Professor B.K. Tripathi, Joint Director, NCERT, New Delhi; Professor N.K. Jangira, former Head DTE, NCERT, New Delhi; Professor S.K. Yadav, former Head DTE, NCERT, New Delhi (Convenor); Dr Padma Yadav, Associate Professor DEE, NCERT; Dr Vijayan and Dr J.K. Patidar, Assistant Professor DTE, NCERT, New Delhi.
Attitude of Primary Teachers towards In-service Training

Manuj Kumar Chutia*

ABSTRACT

Training is the most essential aspect of teaching profession which develops specific skills about teaching and learning either through pre-service or in-service mode. Only by mere attending of training sessions, efficiency cannot be attained but it requires positive frame of mind towards training. A positive mind set directs teachers to be more attentive to learn different teaching-learning skills which can make them successful in actual classroom situation. This study highlights the in-service training attitude of teachers and finds that in-service training attitude is mostly favourable among primary teachers irrespective of their gender and level of teaching. It also finds significant difference in training attitude between male and female teachers and teachers of lower and upper primary stage of teaching.

Key Words: Training attitude, in-service training, LP-UP teachers

Introduction

Teachers are usually called as backbone of the nation because they take the most important responsibility to build a strong nation by imparting most valuable education to the upcoming generation of the society. It is the responsibility of teachers to create efficient and capable individuals of the society for different fields which is done inside the classroom. If you are a teacher in whatever capacity, you have a very special role to play because more than anybody else it is you who are shaping the future generation (Kalam, 2004). Teachers are the most important persons lying behind the screen.

Teaching: a profession

Teaching is one of the highly honoured and dignified professions. It is the occupation which was cured by the enlightened persons of the community in early days, but later on, it has been extended to others but the
This profession is based on specific theories and skills for systematic teaching. Therefore, training has to be provided to teachers so that they can become accomplished in new skills and theories of teaching profession. The first prime Minister of India, Pandit Jawaharlal Nehru remarked ‘if you educate a boy, you educate one individual. If you educate a girl, you educate the whole family and if you educate a teacher, you educate the whole community’ (Agarwal, 1993). This quotation has clearly expressed the importance of teacher education to create a good community and a strong nation. Sri Aurobindo was of the opinion that every teacher should bear in his mind that nothing can be taught but everything can be learnt. He has to present the content in a manner of learning the content himself. They should encourage children to develop interest to learn.

**Teacher Education and Training Attitude**

Teacher education is an inclusive concept. It encompasses teaching skills, sound pedagogical theory and professional skills. Teacher education is not only meant for teaching the teacher, how to teach but also to kindle his/her initiative to keep it alive to minimise the evils of the “Hit and Miss” process and to save time, energy and money of the teachers and the taught. It would help the teacher to minimise his/her trouble and to discharge his/her responsibilities with efficiency and effectiveness. Teacher education is no longer a training process but an education strategy for enabling teachers to teach and concern for their well-being (Arya, 2012). Teacher education can minimise their troubles and learn to appreciate that it would save the children from much of the painful process. Teacher education is needed for developing purpose and for formation of a positive attitude for the profession. It helps the teacher to maintain a congenial environment inside the classroom.

The former president of India Dr A. P. J. Abdul Kalam provided a very pertinent remark in the field of teacher education. According to him, ‘the teacher, the child’s window to learning and knowledge, has to play the role model in generating creativity in the child. Education and the teacher-student relationship have to be seen not in business terms but with the nation’s growth in mind. A proper education would help nurture a sense of dignity and self-respect among our youth. These are qualities no law can enforce – they have to be nurtured ourselves’ (Kalam, 2003).

It is clear that the role of teacher is no longer limited to the narrow sphere of classrooms. On the contrary a teacher plays a multi-dimensional role and in the true sense as the academic leader of the society. Extension services play a vital role in creating a general awareness about various developments in different fields of social and physical sciences that can contribute in developing the social
consciousness as well as in creating an awakened society. Educators and teachers can help different sections of society in understanding what is happening around them and to implement various socially useful productive activities in day-to-day life.

Many agencies organise teacher training programmes of different durations for teachers of various levels with pre-service and in-service mode. The attitude of teachers towards training programmes is not always positive. But, to be successful in teaching one must have favourable attitude towards teaching profession as well as training programmes. Studying on attitude towards training programmes no significant difference has been observed towards in-service training programmes among teachers irrespective of their gender, locality and duration of experiences (Surapuramath, 2012). In another attitudinal study of the teachers towards orientation scheme of UGC found that such programmes are very useful in developing teaching and research capabilities among teachers (Pathania, 2007). Teacher training institutions have to perform such kind of activities which can help teachers to develop professional attitude towards teaching. In a study related to this it was found that teacher training institutions were not successful in developing professional attitude among prospective secondary school teachers and girls professional attitude is slightly better than boys (Hussain, 2004). Apart from the attitude of teachers towards teaching profession and training the impact of such training programmes in real classroom teaching is also equally important. In a study about the impact of the teacher education programme of Lucknow University on pupil teachers’ attitude and teaching efficiency found that most of the trainee groups changed their attitude positively and significantly after training, and male trainees did not show any change in their teacher attitude as shown by female trainees (Srivastava, 1989). Inspite of having severe criticism on imparting teacher training through distance mode, some institutions have been continuing such kind of training programmes. In a study related to teacher training through correspondence mode it was found that teachers were possessing favourable attitude towards B.Ed. through correspondence course irrespective of their gender (Reddy and Jyothi, 2002). Comparing the attitude towards teaching profession and job satisfaction of college teachers of Assam and Orissa, it was found that majority of college teachers from both states had highly favourable and favourable attitude irrespective of their sex, status, experience and location (Panda, 2001).

**Rationale of the Study**

Training programmes have been organised for teachers of all levels and of various durations by different agencies and large number of teachers attended those training programmes.
Some of them have attended training programmes with positive frame of mind to learn some techniques and skills of teaching which will help them in real classroom teaching-learning situation. But all don’t have such kind of positive frame of mind about training. Some teachers don’t hesitate to consider it as impractical and nothing more than mere passing of time and they participate just because of direction of the higher authority. Keeping this view in mind the present study has been undertaken to learn the attitude of primary teachers about in-service training.

**Problem Statement**

The present study is stated as ‘**In-service Training attitude of primary teachers – A study**’. In this problem training attitude implies mind-set of teachers towards training programmes of any duration and primary teachers imply those engaged in teaching profession particularly in lower primary and upper primary level of education. This study is confined to primary teachers of Rupahi Education Block of Nagaon district, Assam.

**Objectives of the Study**

The objectives of the study were as follows:

(i) To study the dimension of in-service training attitude of primary teachers.

(ii) To study the dimension of in-service training attitude of primary teachers irrespective of their gender and level of teaching (LP, UP).

(iii) To study the difference in in-service training attitude of male and female primary teachers.

(iv) To study the difference in in-service training attitude of Upper Primary (UP) and Lower Primary (LP) teachers.

**Hypotheses of the Study**

(i) In-service training attitude of primary teachers is favourable.

(ii) In-service training attitude of primary teachers is favourable irrespective of their gender and level of teaching.

(iii) There is no significant difference in in-service training attitude of male and female primary teachers.

(iv) There is no significant difference in in-service training attitude of Upper Primary (UP) and Lower Primary (LP) teachers.

**Methodology of the Study**

The following methodology were adopted in this study.

**Sampling Procedure**

To investigate this problem a total of 51 primary teachers selected randomly from 34 different primary schools of Rupahi Education Block of Nagaon district, Assam. Out of these 51 primary teachers, 31 males and remaining 20 were females. Similarly 22 teachers were selected from Lower Primary (LP) and 29 from Upper Primary (UP) schools.
Research Tool Used
A five-point Likert type selfdesigned research tool ‘Training attitude of primary teachers’ was administered to the sampled teachers to collect relevant primary data about in-service training attitude. The questionnaire had 22 affirmative statements with five alternatives each i.e., strongly agree (SA), agree (A), undecided (U), disagree (D) and strongly disagree (SD) with the quantitative value of 5, 4, 3, 2, and 1 respectively. The scores for any individual would be between 22 to 110. A score above 66 indicates favourable training attitude and below 66 indicates unfavourable training attitude. The split half reliability coefficient of correlation was found .76 which indicates satisfactory level of reliability.

Data Collection
Descriptive survey method was applied to collect data for this study. The investigator personally approached sampled teachers to fill up the scale as per the guidelines given with.

Statistical Techniques Used
Collected data were analyzed by applying descriptive as well as inferential statistics. Statistical techniques like percentage, Mean (M), Standard deviation (o) and ‘t’ tests were applied to test the hypotheses.

Result and Discussion
The result of the present study were analysed and expressed in the following tables.

Table 1: Percentage of teachers showing in-service training attitude

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>In-service training attitude</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Favourable</td>
</tr>
<tr>
<td>N</td>
<td>51</td>
<td>39</td>
</tr>
<tr>
<td>%</td>
<td>100</td>
<td>76.47</td>
</tr>
</tbody>
</table>

From the above table and figure it is seen that 76.47% teachers’ have shown favourable attitude towards in-service training programmes whereas 11.76% each have shown unfavourable and neutral attitude respectively towards the same. Therefore, it has been revealed from the above data that most of the primary teachers have exposed favourable training attitude towards in-service training.

Figure 1: Graphical depiction of in-service training attitude of teachers
From the above table mostly favourable in-service training attitude from teachers of different categories has been observed. In this study 83.87% male and 65% female teachers have exposed favourable attitude towards in-service training whereas 6.45% male and 20% female teachers have shown unfavourable attitude. While observing the in-service training attitude of primary teachers on the basis of their level of teaching, 82.76% upper primary and 72.73% lower primary teachers have shown favourable in-service training attitude whereas it was 6.90% and 18.18% in case of unfavourable attitude towards training respectively.

While comparing the ‘t’ value in in-service training attitude of male and female primary teachers at 0.05% level of significance was found significant (t = 2.22, 0 > .05). So, the null hypothesis can be rejected at this level and therefore, it can be revealed that differences exist in in-service training attitude between male and female primary teachers.

### Table 2: Dimension of in-service training attitude of primary teachers irrespective of their gender and level of teaching

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>In-service training attitude</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Favourable</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>83.87</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>65</td>
</tr>
<tr>
<td>Level of teaching</td>
<td>UP</td>
<td>82.76</td>
</tr>
<tr>
<td></td>
<td>LP</td>
<td>72.73</td>
</tr>
</tbody>
</table>

### Table 3: Significance of difference in in-service training attitude of male and female primary teachers

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>M</th>
<th>‘o’</th>
<th>df</th>
<th>‘t’</th>
<th>Sig. (2-tailed)</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>31</td>
<td>83.77</td>
<td>6.16</td>
<td>49</td>
<td>2.22*</td>
<td>2.01</td>
<td>S</td>
</tr>
<tr>
<td>Female</td>
<td>20</td>
<td>80</td>
<td>5.79</td>
<td>49</td>
<td></td>
<td></td>
<td>S</td>
</tr>
</tbody>
</table>

Significant level is at p>0.05

### Table 4: Significance of difference in in-service training attitude of LP and UP teachers

<table>
<thead>
<tr>
<th>Level of teaching</th>
<th>N</th>
<th>M</th>
<th>‘o’</th>
<th>df</th>
<th>‘t’</th>
<th>Sig. (2-tailed)</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Primary</td>
<td>22</td>
<td>80.18</td>
<td>5.12</td>
<td>49</td>
<td>2.27*</td>
<td>2.01</td>
<td>S</td>
</tr>
<tr>
<td>Upper Primary</td>
<td>29</td>
<td>83.90</td>
<td>6.62</td>
<td>49</td>
<td></td>
<td></td>
<td>S</td>
</tr>
</tbody>
</table>

Significant level is at p>0.05
The ‘t’ value while testing the significance of difference of in-service training attitude between LP and UP teachers is found 2.27, which is higher than the table value at 5% level of significance and reject the null hypothesis. It indicates that there is significant difference in in-service training attitude among lower primary and upper primary teachers. Therefore, it can be said that teachers of lower primary and upper primary are significantly different in their attitude towards in-service training.

**Major Findings**
The main findings of the present study are as follows:

- The majority of primary teachers have shown a favourable attitude towards in-service training.
- Favourable in-service training attitude has been observed among both men and women primary teachers.
- Irrespective of the level of teaching (LP and UP) primary teachers have shown favourable attitude towards in-service training.
- Significant mean difference has been observed in in-service training attitude between male and female primary teachers.
- Significant mean difference in training attitude towards in-service training has been observed among lower primary and upper primary teachers.

**Suggestions**
From the study the following suggestions can be made:

- Training programmes should be arranged in such a way that it can help teachers to build confidence among them.
- Practical classroom problems should become part of discussion in training programmes.
- Recent innovations in teaching should be demonstrated by experts during in-service training programmes.
- Awareness should be made to create interest among teachers to attend training programmes voluntarily, not because of direction of higher authority.
- Competent resource persons should be invited to the training programmes.
- Training programmes should not be arranged just as a routine work, but a real profit for participants.
- Training should not impose extra burden on the teachers and hamper regular classes of schools.

**Conclusion**
Training programmes are very essential for effective teaching for all teachers teaching at different levels. Inspite of having practical value many teachers are reluctant to participate in such kind of training programmes because of their negative feelings and some of them participate only at the direction of the higher authority. Without developing a positive frame of mind towards training, no programmes will make teaching effective. So, a positive mindset should be created among teachers towards training programmes before entrusting them in training programmes.
REFERENCES


## ABSTRACT

Social science is one of the school subjects and is a content loaded subject which is hardly integrated by the teachers. Students find it not only heavy but also boring. Making a social science class interesting and participatory and reducing the energy consumed for understanding the content is a challenge for the teachers.

While discussing about approach to pedagogy, NCF–2005 states that teaching of social science must adopt methods that promote creativity, aesthetics and critical perspectives. Art Education which covers four main streams namely, music, dance, visual arts and theatre is one such subject that when integrated with any other subject, makes the class lively, participatory and creative. NCF–2005 emphasises that learning of any of these arts would enrich the lives of our young citizens, not only in their school years but also throughout their lives. It further says that dramatisation is one of the under-explored strategies that could be employed. that Art Education improves academic study, communication and cognitive skills, impacting achievement in other areas. Therefore, the researcher felt the need to make social science class interesting, participatory, creative and to go beyond the textbook giving primacy to learners’ experiences. As normally students are interested in Arts, the researcher attempted to study the effect of two of the streams of Arts i.e., Drama and Visual Arts on achievement in social science.

It was a two group pre-test post-test experimental study. The sample was two sections of Class VIII of a school following CBSE syllabus. While in one section learning process was mainly Dramatisation, in another section it was through Visual Arts. The findings of the study were: there is significant difference between the pre-test and post-test scores of both the groups which learnt the content by Dramatisation and Visual Arts. There is no significant difference in the

---

*A Associate Professor, RIE, Ajmer, Rajasthan*
achievement of the two groups who were exposed to Dramatisation and Visual Arts when comparing their gain scores. There is significant difference in terms of gain scores in the achievement of girls and boys who were exposed to Visual Arts. There is no significant difference in terms of gain scores in the achievement of girls and boys who were exposed to Dramatisation.

**Introduction**

School education is one of the important stages of education which aims at all-round development of an individual and cultivation of qualities of responsible citizens of a country. Students learn several subjects which are compulsory at school level. One of them is Social Science, which lays the base for a just and peaceful society. Because the social sciences tend to be considered non-utility subjects and are given less importance than the natural sciences, it is necessary to emphasise that they provide the social, cultural and analytical skills required to adjust to an increasingly interdependent world, and to deal with political and economic realities (*NCF*–2005).

As social science is a content loaded subject which is hardly dealt with an integrated manner by the teachers, students find it not only heavy but also boring. Making a social science class interesting and participatory and reducing the energy consumed for understanding the content is a challenge to the teachers. While discussing about approach to pedagogy, *NCF*–2005 states that social science teaching needs to be revitalised for helping the learner acquire knowledge and skills in an interactive environment. Teaching of social science must adopt methods that promote creativity, aesthetics and critical perspectives. Further Prof Yashpal (1993) emphasised on developing concepts and ability to analyse socio-political realities rather than retention of information.

Art Education which covers four main streams namely, music, dance, visual arts and theatre, is one such subject that when integrated with any other subject, makes the class lively, participatory and creative. In relation to Art Education, *NCF*–2005 states that music, dance and theatre all contribute to the development of the self, both cognitive and social. It emphasises that learning of any of these arts would enrich the lives of our young citizens, not only in their school years but also throughout their lives. It must become both a tool and a subject taught in every school as a compulsory subject up to Class X. It, further says that dramatisation is one of the under-explored strategies that could be employed.

Though many studies have been conducted in the area of art education, only those that related to effects of drama and visual arts on students have been reviewed by the researcher.
With regard to effect of Art Education in schools, the report of US Department of Education on 10 years of Art Integration states that in the past ten years the Arts in Education Model Development and Dissemination and Professional Development for Art Education grant programme have unleashed the creative minds of students and deepened their learning experiences in core academic subjects through arts integration. There are studies (arteducators.org) which show that Art Education improves academic study, communication and cognitive skills, impacting achievement in other areas. Welch (1995) states that 920 Elementary school students in 52 classrooms in Boston, Cambridge and Los Angeles who were given Visual and Performing Arts lessons for three years outscored non-programme students earning significantly higher report card grades in the core subject areas of language, arts, math reading and social studies.

According to Kelner (1993), creating and encouraging students for not memorising, allows them to synthesise and to translate various educational concepts into personally meaningful form. Neil and Lambert (2012) have said that as students find more opportunities for using the language in French language classes where drama activities are conducted compared to conventional language classes, their verbal skills such as expression, recognition, explanation, reasoning, convincing, planning, anticipation and decision-making are more developed.

Seyedeh and others (2013) in their study on Iranian EFL learners have found out that the group taught by 10 sessions of drama activities has received higher score when compared with the control group. The study also revealed that oral proficiency of male and female is the same regarding the implementation of dramatisation in English classes. These studies show that a focus on drama has resulted in positive effect on the learners in strengthening their linguistic skills and translation of educational concepts in a meaningful form.

Therefore, the researcher felt the need to make social science class interesting, participatory, creative and to go beyond the textbook giving primacy to learners’ experiences. As normally students are interested in Arts, the researcher attempted at studying the effect of two of the streams of Arts i.e., Drama and Visual Arts on achievement in social science.

**Objectives**

The objectives of the study were as follows:

- To find the effectiveness of dramatisation and visual arts in achievement in Social Science.
- To compare the effectiveness of dramatisation and visual arts in achievement in Social Science in terms of gain score.
- To compare the effectiveness of dramatisation in the achievement of girls and boys in Social Science in terms of gain score.
- To compare the effectiveness of visual arts in the achievement of
girls and boys in Social Science in terms of gain score.

Methodology

Design of the study: It was a two group pre-test post-test experimental design. Sample: A sample of the study was two intact groups of students studying in Class VIII in two different sections, following NCERT textbooks. One section learnt the content by Dramatisation and the other section learnt the content through Visual Arts. The class which learnt by Dramatisation had 42 students, out of which 19 were girls and 23 were boys. The class which learnt through Visual Arts had 40 students, out of which 23 were girls and 17 were boys.

Tool: The researcher prepared a post-test for 20 marks on the chapter Judiciary, which was studied by the students through Dramatisation and Visual Arts. It included both written items and performance. The written test had objective type and open-ended questions for 10 marks. The performance of the students in drama and in preparing charts and story boards including the final product was evaluated for 10 marks. Average of the two, out of 10 was considered as post-test scores. The marks considered in the study were out of 10, for pre-test and post-test separately. It was both process and product evaluation which was comprehensive in nature.

Learning Process: The unit on Judiciary (NCERT, 2008), which had two chapters was considered in the study. For both the sections of Class VIII, the researcher narrated the story of Sudha Goel, given in the textbook. The students were also given opportunities to narrate their experiences. In one of the sections; students were given two days time and to present a drama on Sudha Goel's case. The students were advised not to go for formal script writing but to present the case in the form of a drama in their own words to be understood by all. The students themselves planned the scenes, rehearsed and presented. Using their day-to-day experiences, they went beyond the textbook and included scenes of protests by women organisations and interviews by press persons which were beyond the expectations of the researcher. They created the scenes of hospital and court with the available infrastructure, thus showing their creativity. They used all the judicial terms which appeared in the lesson, during their drama in the right context. This surprised the researcher. Every student of the class participated actively at various stages of the drama, performing one or the other role.

In another section of Class VIII, students were asked to prepare a collage on Civil and Criminal cases using the clippings from newspapers, magazines etc. Students were so creative, one group prepared a base of outline of India and stuck the cut-outs of cases on it. Another group collected to collect news cuttings in various southern languages and stuck them within the boundary of the states. One more group formed
the base of ‘Nyaya Devata’ or the God of Justice to show justice and stuck civil and criminal cases in two bowl shapes of the balance held in his hand. Other two groups drew series of cartoon pictures to form a story board of Sudha Goel’s case. Different sceneries were drawn beautifully and coloured neatly. The skill acquired by the students through Arts class was used here by the researcher.

**Pre-test**: Marks obtained by the students in Formal Assessment I in Social Science for ten marks was considered as pre-test scores.

**Analysis and Interpretation**

The researcher analysed the pre-test and post-test scores obtained by the students of both the groups in terms of actual scores as well as gain scores. They are reflected in Table 1 to Table 4.

| **Table 1: Mean, SD and t-value of groups – Dramatisation and Visual Arts** |
|----------------|----------------|----------------|----------------|
| **Group**      | **N**          | **Pre-test**   | **Post-test**  | **t-value**   |
|                |                | **M** | **SD** | **M** | **SD** |          |
| Dramatisation  | 42             | 4.40  | 2.35  | 7.8   | 1.58   | 5.57*   |
| Visual Arts    | 40             | 4.87  | 2.58  | 7.7   | 1.83   | 5.66*   |

*Significant

Table 1 shows that the group which was taught mainly by Dramatisation has obtained a t-value of 5.57. The table value is 2.64 for df 82 for the obtained value to be significant at 0.01 level. As the obtained value is 5.57, which is more than the table value, there is significant difference between the pre-test scores and the post-test scores of the Dramatisation group.

This shows that Dramatisation has been effective in the achievement of learners in Social Science.

Table 1 also shows that the group which was taught mainly by Visual Arts has obtained a t-value of 5.66. The table value is 2.64 for df 78, for the obtained value to be significant at 0.01 level. As the obtained value is 5.66 which is more than the table value, there is significant difference between the pre-test scores and the post-test scores of the Arts and Crafts group. This shows that Visual Arts has been effective in the achievement of learners in Social Science. In other words both the groups have shown significant difference between their pre-test scores and the post-test scores. Therefore, we can say that both Dramatisation and Visual Arts have been effective in improving the performance of learners in Social Science.

Though both the groups have shown significant difference in their achievement, the researcher wanted to find out whether there is significant difference between the gain scores of the groups which was taught mainly by Dramatisation and Arts and Crafts.
Therefore, Mean, SD and t-value of the groups were calculated based on their gain scores as given in Table 2.

As per Table 2, the group which learnt by dramatisation has a higher mean gain i.e., 3.40 when compared with the group which learnt by Visual Arts i.e., 2.83. The obtained t-value is 1.54. For df 80, table value is 1.99 to be significant at 0.05 level. But as the obtained value (1.54) is less than the table value (1.99), it is said that there is no significant difference in the mean gain between the two groups, though there is a mean difference of 0.57. This shows that in terms of gain from the two approaches, both the approaches have been equally effective and there is no much difference between the two groups as far as the achievement of the students in Social Science is concerned.

Later, the Investigator wanted to find out whether there is any difference between the girls and boys in terms of their gain in the achievement from pre-test to post-test when learnt through Dramatisation and Visual Arts. Tables 3 and 4 give the statistics related to it.

According to Table 3, the difference between gain mean of girls and boys is only 0.50 and the obtained t-value is 0.96. Even though the boys have secured a greater gain mean i.e., 3.65, when compared with the girls, the difference between the means is not significant. For df 40, t-value to be significant at 0.05 level, table value is 2.02. But, as the obtained value (0.96) is less than that, it can be said that there is no significant difference between the girls and boys in their achievement in Social Science when learnt through Dramatization.

In other words both girls and boys have been benefitted equally by the Dramatisation approach to learning Social Science.

**Table 2: Mean, SD and t-value of Dramatisation and Visual Arts groups based on their Gain Scores**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dramatisation</td>
<td>42</td>
<td>3.40</td>
<td>1.66</td>
<td>1.54**</td>
</tr>
<tr>
<td>Arts and Crafts</td>
<td>40</td>
<td>2.83</td>
<td>1.82</td>
<td></td>
</tr>
</tbody>
</table>

**Not Significant

**Table 3: Mean, SD and t-value of Girls and Boys of Dramatisation group based on their Gain Scores**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girls</td>
<td>19</td>
<td>3.15</td>
<td>1.76</td>
<td>0.96**</td>
</tr>
<tr>
<td>Boys</td>
<td>23</td>
<td>3.65</td>
<td>1.71</td>
<td></td>
</tr>
</tbody>
</table>

**Not Significant
Effect of Integration of Arts on Achievement ...

**Table 4: Mean, SD and t-value of Girls and Boys of Visual Arts group based on their Gain Scores**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girls</td>
<td>23</td>
<td>3.60</td>
<td>1.44</td>
<td>3.27*</td>
</tr>
<tr>
<td>Boys</td>
<td>17</td>
<td>2.06</td>
<td>1.57</td>
<td></td>
</tr>
</tbody>
</table>

* Significant

According to Table 4, the difference between gain mean of girls and boys is 1.54 and the obtained t-value is 3.27. The girls have secured a greater gain mean i.e., 3.60, when compared with the boys (2.06). For df 38, t-value to be significant at 0.01 level, table value is 2.71. As the obtained value (3.27) is greater than that, it can be said that there is significant difference between the girls and boys in their achievement in Social Science when learnt through Visual Arts. In other words, girls have been benefitted more by the Visual Arts approach to learning Social Science when compared with the boys.

**Findings of the Study**

- There is significant difference between the pre-test and post-test scores of both the groups which learnt the content by Dramatisation and Visual Arts.
- There is no significant difference in the achievement of the two groups who were exposed to Dramatisation and Visual Arts when comparing their gain scores.
- There is significant difference in terms of gain scores in the achievement of girls and boys who were exposed to Visual Arts.
- There is no significant difference in terms of gain scores in the achievement of girls and boys who were exposed to Dramatisation.

**Educational Implications**

The present study as well as other studies has shown that when Drama and Art are integrated in the learning core subjects, students show higher achievement. Therefore, it is recommended that Drama and Visual Arts must be taught in all the schools and teachers who handle other subjects should try their best to integrate them for better result in learning. Hence, the authorities may plan in-service programmes for teachers on integrating Drama and Visual Arts in teaching their subject. Attempts are also required to be made to provide sufficient practice time to the student teachers of pre-service teacher education programmes in integrating Drama and Visual Arts while teaching the core subjects. This not only strengthens the skill in various aspects but also increases the participation of both students and student-teachers, in the process of learning, making learning a joyful educative activity.
REFERENCES


WELCH, NANCY AND ANDREA GREENE. 1995. ‘Different ways of knowing’. In *Schools, Communities and the Arts: A Research Compendium*. Morrison Institute for Public Policy.

www.artinaction.org/w/whyart

Status of Continuous and Comprehensive Evaluation (CCE) at Elementary Schools of Khordha District of Odisha

Prabhat Manjari Sarangi*

ABSTRACT

This paper discusses the status of Continuous and Comprehensive Evaluation in elementary schools of Khordha district, Odisha. A sample of 40 students, teachers and head teachers was selected by using random sampling technique. For collecting data interview schedule, questionnaire and official documents were used. The analysis of data revealed that CCE conducted in elementary schools at Khordha district of Odisha have little influence on all-round growth and development of the learners. Awareness programmes for teachers and effective monitoring mechanism programme are needed to achieve the goal of CCE.

Introduction

Since independence, our National Governments have put enormous efforts to achieve the aim of Universalisation of Elementary Education (UEE). Sarva Shiksha Abhiyan is a flagship programme of central government which makes an attempt to universalise Elementary Education in terms of access, enrolment and retention in schools. Emphasising on quality education at elementary level, a number of provisions have been introduced for learners like free textbooks, uniform, mid-day meal, scholarship, flexibility in evaluation etc.

In-spite of all the efforts at different levels, more than fifty per cent of learners leave the school before completion of their elementary education and those who remain do not achieve the quality as desired. One of the major factors for leaving the school system amounts to lack of interest among learners towards school system. Learners are afraid of the threatening examination system. It perpetuates dropout among a large number of students. To overcome this problem reform such examination

*AAssistant Teacher, Kapil Prasad UGUP School, Bhubaneswar, Khordha, Odisha
system. As a result, Continuous and Comprehensive Evaluation (CCE) was introduced in school system consequent to the mandate under the RTE Act-2009.

Different commissions like Radhakrishnan Commission (1948-49), Mudaliar Commission (1952-54), Kothari Commission (1964-66) have given the idea about the importance of examination in school system. The National Policy on Education (1986), Programme of Action (POA) (1992) envisaged the need of CCE at all stages of school education. The National Curriculum Framework (2005) recommended CCE and suggested flexibility in assessment procedure at the school level to assess and emphasise the assessment tasks for the learners. The RTE Act (2009) has also made the use of CCE mandatory till the completion of elementary stage of education. The Central Advisory Board of Education (CABE) approved a decision on 31st August 2009, to implement CCE. It managed to get a broad consensus on education reforms including making examination optional. Under CCE system students will be evaluated throughout the academic year and there will be formative and summative assessment.

Status of Current Evaluation System

The present system of evaluation at school stage has been criticised by different names i.e., a dead hand of education, an enemy of true education, a blood sucker, an obstacle to learning, a necessary evil, a growing tyranny etc. The present examination system covers only a part of the syllabus through written examination. It does not cover all the areas of pupils’ growth. Too much emphasis is given on memorisation and ignores metacognitive abilities. It does not measure students real potential. It gives little emphasis on abilities and skills that require higher mental operations like problem-solving, creative thinking, summarising, inferring, arguing etc. It does not apply multiple techniques of evaluation like oral, observations, projects, assignments etc. It lays emphasis on the maxims “whatever is tested is to be taught and whatever is not tested is not to be taught”. It emphasises on psychological fear and tension. Results of examinations are only declared in terms of raw scores. There exists subjectivity to a great extent in evaluating a learner. It fails to evoke the role of diagnostic and remedial teaching. No admission test was conducted for admitting learner into the school. Teachers prepared the question papers. Home Work was given. Unit test, quarterly test, half-yearly and annual examination conducted through oral and written test and considered for promotion to next higher class. Grades were given for reporting. Evaluation on co-scholastic competitions was conducted but activities like yoga, drawing and painting, quiz and fancy dress competitions etc., were least encouraged in the school. Remedial classes of low quality were conducted. Less number of teachers, inadequate
classrooms, work load on teachers and learners created problems for continuous and comprehensive evaluation (Das, 2010).

The activities such as debate, recitation, creative writing, music, drama, dance, painting, drawing, games, sports and other outdoor and indoor activities termed as co-scholastic or other curricular activities were mostly neglected in schools. Availability of textbooks, assigning homework and socio-economic status were related to higher student achievement. School based interventions elevate students’ achievement (Schiefelvin and Simons, 1981; Lockheed and Verspoor, 1991).

Rationale of the Study
Instive of CCE is being recommended by NCF–2005 and RTE–2009, it is not being practiced truly in a manner envisaged under NCF–2005 and RTE–2009. Being a mandatory obligation now the state of Odisha has also introduced it in all schools. The present study was intended to understand the existing status of Continuous and Comprehensive Evaluation (CCE) at elementary schools of Khordha district of Odisha”.

Objectives of the Study
The objectives formulated for the study are

- To study the present status of CCE in the Elementary Schools of Khordha district of Odisha.
- To examine the level of awareness of the Elementary School teachers as regards CCE.

Delimitation
The study is conducted in 40 Elementary schools of Khordha district of Odisha.

Sample
In this study the procedure of random sampling was adopted to select 40 elementary schools (4 from each block). Accordingly Head teacher of those schools, one teacher and one student from each school were considered as sample for the study.

Tools Used
To collect data, document analysis tool was adopted to select 40 elementary schools (4 from each block). Accordingly, the Head teacher of those schools, one teacher and one student from each school were considered as the sample for the study.

Analysing and Findings
The objective of CCE is to look at assessing cognitive, psychomotor and affective skills in a holistic manner. It lays emphasis on thought process and de-emphasises memorisation. It makes evaluation an integral part of teaching-learning process and use evaluation for improvement of students’ achievement. As per state framework, CCE shall cover curricular areas, other curricular areas and Social Personal Qualities (SPQ).

Curricular areas vary at different classes of elementary level. Percentages of subjects assessed at different classes of elementary level are presented in table 1.
Table 1: Percentage of Subjects assessed in different classes of Elementary level N=40

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Primary Classes-I-II</th>
<th>Primary Classes-III-V</th>
<th>Upper Primary Classes-VI-VIII</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Mathematics</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Environmental studies</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>General Science</td>
<td>0</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>English</td>
<td>0</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Social Science</td>
<td>0</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>History</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Geography</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Hindi</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Sanskrit</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
</tbody>
</table>

Perusal of the table shows that subjects like Language, Mathematics and Environmental studies were assessed in Classes I to III in cent-percent schools whereas including Language and Mathematics, General Science, English and Social Science were evaluated in Classes III to V. Besides Social Studies, other subjects including History, Geography, Hindi and Sanskrit were assessed in Classes VI to VIII. It was found that English was often started from Class III to higher level of classes at elementary level. *It has been observed that though Hindi and Sanskrit books were provided to the students of Classes-VI-VIII, no assessment were conducted in those subjects. Little emphasis was given on those subjects at particular classes.*

Other curricular areas include Art Education, Health and Physical Education, Work Experience and participation in curricular activities (language skill, nature observation, games and sports, mono action, dance, song, drawing, scientific skills, literary activities, scouts and guides, First Aid, Red Cross). Percentages of assessment in other curricular areas are presented in table 2.

Table 2: Percentages of assessment of other curricular areas N=40

<table>
<thead>
<tr>
<th>Other Curricular Areas</th>
<th>Primary Classes-I-II</th>
<th>Primary Classes-III-V</th>
<th>Upper Primary Classes-VI-VIII</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Education</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Health and Physical education</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Work Experience</td>
<td>0</td>
<td>80</td>
<td>100</td>
</tr>
</tbody>
</table>
A close look at the table shows that cent-percent schools assessed areas like Art Education, Health and Physical Education, language related skills, games and sports and cultural activities in each class at elementary level. No assessment of work experience at Class I to II was found whereas cent-percent schools emphasised work experience at upper primary level and eighty per cent from Class III to V. Eighty per cent of schools opined that they followed the skill of nature observation and scientific skill from Class III to VIII. Though there is provision of emphasising Scout and Guides, First Aid and Red Cross at upper primary level, no scope for emphasising those subjects was found. Therefore, no evaluation adopted for those areas at elementary level of schools in the district.

Aim of education is to promote all-round growth and development of a learner which includes development in the area of social personal qualities as well. As per state norm SPQ includes assessment in Cleanliness (personal and social) Co-operation, Responsibility, Punctuality, Environmental awareness and protection, Love for physical labour, Respect towards superior. Percentage of schools assessing different aspects of Social Personal Qualities (SPQ) are presented in table 3.

### Table 3: Percentage of schools assessing different aspects of Social Personal Qualities N=40

<table>
<thead>
<tr>
<th>Social Personal Qualities</th>
<th>Primary (I–V)</th>
<th>Upper Primary (VI–VIII)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleanliness</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Co-operation</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Responsibility</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Punctuality</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Environmental awareness and Protection</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Love for Physical labour</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Respect towards superior</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
Perusal of the table shows that while cent-percent schools assessed social personal qualities like cleanliness, cooperation, responsibility, punctuality and respect towards superior at elementary level, no school assessed other qualities like environmental awareness and protection and love for physical work. It has been found that all the sample schools opined that they evaluated other aspects like truthfulness, tolerance and leadership qualities also at different classes of the elementary level. From this observation it has been found that there is least emphasis given on most of the social personal qualities like environmental awareness and protection and physical labour for a learner which is very essential for bringing a well being society.

Different techniques are used for assessing students performance at elementary level which have been presented in table 4.

A close look at the table shows that while observation, written test, oral test were used to evaluate the learners in curricular and other curricular areas in cent-percent schools, only observation was used for assessing social personal qualities. No other techniques were used for ascertaining SPQ. It has been pointed out that perhaps teachers were not acquainted with using techniques like checklist, rating scale and anecdotal records. Teachers also opined that though assignments and projects were given but they were only checked and not evaluated. Therefore, might be due to non-exposure of teachers to assess those areas.

Tests are used to determine the level of learners at classroom situations. Hence, different means used for assessing CCE at elementary levels are presented in table 5.

### Table 4: Percentage of schools using different techniques for assessing students performance N=40

<table>
<thead>
<tr>
<th></th>
<th>Curricular Areas</th>
<th>Other curricular Areas</th>
<th>Social Personal Qualities (SPQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observation</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Written</td>
<td>100</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Oral</td>
<td>100</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Assignment</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Project</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Checklist</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rating scale</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Anecdotal record</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Perusal of the table 5 shows that while unit test, half-yearly test and annual tests were conducted in cent-percent sample schools for the assessment of curricular areas, only half-yearly and annual tests were adopted for assessing other curricular areas. No class test, diagnostic tests and term end tests were adopted for assessing curricular areas of the sample schools. Social Personal Qualities were assessed only annually in all the sample schools through observation. No other means were adopted for ascertaining those qualities.

Schools adopted different procedure for assessing level of learners. Percentage of schools followed different types of assessment procedures are presented in table no. 6.

A close look at the table shows hundred per cent schools assessed curricular areas individually. Eighty percentage of schools assessed other curricular areas individually and twenty percentage by group. As far as assessment of SPQ is concerned both individual and group assessment was followed by hundred percent of schools. No scope for self or peer assessment was found for assessing above areas.
Recording assessment is very much important in CCE. Different forms of recording assessment are presented in table 7.

Perusal of the table shows that curricular areas were assessed by hundred percent schools by following both marks and grades. Five point grading scales i.e., A, B, C, D, E were used in recording curricular areas. Students secured 80 per cent or above will get ‘A’ grade, students secured 65 to 79 per cent will be awarded grade ‘B’, in between 50 to 64 per cent will placed in ‘C’ grade, in between 35 to 49 per cent will find themselves ‘D’ grade and students secure 34 per cent or below it will be declared with ‘E’ grade. It was found that other curricular areas like art education, games and sports, health and physical education, music and social personal qualities assessed were recorded in three point grading scale i.e., A, B, C. ‘A’ indicates excellent, ‘B’ indicates good and ‘C’ indicates needs special attention. No record was found about the assessment of other areas except mentioned above.

Successful implementation of CCE depends on teachers’ capabilities and efficiency. So teachers need to be trained on CCE. Percentages of teachers trained in CCE are presented in table 8.

A close look at the table 8 shows that no training was organised for teachers at elementary level for conducting CCE. Hundred percent teachers opined that some aspects of CCE were discussed in monthly sharing meeting.

**Findings of the Study**

- Subjects like Language, Mathematics and Environmental

---

**Table 7: Percentage of schools using different forms of recording students assessment N=40**

<table>
<thead>
<tr>
<th>Forms of recording assessments</th>
<th>Curricular Areas</th>
<th>Other curricular areas</th>
<th>Social Personal Qualities (SPQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sores/Marks</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Grades</td>
<td>0</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Both marks &amp; grades</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Notes/Diary</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Table 8: Percentage of teacher trained for conducting CCE N=40**

<table>
<thead>
<tr>
<th>Areas</th>
<th>Teachers trained at Primary Level</th>
<th>Teachers trained at Upper Primary level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curricular Areas</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other curricular areas</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Social Personal Qualities (SPQ)</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
studies are assessed in curricular areas from Class I to II.

- A subject like English is being added and in lieu of Environmental studies, General science and Social Science are being assessed from Class III to V.
- The subjects Social Science gets divided into History and Geography and other subjects remain unchanged and are being assessed from Class VI to VIII. In addition to those subjects Hindi and Sanskrit are added to the assessment process in Class VIII but with no seriousness.
- Though English was introduced in Class III but only oral technique of assessment is adopted for determining the level of learning.
- Other curricular areas like Art Education, Health and Physical Education, Language skills, Games and Sports, Dance, Song are evaluated at elementary level. Besides areas cited above, a little variation was found for assessing other areas.
- No Scout and Guides, First Aid, Red Cross are emphasised at Upper Primary level of schooling.
- Social Personal Qualities (SPQ) like cleanliness, regularity and respect for others were evaluated in cent-percent schools at upper primary level annually using three point value scale i.e., ‘A’ includes (Excellent), ‘B’ includes (Good), Grade ‘C’ indicates (needs special attention).

- It is found that least emphasis was given on most of the socio-personal qualities of the learner. It indicates that it makes a barrier for all-round growth and development of the learner.
- While observation, written and oral test are used to evaluate curricular and other curricular areas in cent-percent schools, only observation is used for assessing social personal qualities of students.
- Hundred percent schools follow unit, half-yearly and annual test for ascertaining curricular areas using five point grading scale and other curricular areas are assessed half-yearly and annually using three point grading scale. SPQ is assessed annually using three point grading scale.
- Hundred percent schools assess curricular areas individually. Eighty percentage of schools assess other curricular areas individually and twenty percentage by group. SPQ is assessed by both individual and group in hundred percent of schools.
- While hundred percent schools follow both marks and grades for curricular areas only grades are used for determining other curricular areas and social personal qualities.
- Teachers are not trained at all for conducting CCE.

<table>
<thead>
<tr>
<th>Areas</th>
<th>Teachers trained at Primary Level</th>
<th>Teachers trained at Upper Primary level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curricular Areas</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other curricular areas</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Social Personal Qualities (SPQ)</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 8: Percentage of teacher trained for conducting CCE N=40
Conclusion
From the present study, it may be concluded that thrust of quality education can be achieved through continuous and comprehensive evaluation. Though it is a better means for moving towards all-round growth and development of a learner in schooling system, still due to lack of training, experience, awareness among teachers it becomes difficult to achieve the goal. During the process of implementation most of the actions taken by the teacher in the form of continuous and comprehensive become ritual. The assessment of personal social qualities is not being done continuously. Personal bias and carelessness play an important role in lieu of continuity of observation. Due to lack of right orientation towards the programme and much of paper work the teachers feel it as necessary evil and perform the activity as duty bound. The flexibility of examination creates tension in both teacher and learner though the curriculum of NCF –2005 thought otherwise. Hence, it becomes necessary to impart training to teacher who practices CCE in regular schooling with authenticity. It is easy to modify the reporting card i.e., progress report for documenting all the aspects to be assessed in each class but to make it effective frequent monitoring and supervision of CCE at school level become essential.

REFERENCES
Sarangi, D. Continuous and Comprehensive Evaluation of students learning and progress at elementary stage in Odisha. A mandate U/S 29 (h) of RTE, 2009.
Children with Learning Disabilities – Teaching Effective Coping Strategies
Sneh Bansal*

In India, disability is still viewed in terms of a “misfortune” with a ‘better dead than disabled’ approach; the idea being that it is not possible for children with disability to enjoy and lead a good quality of life. The parents of children with disabilities develop ‘chronic sorrow’ characterised by periodic recurrence of grief, shame, shock and pain. They are overwhelmed by feelings of glumness, resentment, and humiliation. Rejection, projection of blame, guilt, pain, withdrawal and acceptance are some of the usual parental reactions. Some parents also experience helplessness, feelings of inadequacy, anger, shock and guilt, whereas others go through periods of disbelief, depression and self-blame. The siblings also experience feelings of guilt, shame and embarrassment (Frude, 1992).

There is a strong belief in some families that the birth of the child with disability in the present life is attributable to past life. In the Indian context, mothers are often held responsible for the birth of a child with disability, in the credence that she is punished by God. Illiteracy is seen as the reason behind most of these beliefs and taboos. Regardless of various government policies since independence, a major portion of the Indian population is still illiterate. Universal Elementary Education (UEE) is one of the Millennium Development Goals (MDG) set for the Year 2015. UEE implies universal enrolment, universal retention and universal performance. This MDG synchronises with the targets set by the government of India. The National University of Educational Planning and Administration (NUEPA) has recently developed School Report Cards of more than one million Primary and Upper Primary schools. Covering 11,24,033 schools, the publication updates more than 400 variables for 604 districts across 35 states and union territories on all aspects of universalisation of

*Assistant Professor, Department of Education, Chandigarh College of Education, Mohali, Punjab
education, and shows that Kerala, Delhi, Tamil Nadu, Karnataka and Himachal Pradesh are the top five while Bihar, Jharkhand, West Bengal, Uttar Pradesh and Assam are the five bottom-ranked states (*DISE District Report Cards, 2005-06*). Whatever may be the reflection through the ranks in education development index, the gains are lost due to ‘burning at both ends’—high rate of school dropout and poor performance due to poor quality.

Currently, there is a trend towards inclusive education. At present, 5.5 million teachers teach 202.5 million children in about one million schools. Statistics show that 82 per cent of the population has access to primary education within a one-kilometer radius of home (Rajakumar, Kumar, Uppal, and Devikar, 2005). The number of children with disabilities in normal schools is approximately 40,000 (Mani, 2001), which far exceeds the number of children in special schools.

One of the primary objectives of SSA is to educate girls and children with special needs, currently less well-served. There are children who have special needs, for whom the nature and intensity of required care is even more significant. There are many children who look normal and behave normally but academically are not as good as their peers. In spite of having average or above average intelligence, these children may face difficulties in one or several areas of academics such as reading, arithmetic, spelling and writing. Some of these children excel in many areas other than the problem area; others are merely slow in acquiring school related skills (Karanth, 2003). These children are wrongly called lazy, unmotivated, stubborn, not trying to work, dumb etc. Unlike physical disabilities, learning disabilities are not so obvious and have been referred to as “hidden handicap”. Sometimes these disabilities go unrecognised by parents, teachers, and physicians.

Learning Disability (LD) is one of the prime causes of poor academic performance in children. In learning disability, the acquisition and use of academic skills of reading, writing, spelling, reasoning, mathematics or social skills may be significantly impaired, even though the child has normal or above normal intelligence. Learning disabilities are disorders that affect the ability to understand or use spoken or written language, do mathematical calculations, coordinate movements or direct attention (National Institutes of Health, 2011). It is reported that in India, nearly 10 per cent of children and adolescents in the age range of 0-18 years experienced learning difficulties. In the majority of cases reading and calculation deficits are seen together. Thus, learning disabilities are prevalent but are more difficult to recognise and define in comparison to physical disabilities. Children who have learning disabilities represent a group of people who have been excluded, rejected, ridiculed and often feared for centuries. The inheritance of a
negative social history shows how a lack of value can persevere across generations and prejudice the lives of individuals. Students with learning disabilities are typically less well-liked, more frequently rejected, have lower academic self-concept scores (Vaughn and Elbaum, 1996), score lower in self-perceived intelligence, academic skills, behaviour, and social acceptance (Smith and Nagle, 1995), and tend to be more vulnerable to bullying (Mishna, 2003) than other students. This environmental stigma, more intangible and unpredictable than for people with physical disabilities, magnifies the importance of socialisation and social comparison for people with learning disability (Dagnan and Waring, 2004). People with learning difficulties may prefer not to identify with others with disabilities, because of perceived negative effects on self-esteem (Harris, 1995) and a desire for normalisation. Although some individuals with learning disabilities might cope by regarding themselves as part of a minority group which rejects prejudice, others might distance themselves from those disabilities and from potentially stigmatising services (Jahoda and Markova, 2004). Some students may go to great lengths to avoid difficult tasks while trying to appear competent and pass as “normal” (Rueda and Mehan, 1986). There is strong evidence that individuals with learning disabilities (LD) experience more social, emotional and motivational difficulties than those without LD. In school, students with LD have academic difficulties coupled with lower academic self-concepts and lower self-perceptions and self-esteem. In addition, it has generally been acknowledged that students with LD view their own academic skills and self-regulatory capacities as weaker than those of their normally achieving (NA) peers.

The IDEA (2004) represents the most influential of learning disabilities. As defined in IDEA (2004), the SLD definition reads as follows:

**In General** - The term “specific learning disability” means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in an imperfect ability to listen, think, speak, write, spell or do mathematical calculations.

**Terms Included** - Such term includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia and developmental aphasia.

**Terms Not Included** - Such term does not include a learning problem that is primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage. (P.L. 108-466, Sec. 602[30])

Subtypes of learning disabilities include:

1. **Reading** (dyslexia): Dyslexia is functionally defined as a disorder in one or more of the basic skills involved in reading, including decoding (i.e., letter-word recog-
1. **Definition, phonetic analysis** and comprehension.

2. **Mathematics** (dyscalculia): Dyscalculia is functionally defined as a disorder in one or more of the basic skills involved in mathematics, including mechanical (computational) arithmetic and mathematics reasoning abilities.

3. **Written expression** (dysgraphia): Dysgraphia is functionally defined as a disorder in written expression that involves deficits in one or more of the following: (a) the motor production writing, including letter formation, speed of writing production, and spatial organisation of writing; (b) knowledge of rules for spelling, punctuation and capitalisation, and grammatical usage; (c) semantic abilities related to clear expression of information written form; and (d) organisational ability, related to the thematic construction and organisation of written discourse.

4. **Social-emotional functioning** (social-emotional learning disabilities): Social-emotional learning disability is functionally defined as a form of socio-emotional disturbance caused by specific patterns of central processing abilities and deficits, as opposed to socio-emotional reactions that often develop secondary to the frustration inherent in dealing with the consequences of learning disabilities. The functional social emotional deficits lie in the areas of adaptation to novel situations, social competence (e.g., judgement social interaction, social perception) and poor pragmatic communication ability.

**Facts about Learning Disabilities**

- More boys than girls are identified as learning disabled; the ratio is about 3:1. Recent studies suggest that as many girls as boys may have the condition but are not identified.
- Students with learning disabilities are usually identified by the time they reach late third or early fourth grade.
- More students are identified because of deficits in reading and the language arts than in mathematics.
- IQs of identified LD students are typically in the 90 to 95 range.
- Students with LD tend to have deficits in short-term memory. In looking at testing results, you will find that short-term memory scores are often below the 25th percentile.
- About one-third of students on Resource Specialist caseloads have attentional deficits, and a somewhat higher percentage of students in special day classes have attentional problems.
- Phonological awareness deficits and poor phonics development are common among the LD population. Phonemic awareness and phonics training will make
LD students better readers and spellers.

- Students with LD are not as socially acceptable as other students when rated by their peers and teachers.
- As many as 50 per cent of students with LD will drop out of school prior to high school graduation.

Learning disabilities comprise a heterogeneous group of individuals displaying various behavioural patterns. Individuals with LD need early identification, sound remedial teaching appropriate to their needs, personal and family counselling, continuous training in social skills, vocational guidance, and on-the-job coaching. This suggests the needs for the adaptation of instructional methodologies and approaches to accommodate the learning disabled children.

The year 2010 was a landmark year for education in the country. The government has recently launched the Sarva Shiksha Abhiyan (SSA). This proposes to implement universalisation of elementary education (UEE) in a mission mode with a focus on providing quality elementary education to all children in the age group 6–14 years. The Right of Children to Free and Compulsory Education (RTE) Act, 2009, representing the consequential legislation to the Constitutional (86th Amendment) Act, 2002, was enforced with effect from 1 April, 2010 (Ministry of Human Resource Development, 2010). This Act makes education free and compulsory to all children of India in the 6-14 years age group, and it states that no child shall be held back, expelled or required to pass a board examination until completion of Class VIII. Because the RTE Act mandates free and compulsory education to all children of India in the 6-14 years age group, the unique learning needs of children with LD, who comprise 5-15% of the school-going population, can no longer be ignored (Karande and Gogtay, 2010). However, The RTE Act seems to be ignoring the need for making adequate provisions for these children. Not only modification and accommodations in curriculum may be required but teachers also need to be trained and sensitise to guide such children.

In a country like India, the awareness to learning disability is very meager and at a negligible rate. This inheritance requires proactive measures to ensure that the learning disabled can actively participate in all aspects of social life. Cultural beliefs about disability play an important role in determining the way in which the family perceives disability and the kind of measures it takes for prevention, treatment and rehabilitation. Given the importance of children’s educational outcomes, it is crucial that school professionals are well-versed of instructional strategies supported by scientific evidence. Several specific instructional methods have been used with varying degrees of success with learning disabilities: applied behaviour analysis and behavioural intervention, self-monitoring, metacognitive strategy.
instruction, attribution training, cooperative learning, peer tutoring, and mnemonic devices. Various evidenced based interventions related to reading, mathematics and writings have been discussed in next section.

**Reading Intervention: supported Practices**

Learning Disabled (LD) students experience greater problems with reading than any other academic areas. Researchers reported that 85% to 90% of all LD students experienced difficulties in reading. A number of empirically supported instructional practices have been demonstrated to improve the reading skills of children (National Reading Panel, 2000).

Students with learning disabilities in reading comprehension and basic reading skills, frequently have weaknesses in reading fluency. Typically, they do not process groups of words as meaningful phrases. Previewing has proven a particularly effective technique to improve the reading skills of children. Previewing is defined as "any method that provides an opportunity for a learner to read or listen to a selection or passage prior to instruction and/or testing". The most prevalent previewing strategies used in the classroom are oral previewing (the student reads the passage aloud prior to the reading session), silent previewing (the student reads the passages silently prior to the reading session), and listening (the student listens to and follows along as someone reads the passage aloud). Evidence has offered some encouragement that the reading and reading-related abilities of disabled readers can be substantially improved with intensive and focused instructional programmes. Additional practices have been recently examined that involve highly structured and explicit instruction in decoding, word recognition, fluency, and reading comprehension as well as incorporate peer-assisted learning strategies (Fuchs and Fuchs, 2005). Some strategies that can help students with reading disabilities include index card guides, comprehension through pre-reading, increasing vocabulary skills, researching a topic prior, ask vital questions, sight word-word bingo, flashcards, word hunts, word walls. Strategies and accommodations that may be helpful for these students include: reading material aloud, repeating key points, highlighting important information, the copying of class notes, extended time on assignments and tests, small group instruction, reducing homework, books on tape, study guides for tests, and a buddy system (Smith, Polloway, Patton, and Dowdy, 2007).

For teachers it is crucial to teach the students the basic fundamentals of reading so that they can advance and fully function in society. Teachers are continuously looking for ways to help their students reach and even exceed the standards. New ideas and strategies are constantly being presented to help students with LD learn reading skills better and faster.
Students with learning disabilities also have difficulty with much of the vocabulary used to communicate academic concepts. Understandably, comprehension depends not only on the readers' general background knowledge regarding the topic at hand, but also on their familiarity with the terminology and vocabulary used in the text. Researchers have investigated the impact of various vocabulary interventions on both word knowledge and comprehension of passages among students with learning disabilities. For example, Jenkins and colleagues investigated the impact of various vocabulary interventions on both word knowledge and comprehension of passages among students with learning disabilities. They compared several treatments that varied in the amount of direct instruction provided. Students read sentences containing target words and synonyms, read definitions of target words, and practiced using target words in sentences. Results indicated that practice was critical to optimum learning. When students practiced using the target words, they learned more synonyms and their sentence comprehension improved, demonstrating transfer of learning.

**Mathematics Interventions: supported Practices**

Mathematical proficiency is essential not only to success in school, but also to success in adult life. Over the past 10 years, researchers have begun to take a closer look at Mathematics Learning Disabilities (MLD). Geary (2004) estimated the prevalence of MLD at between 5 per cent and 8 per cent of the school-age population, similar to the estimated prevalence of reading disabilities. Mathematics is unique in that learners must acquire and apply a wide variety of different concepts and skills to be successful across the multiple branches in mathematics (e.g., algebra, geometry). Additionally, for most of these topics, learning is cumulative; in other words, new math skills and applications depend on mastery of previous concepts and skills. During the early years, children usually build up number sense, which then grows along the lines of the various Piagetian operations (e.g., number conservation, classification, seriation) and in combination with various counting skills. A basic understanding of arithmetic operations is established at this time. Then next step is to learn the four basic mathematical operations (i.e., addition, subtraction, multiplication, and division). Acquaintance of mathematical operations and a competence to carry out mental arithmetic play a significant role in the development of children's later math skills (Mercer and Miller, 1992; Van Luit and Naglieri, 1999). Most children with math learning difficulties are unable to master the four basic operations before leaving elementary school and, thus, need special attention to acquire the skills. Mastery of the basic operations, however, is not sufficient: Students must also acquire
problem-solving skills in addition to the basic computational skills. For mathematical problem-solving, that is, children must not only acquire the basic mathematical skills but also know how and when to apply their knowledge in new and sometimes different situations. The third category of interventions addresses such problem-solving skills. Moreover, in solving mathematics word problems, it is not always clear just which procedure to apply or approach to adopt, which must therefore be learned. In keeping with these steps, a distinction can be made between interventions that focus on (a) Preparatory arithmetic, (b) Automatisation of basic math facts, or (c) Mathematical problem-solving strategies. Kroesbergen and Van Luit (2003) concluded that direct instruction is most effective for teaching basic skills; and are superior to peer mediated/assisted instruction (e.g., peer tutoring or computer-assisted instruction) for teaching mathematics generally. Self-instruction, a self-regulation strategy, is the most effective method for teaching math problem-solving.

- **Strategy Training:** This strategy refers to any explicit problem-solving heuristic procedures (e.g., direct instruction, cognitive and metacognitive) that lead to the solution of the problem. These may involve explicit teaching or self-regulation of a strategy in isolation or together with other elements (e.g., paraphrasing, visualising, hypothesising, and estimating the answer). Direct instruction and cognitive strategies relate to how to solve a problem, whereas metacognitive strategies relate to knowing how to solve a problem and may include self-instruction, self-questioning, and self-regulation procedures.

- **Computer-aided Instruction (CAI):** This variable refers to an intervention that employs CAI tutorial or interactive videodisc programmes. Technology has proven to be an effective method of giving such students opportunities to engage in basic drill and practice, simulations, exploratory, or communication activities that are matched to their individual needs and abilities. Word processing Software, Word Prediction Software, Communication Technologies, Hyperlinks and Multimedia Environments are some of the computer activities that have significant benefits for students with disabilities.

- **Peer-mediated Instruction:** Peer-mediated instruction, also referred
to as peer tutoring, peer-assisted learning, peer monitoring, or peer facilitation, is a widely applied and research-validated intervention in both general and special education settings (Hall and Stegila, 2003). Peer-mediated instruction is an instructional arrangement in which peers serve as the main instructional agent for other students. Peers mediated approaches are not used in new content, however, it is used to reinforce, provide practice, or build fluency of skills previously taught through teacher-directed instruction.

- Other: This category refers to no instruction (e.g., attention only, use of calculators) or any type of task instruction not included in the above categories (e.g., Key word, problem sequence).

**Writing Interventions: supported Practice**

The ability to express oneself in writing is important for academic achievement. Written expression skills are vital for student achievement since these are basic requirement for most academic subjects. Research studies have concluded that these students have difficulties with spelling, punctuation, word sequencing fluency (that is, the number of words in a story) and difficulty with mastering planning, revising, organising and evaluating (process) elements of writing. Other features of the written products of students with LD reflect the greater difficulty they have in producing sentence structures, as seen in their use of shorter and fewer sentences and sentence-combining links. Specific and appropriate writing instructions help them in overcoming their writing difficulties and improving the quality of their written compositions and developing their writing competence. Researches in writing showed that students with learning disabilities benefit from an integrated approach to writing instruction that focuses directly on cognitive, metacognitive, behavioural and affective factors (Englert et al., 1991; Harris, Graham, and Mason, 2006). Harris and Graham (1999) recommended that explicit and differentiated instruction is necessary for these students as their learning and behavioural challenges compound with age and grade level. Adaptations for struggling writers include providing extra support for planning and revising, developing independence and motivation, the use of peer assistance, and the joint construction of texts (Graham, Harris, Finz-Chorzempa and MacArthur, 2003). Explicit instruction in planning writing directly benefits students with learning disabilities in the middle years of schooling resulting in longer and higher quality texts (Troia and Graham, 2002). In addition, the use of peer support for students with learning disabilities contributes independently to improvement in the writing skills of students above and beyond the effects of explicit instruction (Harris, Graham, and Mason, 2006). Bruning and Horn,

- Provide additional explicit teaching and modeling for students who have difficulty acquiring and applying the necessary writing knowledge, skills and strategies,
- Tailor the content of instruction to meet each student’s needs (e.g., teach a simple planning strategy to students who either skip or experience difficulty with planning, and teach a more sophisticated planning strategy for those who have mastered the basics already),
- Provide targeted, opportunistic instruction in response to students’ progress and needs (e.g., a mini-lesson on how to add supportive details),
- Control the difficulty of writing tasks to ensure that each student is working on something that is personally challenging but achievable,
- Use a variety of procedural facilitators to support each student’s ability to complete writing assignments successfully (e.g., cue cards, think sheets, graphic organisers, mnemonics, and prompts),
- During guided practice, consistently and carefully monitor students’ progress and provide feedback and scaffolding in response to individual needs (e.g., when students encounter difficulty, use verbal prompting and other supports in ways that encourage them to think through the task and figure out what to do, rather than telling them exactly how to proceed),
- Recognising that the amount of time individual students require to compose varies, ensure that each student receives ample opportunity to complete the stages of the writing process successfully.

Given that many children experience academic difficulties in reading, mathematics, written expression and spelling, it is imperative that school professionals intervene. Training of school teachers and other functionaries in effective instructional/ coping strategies can have positive impact on learning of children with disabilities.

REFERENCES


The rapidly changing education scenario in India facilitated by implementation of Right to Education Act-2009 is making Indian classroom more and more diverse in terms of students needs. More and more classrooms are now witnessing the presence of children with disabilities. As a result of efforts under Sarva Shiksha Abhiyaan (SSA), enrolment and retention of children with special needs up to elementary level has also increased there by adding to the existing diversity in the classroom. Managing the teaching-learning of children with special needs within the same classroom along with their non-disabled peers is becoming a challenge for the regular teachers due to a number of reasons. The foremost of them is the lack of training in inclusive education practices. Realising this as a challenge the various policies and programmes of Government of India like SSA and Rashtriya Madhyamik Shiksha Abhiyaan (RMSA) have attempted to meet this challenge by organising a large number of in-service teacher training programmes and also by recruiting special education teachers. The efforts of the Government though effective, however are just like a drop in the ocean due to the huge number of regular teachers as well as identified children with disabilities.

In this scenario, the need of the hour is to encourage collaborative work culture at the level of school so that the children with special needs remain primary responsibility of regular teachers, instead of merely referred to special education teachers who are attached with the school in itinerant mode.

The present paper, explores possibilities of collaboration in inclusive schools at all levels like children, teachers and administrative functionaries in the schools. Various strategies for promoting collaboration have also been discussed in this paper.
Understanding Collaboration

Collaboration is that style of working in which two or more professionals/functionaries work together towards achieving the common aim. Together they share ideas, develop plans, implement plans and also evaluate the outcomes. True collaboration occurs when all members of collaborating team feel equally valued, goals are clear to all, decision making is shared and each one is accepted for their share of work and style.

At the level of school, collaboration in implementing inclusive education would mean regular education of teachers, special education teachers, educational administrators, students (both challenged as well as non-challenged), parents and para-professionals working as a team to achieve the common aim of providing quality education to the children.

Why Collaboration is Needed in Inclusive Classroom?

The experience of educating Children With Special Needs (CWSN) in regular schools under SSA and RMSA has revealed that the CWSN are physically included, that is, they are sitting in the same classroom but do not feel involved in the teaching-learning activities as the regular teacher doesn’t have any orientation or training in taking care of CWSN in the classroom along with their non-CWSN peers. This requires the skill of treating the entire group of children as one without diluting the interventions for managing special needs. Unfortunately the regular teachers though trained in teaching children lack the knowledge and skill of implementing inclusive teaching-learning practices. He/she requires knowledge and awareness about the inclusive education practices and handholding by the resource teacher.

Education of CWSN in regular classroom involves efforts from a number of persons simultaneously that is:

- Regular teachers to make the child learn reading, writing mathematics, science, etc,
- Special education inputs provided by special teachers for understanding the modalities of curriculum adaptation, task analysis revisions, repeated practices, behaviour modification and learning daily life skills.
- Therapeutic service provided by para-professionals to help in speech, mobility, etc.
- Administrators to maintain the availability of required services and resources.
- Policy planners to provide the required flexibility in the implementation of policies so that schooling becomes comfortable for CWSN.
- Resources (like resource room) required are often present at some other physical location and therefore require collaboration between different schools/institutions.
- The CWSN and children without special needs should have feeling of mutual acceptance and respect.
and one group should not make
fun or bully the other.

The experiences mentioned above indicate that in order to be successful in educating CWSN in inclusive classroom efforts from a number of different professionals are necessary. The same is not possible unless collaborative work culture is emphasised and strategies for the same are advocated.

**Benefits of Collaboration in Indian School System**

At the moment the experience of a number of educational capacity building programme both at the SSA and RMSA level organised by National Council of Educational Research and Training (NCERT), State Council of Educational Research and Training (SCERT) and other institutions like National University of Educational Planning and Administration (NUEPA), indicate huge gap between required and available number of special education teachers. This issue can be tackled if the special education teachers are deployed judiciously and also with slightly altered nature of work both for the regular as well as special education teachers. In collaborative work settings, the special education teachers instead of working at the level of individual student take the role of Key Resource Person (KRP) for a cluster of schools. The main duty of KRP would be to help the regular teachers in

- Identifying the special needs
- Develop inclusive education plan
- Implement the plan.

Apart from this the KRP would be expected to mentor and handhold the regular teachers in implementing the inclusive education practices. Remember, the regular teachers may or may not have the knowledge and awareness to implement the inclusive education practices. The handholding and ready availability of resource person as and when required will also aid in sustaining the motivation of teachers struggling to take care of special needs during curriculum transaction (subject teaching). This will reduce the demand of physical availability of special education teachers in the school on daily basis.

**Characteristics of collaboration**

The major feature of collaborative work culture is envisaging a common goal. In the case of inclusive education the common goal may be to provide quality education to all children. The underlying assumptions for realising this common goal would be to accept each and every child enrolled in the school and to have faith in his/her capacity of learning and achieving.

Collaborative work culture also demands that each and every member of the team should be considered to be equally valuable. Each member's contribution is essential for realising the common goal. The contribution of resource teacher in acting as guide and mentor to the regular teacher cannot be valued more than the work of regular teacher who is transacting the curriculum, motivating each child to learn and achieve, and is
also taking care of the special needs of children.

Another important practice of collaborative work culture is shared decision-making. When decisions are taken jointly the responsibility for outcomes also gets equally distributed. The achievements, academic and others related to daily living skills of children with special needs provides sense of achievement equally to all members of the team. Similarly, the decisions failing to deliver the desired results are also viewed as joint responsibility. The accountability is of all the members of the collaborating team.

The resources required for realising the common goal are also collected and pooled. Each member has equal access to the resources as and when required. The collaborative work culture values contribution and rights of each member of the team.

**Pre-requisite for Collaboration**

The collaborative work requires sharing of not only ideas by each member of the team, but also of the work plans, resources, responsibilities and outcomes. Open communication among the team members is another key requirement for success in collaborative efforts. The effective communication skills like listening, non-verbal signals, asking questions, conducting effective meetings, responding to resistance, resolving conflicts, persuading others etc., are assets for achieving success. Supportive environment indicates sensitising administrative staff, support staff, para-professional and teachers towards the significance of the collaborative efforts. Making each one a part of the team and eliciting required support to ensure smooth implementation of the plan/intervention. Working in collaboration might be a new style of work for teachers and administrators who are used to work either independently or in subordination, hence training in collaboration of all the members like support staff, teachers both regular as well as special education, administrative staff etc. is necessary. This training may also make an attempt towards resolving administrative hierarchies; say for example a teacher not only listening but also appreciating the suggestions of ayah.

**Steps for Shared Problem-solving or Working in Collaboration**

Discovering a shared need or a common goal is identified which affect each member of the team. This involves not only pinpointing the need but also to mention the same in clear objective statement(s). An example of the same could be “Educating Rohit, a child with speech impairments studying in class three, in inclusive classroom”. Once the common or shared need is identified the next logical step is to identify obstacle and hurdles which may prevent the desired outcome. In the example above the obstacle may be “Rohit is not able to express his ideas and feelings due to speech problems, this makes it difficult to involve him in discussions and debates, seeking
verbal replies, obtaining his inputs during classroom and assessing how much he has understood.” Mentioning obstacles and hurdles in this fashion indicates acceptance of the situation/disability and listing the hurdles that the problem at hand is involving Rohit in discussion and seeking his response. Next task is to brainstorm the possible solutions by involving each member of the team. This may lead to listing of a number of ideas for example inviting family members to act as interpreter, planning teaching-learning requiring minimum verbal interaction, written expression, sign language, cued speech (Speech clubbed with signs or vice versa) study buddy etc. The ideas of each member is valued and placed before the house for wider discussion. This will make each member feel valued and appreciated for their contribution. The pros and cons of each idea are discussed at length and each idea is evaluated for its practicability, implementation, resources required, ease of implementation, possible threats, degree of effectness etc. This is the step which will lead to choosing one solution out of the many listed or for developing new strategy by merging various ideas. For example, in case of Rohit, a peer may be encouraged to learn sign language and till then the teaching-learning may be planned carefully so that verbal inputs from him may be sought via writing or action/signs clubbed with writing. During the days of unavoidable debates or discussions family members may be involved for interpreting his expression through sign language and facilitating his participation in the classroom.

Once a possible solution is finalised and agreed upon by everyone, the time is to list the requirements and pool in the resources to meet the requirements. This is also the time to develop action plan with specific details assigning roles and responsibilities. In case of Rohit the very first action would be to identify a peer who would like to volunteer for learning the sign language and act as interpreter, next task is to arrange for his/her training in sign language along with Rohit. Simultaneously, the subject teachers should be encouraged to modify teaching-learning activities so that verbal inputs from the child is minimised, for situations requiring responses in yes or no signs like nodding the head or raising coloured paper cards can be tried. If time line is also mentioned against each action point this makes the planning more effective and easy for implementation.

Now comes the time for implementing the plan i.e., putting into practice the strategies or the action plan decided in above step. The implementation phase also brings to forefront various issues and concerns which may not have been realised during the process of planning till now. In the case of Rohit subject teachers may also require training in modifying the teaching-learning strategies so that Rohit also feels part of the process. After implementing the plans for pre-decided duration, comes the time to evaluate the outcomes. This
should not be left to the end rather should be done regularly along with the implementation, so that if there is need the action plan may be changed accordingly.

**Models of Collaborative Teaching**

**One teacher and one support**—the regular teacher teaches with support from special education teacher. This model looks at the special education teacher as the person providing support from outside the class. He/she may not be required to work with the child in one to one setting. The curriculum transaction strategies are discussed and planned collaboratively and the regular teacher is the main functionary in the classroom, the special educator acts as scaffolding. The special education teacher also acts as mediator between various other stakeholders like para-professionals, support staff, parents and peers.

**Station teaching**—the entire class is divided into two groups based on the need of intervention for a particular subject. For example in Rohit’s class, there might be other children who require help for self-expression during paragraph writing, for arranging their thought in logical sequence or generating ideas. These children may be grouped together and either the regular or the special teacher may provide the necessary inputs depending on their ease and comfort. This way the class tackles different levels of learning simultaneously. Everybody is part of the teaching-learning process.

**Parallel teaching**—the entire class is divided into two groups just like station teaching above and instead of having both the groups work together on different levels of the same topic or subject, different skills or subjects or topics are simultaneously dealt by two teachers in the two groups. This might be useful for remedial classes or for inculcating study habits or learning daily living skills. This might be understood as two parallel groups working at the same time. This can be compared to children of the same class attending art or music or drawing classes at the same time depending on their choice of subject. The difference here lies in the basis of group formation; the grouping is based on the learning needs and special needs of children in the classroom.

**Alternative teaching design**—In this model, one teacher teaches and another teacher re-teaches small group of students who are facing difficulty with content. Math is one subject which is highly compatible with this design due to its nature. Children require varying degree of practice before mastering a concept. Similarly, this may be tried for other subjects. For example, while teaching environmental science in class 3 some children may require re-teaching the sources of water.

**Case by case**—Students with special needs/challenges present in particular classes remains primarily the responsibility of the regular teacher. Each child’s case is closely monitored.
by both the special education resource teacher as well as the general teacher. The interventions are also decided case by case.

**Adaptive Learning Environments Model**—(ALEM-Wang, Rubenstein, and Reynolds in 1985). This model advocates creation of such learning environments in the schools where all students can learn basic academic skills irrespective of their challenges and thereby feel confident about their own abilities to cope with the social and intellectual demands of school. ALEM blends prescribed learning as in a curriculum, with the scope of experimenting with increasing flexibility within the system so that the schools’ capabilities to accommodate individual learning needs are enhanced. Educational intervention is individually planned, and each student is expected to progress through the curriculum at his or her own pace.

**Team Teaching**—(Elliott and McKenzie). In this model the general education and special education teachers collaborate and teach all students in inclusive class as partners. Most of the special education services are provided on a pull-out basis (both for students and teachers) the concept of team teaching needs to be carefully thought out and collaboratively pre-planned so that the need for pulling out a child with special needs is minimised. Both teachers are responsible for instructional planning and delivery, student achievement, assessment and discipline.

**Strategies Intervention Model** (SIM)-This model was developed at the University of Kansas, Centre for Research on Learning. The model is based on the assumption that all students should develop their potential as independent and strategic learners. In simple terms, each one should be able to devise a plan for self-learning and problem-solving. This plan or strategy should function in harmony with various aspects of life like curriculum, social, motivational and executive domains. In response to the demands and expectations of the curriculum the students are taught learning strategies for acquiring, storing and expressing content objectives. The collaboration occurs between the special educator and regular teacher and curriculum planners.

**Circle of Inclusion**—This model is primarily used in the education of very young children (birth to age eight). It facilitates child’s smooth transition from one stage of schooling to other and also from one social environment to another. Frequent meetings involving child’s teacher(s), parent(s), medical and/or psychological practitioner(s), therapists, helpers/carers and others who may be instrumental in implementing the child’s IEP (Individual Education Plans) are held to review the progress and needs of each child in a Circle of Inclusion classroom.

**Consultant Model**—The special teacher/resource teacher is made available to re-teach a difficult skill.
or to help the student practice a newly acquired skill. This is a non-intrusive approach that provides the special needs students with at least two teachers to ask for help with curriculum related problems.

**Teaming Model**—The special teacher is assigned to one class with one planning period per week for the team of teachers teaching that particular class. The special teacher provides student information, possible instructional strategies, modification ideas for assignments/tests, and behaviour strategies. The teachers acting as team meet on a regular basis, establishing consistent communication among the team members. The team members are encouraged to work in close collaboration with lots of mutual handholding instead of working independently to achieve success with their students.

**Pilot programmes leading to phase in**—Here inclusion is practiced as a short term project, by those staff members who are interested in and/or willing to try inclusion. These members usually try out their ideas for a specified period of time. The approach tried on short term basis gradually becomes an integral part of the overall school programme. It is often implemented into specific subjects. The positive side is that slowly it will become a component of the school’s programmes and through exposure students as well as teachers will become comfortable working together.

**Special Education Teacher Support Services (SETSS)**—A special teacher meets regularly with general teachers to provide indirect support in the form of guidance in planning lessons/units to include differentiated instruction, to suggest accommodations and modifications for individual students, and to monitor student progress. The special teacher helps address teacher concerns, and assists teachers in adapting the curriculum, accommodating special needs in teaching-learning process, maintaining the pace of instruction in an inclusive classroom. The regular teacher is primarily responsible for developing and maintaining students’ Individualised Education Plans (IEP) with the support from resource teacher.

**Conclusion**

The initiatives taken by the state and central governments under SSA and RMSA for implementation of inclusive education practices and providing quality educational intervention to the CWSN in the nearby regular schools has started showing fruits as the enrolment and retention of CWSN at the primary level of schooling has shown improvement. However, the next step is to sensitisise the regular teachers towards CWSN and enabling them to plan and execute the planned interventions with the help of resource special education teacher. This appears to be a bit difficult at the moment but can be attempted by following any of the models of collaborative teaching mentioned above on a pilot or experimental basis.
REFERENCES

TO THE CONTRIBUTORS

The Primary Teacher invites you to write articles, field notes and reports for publication. We want your honest deliberations on issues that impact elementary education. You may like to focus on issues that bother you and concerns that you are sensitive to and which you feel should be shared with other teachers working at the grassroots levels.

- Use simple and non-technical language.
- Write in a friendly and communicative tone.
- Each article should be about 1500 to 3000 words.
- Keeping the clientele in mind, which is the teacher, please include information pieces that the teacher may not have access to in her/his place of location. You may include field notes and your own perceptions about issues in research, development and training in the area of elementary education.
- Send two copies of the piece along with the soft copy.
- Each article should also have a short abstract in about 150 words.
- Try to write in a magazine/story/narrative format to make the piece user-friendly and interesting to read.
- Please send photographs and illustrations with due acknowledgements, wherever necessary, to be incorporated in your article.

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.

You may write to us at the following address/email:
Professor Santosh Sharma, Academic Editor, The Primary Teacher
G. B. Pant Building, NCERT, Sri Aurobindo Marg, New Delhi – 110016
Email: primaryteacher.ncert@gmail.com
Abstract

For studying teaching styles of teachers, teachers were categorised in four groups according to their level of Emotional Intelligence (EI) viz., Extremely High EI (EHE), high EI (HE), moderate EI (ME), and low EI (LE). By comparing and contrasting teaching styles of teachers of different groups, it was observed that teachers of EHE and HE groups were “INDIRECT” in their teaching styles and their counterparts were “DIRECT” in their teaching styles. In addition, constructivist compatible elements were observed to be embedded in teaching styles of teachers of EHE and HE groups than their counterparts.

Key words: Emotional intelligence; indirect teaching style; direct teaching style; clock-wise flow diagram; percentage master matrix.

1. Introduction

This article is tries to answer the question ‘how Emotional Intelligence (EI) plays an important role in teaching style of teachers’. This is a descriptive research study. What is known about EI today is grounded primarily in psychobiology and modern neuroscience and pointed out the distinction between intellectual and emotional capacities. The Harvard psychologist, Howard Gardner, introduced the theory of “multiple intelligence”. His research identified seven kinds of intelligences including mathematical and verbal abilities as well as two personal varieties identified as “knowing one’s inner world” and “adeptness” (Kemper, 1999). The concept of EI, as it is referred to today, was formally conceptualised in 1990 by two American psychologists, John Mayer and Peter Salovey. According to Mayer and Salovey, EI reflects not a single trait or ability but, rather, a composite of distinct emotional
reasoning abilities: perceiving, understanding and regulating emotions. Emotional Intelligence (EI) implies that humans are both rational and emotional beings. They are predominately neither rational beings nor emotional beings. Hence, adaptation and coping abilities in life are dependent on the integrative functioning of both rational and emotional capacities (Salovey, Bedell, Detweiler and Mayer, 2000). Peter Salovey and John Mayer (1990) defined EI as a mental ability that consists of “ability to monitor one’s own and other’s feelings and emotions, to discriminate among them and to use this information to guide one’s thinking and actions” (p. 189). Goleman (1995) however has defined EI in different way. His model of EI includes (a) knowing one’s emotions, (b) managing emotions, (c) motivating oneself, (d) recognising emotions in others (e) and handling relationship. Later Mayer and Salovey (1997) revised their theory a bit to emphasise the cognitive components and talked about a hierarchy of mental abilities. In contrast, Raven Bar-On (1997) defined EI as “an array of non-cognitive capabilities, competencies and skills that influence one’s ability to succeed in coping with environmental demands and pressures” (p.14).

1.1 Correlates of EI

A perusal of findings revealed EI as significant predictor of social quality relationship, inter-personal relationship, teaching self-efficacy, and communication effectiveness, which portray importance of EI for teaching behaviour.

1.1.1 EI and Inter-personal Relationship

Teaching occurs in the social context (Flanders, 1970). As such teacher is required to be efficient in inter-personal relationship. Here, EI of teachers seems to be important. EI is defined as one’s ability to manage and monitor one’s own emotions; recognise different type of emotions in others; distinguish the difference between one’s emotions and those of others, and use that information to guide one’s thinking and actions (Pinos, Twigg and Olson, 2006). Then, teacher high on EI is capable to perceive and understand feelings and emotions of students and consequently can guide his action in consistent with feeling and emotion of students. EI is observed as significant predictor of quality of social relationship (Brackett, Mayer and Warner, 2004; Eisenberg, Fobes, Guthrie and Rieser, 2000; Lopes, Salovey and Straus, 2002). EI of teacher is likely to affect his or her inter-personal relationships with students. The way teacher relates himself or herself to students; it decides the conduciveness of social-emotional climate of classroom (Flanders, 1970).

Singh (2003) in his study revealed that teaching profession requires high EI. He further added that the teaching profession entails emotional competencies such as empathy, rapport, harmony and comfort while
dealing with groups. Hence, teachers with high EI seem to exhibit open and free expression of ideas which lead them to creativity and mutual respect. Empathy is critical skill for both getting along with students of diversified backgrounds. Empathy is an “antidote” that attunes people to subtleties in body language, or allows them to hear the emotional message beneath the words and has a deep understanding of the existence and importance of cultural and ethnic differences (Goleman, 2004).

1.1.2 EI and Classroom Verbal Behaviour
Ergur (2009) discussing attributes of an emotionally intelligent teacher has written that responding to learners is a great opportunity for the teacher to reflect his emotional intelligence while replying to a comment or a question from a student. If it is handled skilfully, it will motivate the students, affect the emotional environment, clarify what is an acceptable answer, show the learners that they are valued by the teacher and their teacher is listening to them attentively. Responding could be achieved at two levels – cognitive and affective. Informing about a specific topic, clarifying the situation, expanding the subject by giving details can be defined as “cognitive responding” whereas through “affective responding” the teacher responds to the feelings of the questioner or the commander. In other words, the teacher has the potential to make the students feel respected, valued, belittled, dismissed or humiliated through the use of his affective responding skills.

1.1.3 EI and Teaching Self-efficacy
Researches conducted to study role of EI in teaching self-efficacy and in communication effectiveness showed that teachers with higher on EI will tend to have positive believes about his teaching capabilities (self-efficacy), due to awareness about his strengths and weaknesses. Teaching self-efficacy is one of the most important variables consistently related to positive teaching and student learning outcome (Penrose, Perry and Ball, 2007). Significant association between EI and teaching self-efficacy appears to underscore validity of theory of EI and its application for teachers.

1.1.4 EI and Communication Effectiveness
Communication is culmination of all EI abilities. EI is defined as the capacity to reason about emotions, and of emotions to enhance thinking. It includes the abilities to accurately perceive emotions, to access and generate emotions to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions to promote emotional and intellectual growth (Mayer and Salovey, 1997). The high EI individual, most centrally, can better perceive emotions, use them in thought processes, understand their meanings, and manage emotions better than others and tends to be more open and
agreeable (Mayer, Salovey and Caruso, 2004).

Each emotion conveys a unique set of identifiable signals - emotional information (Scherer, Banse, and Wallbott, 2001). Emotion information processing an evolved area of communication (Mayer, Salovey, Caruso and Sitarenios, 2001). Teachers high on EI seem to be in advantageous position in carving out conducive-social-emotional classroom climate by having capacity to reason about emotions. The teachers with EI are likely to be aware of their own feelings and those of students and is able to communicate both positive and negative emotions and internal experience at appropriate times. This has an impact on students’ mood. Thus, possessing EI is likely to permit teacher to have a closer understanding of students and their surroundings.

1.2 EI and Teaching Style

On the basis of above mentioned findings, it appears that level of EI is likely to be influential in shaping the teaching style of primary school teachers. Teaching style is defined as group of teaching behaviours which are consistently reflected in classroom teaching of teachers (Pandey, 1981). Flanders had evolved two teaching styles: ‘Indirect’ and ‘Direct’ (Flanders, 1970). Indirect teaching style refers behaviours which tend to encourage and support pupil participation. The reasons why teachers with EI seem to be influential in “Indirect teaching style’ might be due to the abilities of EI teachers required for “Indirectness”. For indirect teaching style, teacher is required to perform teaching activities related to Categories 1, 2, 3, and 4 of FIACs (Flanders Interaction Analysis Category System). The way EI is likely to be influential in performing activities related to foregoing categories are given below:

- **To recognise and read feelings and emotions of students (Category 1 of FIACs):** Emotional intelligence abilities like ability to perceive emotions and ability to use emotions to facilitate thoughts and actions are essential for manifestation of teaching behaviours related to Category 1 of FIACs. These are lowest abilities in the hierarchy of EI abilities (Mayer and Salovey, 1997). It implies that emotionally intelligent teachers can easily read emotions and feelings of students, and, can guide his further actions showing concern towards students.

- **To praise and appreciate ideas and behaviour at cessation of pupil talk (initiation or responding) (Category 2 of FIACs):** Ability to appreciate view-points and ideas of students are social skills as propounded by Goleman (1995). It implies that manifestation of this is dependent on EI of teachers.

- **To integrate pupil ideas with classroom fabric (Category 3 of FIACs):** Emotionally intelligent teachers appreciate view-points of students and further integrate
students responding and initiation with classroom communication fabric (Ergur, 2009).

- **To ask diversified questions (Category 4 of FIACs):** Emotionally intelligent teachers are observed to ask diversified questions, it implies narrow questions (low cognitive level questions) and thought-provoking questions (high cognitive level questions) (Ergur, 2009).

Emotional intelligence abilities underlie above mentioned teaching behaviours. So, it seems that primary school teachers having high level of EI will tend to perform those teaching behaviours, which constitute ‘Indirect Teaching Style’.

If teachers lack Emotional intelligence abilities in that case likelihood of occurrence of teaching behaviours *viz.*, giving directions (Category 6 of FIACs) and criticising the ideas and behaviour of students and using extreme self-reference (Category 7 of FIACs), will tend to increase. These teaching behaviours indicate “Direct Teaching Style” in classroom. Hence nature of teaching style either Indirect or Direct is likely to be affected by level of EI of teachers.

### 1.3 Rationale for Conducting Study on Sample of Primary School Teachers

Dynamic interchange between the mind of the teacher and individual learner is kernel of effective pedagogy. If teacher succeeds in bringing about the dynamic interchange, it might be attributed to his EI (Ergur, 2009). Dynamic interchange between the mind of teacher and his students is contingent on socio-emotional climate of the classroom (Pandey, 1981). Here, level of EI is likely to be important for teachers (Ergur, 2009). This study is to be concentrated around primary school teachers because the first exposure of child in terms of learning and developing capabilities to relate to the external world starts at school. For the first time in their lives, children feel the need to emotionally react differently to a whole set of new relationships coming as stimuli from the environment, hitherto alien to them. The transition from dealing with informal to formal relationships along with the need to balance both, creates tremendous role strains in the children, thereby disturbing their hitherto undifferentiated emotional and social world. Level of EI enabled teachers to respond tactfully to social, emotional and cognitive needs of students (Ergur, 2009). *National Curriculum Framework-2005* emphasises constructivist approach of teaching. Constructivism refers active participation of students in teaching-learning situation, so that, they can actively construct knowledge as well as organise, reorganise and transform earlier knowledge. Indirect teaching style is likely to facilitate active participation of students. Teachers having high level of EI, ask open-ended questions and encourage pupil initiation in their classroom (Ergur, 2009).
Against this backdrop, it was postulated that level of EI is likely to be influential in teaching style of primary school teachers. If teachers’ teaching style tend to be ‘Indirect’, constructivist compatible elements are likely to be reflected in their classroom teaching. It is further postulated that due to low level of EI, teachers are likely to be ‘Direct’ in their teaching style. The study was conducted with the objective, “To study the influence of Emotional Intelligence on teaching styles (Verbal Behaviour Pattern) of primary school teachers.”

2. Methodology

Descriptive research method was used in this study.

2.1 Population and Sampling Technique

Primary school teachers of government, government-aided and private schools of Varanasi city constituted the population of the study; ‘Multi-stage random sampling technique’ was employed for selection of sample. At last 91 primary school teachers constituted the sample of this study.

In the first stage five educational wards were randomly selected from nine education wards in Varanasi city of Uttar Pradesh (Table 1). In second stage, from each sampled educational ward, five government and five private schools were randomly drawn (Table 1). In third stage, from each sampled school, two teachers were randomly drawn. Nine teachers did not respond to “Emotional Intelligence Test”, so they were dropped from the sample. Hence ninety-one teachers finally constituted the sample of the study.

Table 2 depicts details of sample of the study concerning demographic variables (Sex, Stream, School type and Training). In sample of this study, teachers who have pursued B.Sc. (Graduation in Science stream subjects) were designated as belonging to science stream and who have pursued B.A., were designated as belonging to art stream. ‘Training’ in this study implies, pursing of B.Ed. course. Teachers who have pursued

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Ward Name</th>
<th>No. of Government School</th>
<th>No. of Private School</th>
<th>Total no. of Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Bhelupur</td>
<td>05</td>
<td>05</td>
<td>10</td>
</tr>
<tr>
<td>2.</td>
<td>Chauk</td>
<td>05</td>
<td>05</td>
<td>10</td>
</tr>
<tr>
<td>3.</td>
<td>Chetganj</td>
<td>05</td>
<td>05</td>
<td>10</td>
</tr>
<tr>
<td>4.</td>
<td>Dashaswamedha</td>
<td>05</td>
<td>05</td>
<td>10</td>
</tr>
<tr>
<td>5.</td>
<td>Shivpur</td>
<td>05</td>
<td>05</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>25</td>
<td>25</td>
<td>50</td>
</tr>
</tbody>
</table>
B.Ed. course were designated as trained teachers and teachers who have not pursued B.Ed. course were termed as non-trained teachers. Schools which are run by government are categorised as ‘Government type school’ and schools which were not run by government were categorised as ‘private school’.

2.2 Tools Used

2.2.1 Flanders Interaction Analysis Category system (FIACs)

Flanders Interaction Analysis Category System (FIACs) (1970) (Table 3) was used to observe the classes. For ensuring reliability of data on FIACs inter-observer and intra-observer reliability were established by using Scott’s coefficient. Inter-observer reliability was obtained to be 0.78 and intra-observer reliability was found to be 0.86. As pointed out by Ober and others an $r$ of 0.60 is frequently established as an acceptable level (Pandey, 1981).

2.2.2 The EQ Test [developed by Prof. N. K. Chadha and Dr Dalip Singh, 2003.]

The EQ Test (developed by Prof. N. K. Chadha and Dr Dalip Singh) was

<table>
<thead>
<tr>
<th>Sample Break Up: As per Demographic variables of study</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
</tr>
<tr>
<td>36</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 3: Flanders Analysis Category System.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Categories</strong></td>
</tr>
<tr>
<td>(a) Teacher Talk</td>
</tr>
<tr>
<td>Indirect Influence</td>
</tr>
<tr>
<td>1. Accepts feelings</td>
</tr>
<tr>
<td>2. Praises or encourages</td>
</tr>
<tr>
<td>3. Accepts or uses pupil ideas</td>
</tr>
<tr>
<td>4. Asks questions</td>
</tr>
<tr>
<td>Direct Influence</td>
</tr>
<tr>
<td>5. Lecturing</td>
</tr>
<tr>
<td>6. Giving Directions</td>
</tr>
<tr>
<td>7. Criticising or justifying authority</td>
</tr>
<tr>
<td>(b) Pupil Talk</td>
</tr>
<tr>
<td>Response</td>
</tr>
<tr>
<td>8. Pupil talk response</td>
</tr>
<tr>
<td>Initiation</td>
</tr>
<tr>
<td>9. Pupil talk initiation</td>
</tr>
<tr>
<td>(c) Silence/Confusion</td>
</tr>
<tr>
<td>10. Silence or confusion</td>
</tr>
</tbody>
</table>

(Flanders, 1970)
adapted in Hindi by the investigator for the measurement of EI of primary school teachers. Reliability of the tool has been established by ‘test-retest method’ and ‘internal consistency method’. Stability coefficient was found to be 0.89. Cronbach-alpha coefficient (α) was computed for each dimension of EI-emotional sensitivity, emotional maturity and emotional competency, which were obtained to be 0.76, 0.69 and 0.74, respectively.

Content validity was established with expert judgements and for ensuring empirical validity of the tool, it was correlated with ‘Bhattacharya Instrument of EI’ (BEIS-In). The validity was found to be 0.58, which indicates that this EI test is valid.

2.3 Data Collection and Analyses

Procedure of data collection and categorisation of teachers in different groups as per their level of EI:

2.3.1 Phase 1

2.3.1.1 Observer Training

Prior to observation of each sampled teacher by FIACs, the investigator received comprehensive training in observing teachers in classroom situations. The categories (FIACs) were memorised thoroughly. By the end of the training period the inter-observer reliability, using Scott’s coefficient correlation was consistently near about 0.78.

2.3.1.2 Procedure of Observation and Data Collection

Each teacher was observed once, for 35 minutes by using FIACs.

2.3.2 Phase 2: Categorisation of Teachers in Different Groups

On the basis of scores on ‘EI Test’, teachers were classified into four groups; as per established norms of the test,

- Teachers who scored 285 or above were grouped as EHE (teachers having extremely high EI);
- Teachers who scored in the range of ‘250-284’ were grouped as ‘HE’ (teachers having high EI);
- Teachers who scored in the range of ‘200-249’ were grouped as ‘ME’ (teachers having moderate EI);
- Teachers who scored in the range of ‘150-199’ were grouped as ‘LE’ (teachers having low EI).

Out of 91 primary school teachers, 14 teachers were identified as having extremely high EI (EHE), 16 teachers were identified as having high EI (HE), 32 teachers were identified as having moderate EI (ME), and 19 teachers were identified as having low EI (LE). Group-wise distribution of teachers is given in Table 4. Table 5 depicts the distribution of teachers of EHE, HE, ME and LE groups as per type of school (government and private).
Table 4: Number of teachers in each group

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Groups</th>
<th>No. of Teachers</th>
<th>Range of Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>EHE</td>
<td>14</td>
<td>285 or above</td>
</tr>
<tr>
<td>2.</td>
<td>HE</td>
<td>16</td>
<td>250-284</td>
</tr>
<tr>
<td>3.</td>
<td>ME</td>
<td>32</td>
<td>200-249</td>
</tr>
<tr>
<td>4.</td>
<td>LE</td>
<td>19</td>
<td>150-199</td>
</tr>
</tbody>
</table>

Table 5: Sample break-up as per nature of School and level of EI

<table>
<thead>
<tr>
<th>School</th>
<th>EHE</th>
<th>HE</th>
<th>ME</th>
<th>LE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kendriya Vidyalaya</td>
<td>04</td>
<td>02</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Nagar Nigam School</td>
<td>03</td>
<td>06</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>Reputed Private School</td>
<td>05</td>
<td>08</td>
<td>03</td>
<td>----</td>
</tr>
<tr>
<td>General Private School</td>
<td>02</td>
<td>----</td>
<td>16</td>
<td>07</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>16</td>
<td>32</td>
<td>19</td>
</tr>
</tbody>
</table>

2.3.3 Phase 3: Treatment with Data Obtained by Observation of Each Teacher by FIACs

2.3.3.1 Tabulating Interaction Analysis Matrices

After observing each sampled teacher, 10x10 matrices were complied. After classifying teachers in four groups according to their level of EI, master matrix was compiled for each group of teachers. Four master 10x10 matrices were compiled. Later on, the cell frequencies of these four master 10x10 matrices were converted into percentages to get the percentage matrices.

2.3.3.2 Clock-wise Communication Flow Diagram

Clockwise communication flow diagrams were drawn for each of the four groups of teachers, separately for analysing their teaching style.

3. Results, Analysis and Discussion

Teaching styles of teachers of EHE, HE, ME, and LE groups were studied by preparing anti-clock-wise flow diagram for each group separately. An anti-clock-wise flow diagram was drawn corresponding to each percentage master matrix. Moreover for all 10 categories of FIACs mean percentage values were computed for all groups of teachers in combined. In addition to this mean percentage value, FIACs for each group were also computed, which are given in Table 6.
3.1 Teaching Style of Teachers having Extremely High EI (EHE)

3.1.1 Pattern of Teaching Behaviours Constituting Teaching Styles of Teachers having EHE as per Figure 1:

As per the Figure 1, it appeared that almost 78.04 per cent of teaching behaviours of teachers of the EHE group were found to be concentrated in 16 cells of the matrix, these behaviours constituted three patterns in the interaction patterns of EHE group teachers:

**Pattern 1:** Cell “5-5” (extended lecturing) → “5-4” (asking question just after lecturing or while lecturing) → cell “4-8” (students’ responding after teachers’ questioning) → cell “8-8” (extended students’ responding) → “8-5” (lecturing following students’ responding).

**Pattern 2:** Cell “9-9” (extended students’ initiation or students’ initiation steady state) → cell “9-8” (students’ responding following students’ initiation) → cell “8-3” (appreciation and integration of the pupil ideas with classroom communication fabric) →
cell “3-4” (asking question based on the expressed pupil ideas for enlarging the pupil thinking further) → cell “4-9” (students initiation in consequent to the divergent or thought-provoking question).

**Pattern 3:** Cell “10-10” (silence in the classroom in consequent to the asking thought-provoking or divergent question) → cell “10-8” (students’ responding after silence following divergent or thought-provoking question) → cell “8-2” (praising the students’ responding) → cell “2-4” (Praising and consequently asking questions) → cell “4-4” (extended asking question) → cell “4-10” (silence following though-provoking questions).

### 3.1.2 Discussion

Although lecturing (Category 5 of FIACs) of EHE group’s teachers occupied 42.8 % (Table 6) of their total teaching behaviours, the extended lecturing (cell ‘5-5’) was only 35.9 per cent. The word lecturing connotes the total lecturing done by teacher either in extended manner or in transition phase while shifting from one teaching behaviour to another. The term extended lecturing refers to the time period during which the teacher constantly been teaching. The difference between lecturing percentage and extended lecturing percentage indicates the healthy teaching practice (Pandey, 1981). It appears that such teachers utilised that portion of lecturing time in creating environment for thinking in the students.

<table>
<thead>
<tr>
<th>Group</th>
<th>Accepts feeling</th>
<th>Praises or encourages</th>
<th>Accepts or uses ideas of pupils</th>
<th>Asking questions</th>
<th>Giving directions</th>
<th>Criticising or justifying authority</th>
<th>Pupil talk</th>
<th>Pupil-talk initiation</th>
<th>Pupil-talk confusion</th>
<th>Silence or confusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>EHE</td>
<td>0.94</td>
<td>3.48</td>
<td>10.59</td>
<td>42.8</td>
<td>4.16</td>
<td>17.8</td>
<td>3.18</td>
<td>10.88</td>
<td>42.8</td>
<td>1.6</td>
</tr>
<tr>
<td>HE</td>
<td>0.68</td>
<td>2.22</td>
<td>8.35</td>
<td>41.74</td>
<td>4.43</td>
<td>13.8</td>
<td>3.5</td>
<td>3.5</td>
<td>43.9</td>
<td>22.22</td>
</tr>
<tr>
<td>ME</td>
<td>0.84</td>
<td>0.35</td>
<td>1.9</td>
<td>56.3</td>
<td>3.4</td>
<td>14.84</td>
<td>0.89</td>
<td>18.9</td>
<td>18.9</td>
<td>22.22</td>
</tr>
<tr>
<td>LE</td>
<td>0.04</td>
<td>0.35</td>
<td>1.86</td>
<td>37.6</td>
<td>3.4</td>
<td>14.84</td>
<td>0.89</td>
<td>18.9</td>
<td>18.9</td>
<td>22.22</td>
</tr>
</tbody>
</table>

Table 6: Mean percentage (%) value for each category of FIACs for all groups of teachers.
Percentage (%) of pupil-talk response (PTR), which is 17.8%, is found greater than the mean value of 14.03% for all groups. Likewise, percentage of pupil talk-initiation (PTI), which is 3.18%, is also found greater than the mean value of 2.60% for all four groups (Table 6). Higher percentages of PTR and PTI might be attributed to the higher percentages of the behaviours ‘Praising or encouraging’ and ‘Accepting or using ideas of the students’, which are obtained as 3.94% and 3.48%, respectively and greater than the mean values obtained as 2.59% and 1.76%, respectively for all groups of the teachers (Table 6). Praising and acknowledging pupil ideas are illustrated by cells ‘8-2’-‘8-3’ transitions (Figure 1). When the teacher accepts, clarifies or uses constructively pupil’s ideas, they are encouraged to participate further.

Higher PTI is also likely to be due to patterns of open questions, illustrated by cells ‘3-4’-‘4-4’-‘4-9’-‘9-9’ transitions (Figure 1). Percentage of the asking questions, (10.59%) for the teachers of the EHE group is greater than the mean value (6.61%) for all four groups of the teachers (Table 6). Higher percentage of asking questions than that of their counterparts (HE, ME, and LE groups’ teachers) refers the higher level of intellectualism in their classes.

Effect of higher percentage of asking questions is likely to be seen in higher percentage values of PTR and PTI than classes of teachers in the HE, ME, and LE. Patterns of teaching behaviors: extended asking questions (cell ‘4-4’) and silence in classroom in consequent to asking thought-provoking or divergent question (cell ‘4-10’ and cell ‘10-10’) and patterns of teaching behaviours: asking question based on ideas expressed by students for broadening the viewpoints of students and students’ initiation (cell ‘3-4’ and cell ‘4-9’) and extended students’ initiation (cell ‘9-9’) characterised the enriched cognitive characteristic of classroom teaching of these teachers (Figure 1). It has been observed in previous studies that teachers who predominately used higher cognitive questions had a positive effect on students’ achievement, and teachers that were trained in effective questions and used higher cognitive questions greatly affected the intellectualism in their classes (Redfield and Rousseau, 1981). Students can be stretched mentally through sensitive teacher-led but not teacher dominated discourse, when a teacher dominated a discussion, it controlled the whole discussion and the students do not have the freedom to voice their thought (Redfield and Rousseau, 1981; Chin, 2006; Wells and Arauz, 2006; Myhill and Dunkin, 2005; Schleppenbach, Perry and Miller, 2007).

PTR and PTI in consequent to divergent or thought-provoking questions asked by teachers reflect the presence of constructivist practices in the classes of teachers of EHE group. If the questions asked are unto the task, creative, thought-provoking, critical and contextually correct, they assist...
the process of knowledge construction. It is desirable to have more number of higher order questions trying to probe the deep understanding. EHE group teachers allow students to actively participate in their learning versus the traditional idea of passively receiving information. Instead of giving lectures and expecting students to regurgitate what has been lectured, teachers show students how to listen to others and question ideas when they are unknown. Classroom discourse is socially meaningful activity because it creates a situation in which all students are encouraged to participate. Students’ participation during classroom discourse allows students to practice problem-solving and decision-making skills. At the same time it helps to build the students self-confident to voice their own view and able to justify their ideas to the class.

Percentage (%) of ‘Silence or confusion’ which denotes the category 10 of the FIACs is found to be 10.18% (Table 6). Silence in the classes of teachers of EHE group is likely to occur due to the higher percentage of the asking question which is confirmed by patterns of open questions cells ‘4-4’-‘4-10’-‘10-10’ transitions; which implies that silence have been used for the stimulating the thinking skill.

3.1.3 Nature of Teaching Style of Teachers of EHE Group

It is evident from Table 2 that percentage of the occurrences of the categories: 2 (Praising or encouraging),

![Figure 2: Cell-wise percentage value for EHE and mean percentage value for each cell for all groups of teachers](image-url)
3 (Accepting or using ideas of the students), 4 (asking question), 8 (PTR), and 9 (PTI) are greater than obtained mean values for all these categories for combined groups of the teachers, which signifies that teachers of EHE group are “INDIRECT” in their teaching style (Flanders, 1970).

Figure 2 revealed that percentage of the frequencies in the cells: ‘2-4’ (Asking questions following praising students), ‘4-4’ (asking question), (4-10) and (10-10) (silence in the classroom in consequent to the asking thought-provoking or divergent question), (8-2) (praising the students’ responding), (3-4) (asking question based on the expressed pupil ideas for enlarging the pupil thinking further), (4-9) (students initiation in consequent to the divergent or thought-provoking question), (9-9) (extended students initiation or students initiation steady state), (8-3) (appreciation of the pupil ideas and building on the ideas expressed by the pupil) are greater than the obtained mean values for all these cells for combined teachers of all groups, which further confirmed the ‘INDIRECT’ teaching style of the teachers of EHE group (Flanders, 1970).

3.2 Teaching Style of Teachers Having High EI (HE)

3.2.1 Pattern of Teaching Behaviours Constituting Teaching Style of Teachers HE Group

Figure 3 depicts that near about 80.61% of total frequencies of observed teaching behaviours of teachers of these groups, got concentrated in the seventeen cells. Patterns which are identified are:

**Pattern 1**: Cell “5-5” (extended lecturing) → “5-4” (asking question just after lecturing or while lecturing) → cell “4-8” (students’ responding after teachers’ questioning) → cell “8-8” (extended students’ responding) → “8-5” (lecturing following students’ responding).

**Pattern 2**: Cell “9-9” (extended students’ initiation or students’ initiation steady state) → cell “9-8” (students’ responding following students’ initiation) → cell “8-2” (praising at cessation of pupil talk) → cell “2-3” (asking question based on pupil talk following praising at cessation of pupil talk) → cell “3-4” (asking question based on ideas expressed by students) → cell “3-9” (students’ initiation in consequent to thought-provoking questions asked at cessation of pupil talk).

**Pattern 3**: Cell “10-10” (silence in the classroom in consequent to the asking thought-provoking or divergent question) → cell “10-8” (pupil responding following silence) → cell “8-4” (asking question following students’ responding) → cell “4-4” (extended asking question) → cell “4-10” (silence as result of thought provoking questions).

3.2.2 Discussion

Percentage (%) of lecturing (category 5) is observed to be 41.74 less than
the mean value of 42.41 for the entire four groups (Table 6). As per Figure 3, percentage (%) of extended lecturing (cell 5-5) is found to be 36.6; difference between the percentages of the lecturing and the extended lecturing signifies the attempts of the teacher to ensure the active participation of the students.

Like the teachers of the EHE group, for HE group teachers, percentage (3.68%) of the occurrences of the behaviour ‘praising or encouraging’ is found to be greater than the mean value (2.59%) for the entire groups (Table 6). Praising or encouraging at cessation of PTR or PTI, is illustrated by patterns of cells ‘8-2’-’2-2’-‘2-3’ transitions in Figure 3.

Percentage (2.22%) of occurrence of the behaviour appreciating and integrating PTR and PTI with classroom communication fabric is found to be greater than the mean value (1.76%) of the entire groups (Table 6). It is evident by pattern of cells ‘2-3’-‘3-4’ transitions (Figure 3).

Figure 3: Communication pattern in classes of teachers of HE group as per FIACs
A teacher can react to student ideas by acknowledging, clarifying and using them in problem-solving process. Responding to learners is a great opportunity for the teachers to reflect his EI while replying to a comment or a question of a student. If it is handled skilfully, it will help the motivation of the students, affect the emotional environment, clarify what is an acceptable answer, show the learners that they are valued by the teacher and their teacher is listening to them attentively. Table 6 reveals comparatively higher percentage of 'PIR' (3.5%) in classes of these teachers. It has been found higher than mean percentage value (2.06%) for all groups of teachers; this higher percentage of 'PIR' might be attributed to ‘accepting or building upon the ideas expressed by pupil’. Higher PTI show more willing involvement in the lesson. PTI is evident from pattern of cells ‘3-9’-’9-9’ transitions (Figure 3).

For HE group teachers, higher percentage (8.35%) of occurrence of behaviour ‘asking questions’ is found to be higher than the mean value (6.61 %) of the entire groups (Table 6). These teachers try to build upon the information provided by the student instead of declaring it right or wrong like traditional pedagogies. Pattern of cells ‘4-4’-’4-10’-’10-10’ transitions, indicates silence in classroom in consequent to the asking thought-provoking or divergent question.

Chain of teaching behaviours, asking question based on ideas expressed by students for broadening the viewpoints of students and students’ initiation and extended students’ initiation characterised the enriched cognitive characteristic of classroom teaching of these teachers (HE), like teachers of EHE group, which is evident from pattern of cells ‘3-4’-‘3-9’-9-9’ transitions (Figure 3). The level of questions asked determines the quality of the activity of learning going on. It is needed to make questions more innovative and demanding in order to provoke thinking and support understanding among the students. Higher percentage (18.17%) of occurrences of the behaviour ‘silence or confusion’ are found to be greater than mean value (22.22%) of the entire groups (Table 6). Higher percentage of silence in classes these teachers might be attributed to levels of questions which make students to think creatively and imaginatively.

Higher percentage (3.5%) of occurrences of the behaviour PTI are found to be greater than mean value (2.06%) of entire groups: On the contrary to the EHE group, percentage (13.8) of occurrence of the behaviour PTR is found to be slightly less than the mean value (14.03%) of the entire groups (Table 6); but it does not seem matter of concern. Higher percentage of PTI reflects constructivist compatible changes in the classes of these teachers. One way to loosen up a rigid pattern of interaction, providing this is to be the teacher rather than a pupil prerogative, is to ask questions which invite participation by the pupils. The pattern of open questions
is illustrated by the cells ‘3-4’-‘4-4’-‘4-9’-‘9-9’ transitions in the Figure 3. These questions stimulate pupils to express their own ideas and to contribute their own suggestions.

3.2.3 Nature of Teaching Style of Teachers of HE Group

Table 6 showed that percentage of the occurrences of the categories: 2 (Praising or encouraging), 3 (Accepting or using ideas of the students), 4 (asking question), 8 (PTR), and 9 (PTI) are greater than obtained mean percentage values of corresponding categories for all groups of the teachers in combined, which signifies that HE group teachers are ‘INDIRECT’ in their teaching style like EHE group teachers.

In addition to this, Figure 4 depicts that percentage of the frequencies in the cells: ‘2-2’ (Praising in the extended manner), ‘2-3’ (praising and using the ideas expressed by the pupil), ‘3-3’ (extended appreciation of the pupil ideas), ‘3-9’ (students initiation in consequent to appreciation of the students’ responding on the part of the teacher) ‘4-4’ (asking question), (4-10) and (10-10) (silence in the classroom in consequent to the asking thought-provoking or divergent question), (8-2) (praising the students’ responding), (9-9) (extended students initiation or students initiation steady state), (8-3) (appreciation of the pupil ideas and building on the ideas expressed by the pupil) are found higher than obtained mean values for these cells for entire teachers of all groups, which further authenticated the ‘INDIRECT’ nature of the teaching style of these teachers.

3.3 Teaching Style of Teachers Having Moderate EI (ME)

3.3.1 Pattern of Behaviours Constituting Teaching Style of Teachers of ME Group

Figure 5 shows that near about 82.69% of the total frequencies of teaching behaviours are found to be concentrated in the fourteen cells and patterns which emerged are:

Pattern 1: Cell “5-5” (extended lecturing) → cell “5-4” (asking questions following lecturing or while lecturing) → cell “4-4” (extended asking questions) → cell “4-8” (students’ responding following questions asked by teacher) → cell “8-8” (extended pupil responding) → cell “8-5” (teachers’ lecturing at cessation of pupil talk).

Pattern 2: Cell “10-10” (silence following criticism of students’ behaviour and ideas) → cell “10-6” (directing or giving instruction following silence) → cell “6-6” (extended giving instruction).

Pattern 3: Cell “8-2” (praising at cessation of pupil responding) → cell “8-4” (asking questions following praising at cessation of pupil responding).

3.3.2 Discussion

For teachers of ME group, percentage (1.9%) of the occurrences of the behaviour ‘praising or encouraging’ is found to be less than the mean value (2.59%) for the entire groups. Pattern of cells ‘8-2’-‘2-2’-‘2-3’ transitions, which denotes praising at cessation of PTR, are not evident in classes of
these teachers like to teachers of HE groups.

Percentage (1%) of occurrence of the behaviour ‘accepting or using the ideas of the pupil’ is found to be less than the mean value (1.76%) of the entire groups (Table 6). Integrating PTR with communication fabric of classroom, which revealed itself by pattern of cells ‘2-3’-’3-4’ transitions in classes of teachers of EHE and HE groups is not evident in classes of these teachers.

Percentage (5.63%) of occurrence of the behaviour ‘asking questions’; is found to be less than the mean value (6.61%) of the entire groups (Table 6). PTR and PIR are decided by the way teachers handle PTR and PIR and asks diversified questions (from narrow ended to open ended). Diversified questioning patterns like cells ‘4-4’-’4-10’-’10-10’ transitions or cells ‘3-4’-’3-9’-’9-9’ transitions or cells ‘3-4’-’4-4’-’9-9’ transitions are very frequent in classes of teachers of EHE and HE groups, these patterns are rare in classes of teachers of ME group. These questions stimulate pupils to express their own ideas and to contribute their own suggestions; so these teachers seem incapable to ask questions which invite participation.

Figure 4: Cell-wise percentage value for teachers of HE group and mean percentage value for each cell for all groups of teachers
Percentage (0.89%) of the occurrence of the behaviour PTI; which is found to be less than the mean value (2.06%) of the entire groups; might be also attributed to incapability of these teachers to praise at cessation of PTR and PTI and integrating pupil ideas with classroom communication fabric unlike teachers of EHE and HE groups. These teaching behaviours manifest themselves by patterns like cells ‘8-2’-‘2-2’-‘2-3’ transitions or cells ‘8-3’-‘3-4’ transitions, can rarely be seen in classes of teachers of ME group, these are very frequent in classes of teachers of EHE group and HE group. PTI and PTR which show more willing students’ involvement are found lacking in classroom teaching of teachers of ME group.

Percentage (5.9%) of the occurrence of the behaviour ‘giving directions’ are found to be higher than the mean value (4.24 %) of the entire groups. Unlike EHE group and HE group, percentage (3.4%) of the occurrence of the behaviour ‘criticizing or justifying authority’ is found to be less than the mean value (4.05%) of the entire groups; though it is high enough to

Figure 5: Communication pattern in the classes of teachers of ME groups as per FIACs
poison social-emotional climate (Table 6); giving directions and criticising PTR is illustrated by pattern of cells ‘6-6’-‘6-7’-‘7-7’ transitions in Figure 5. Higher percentage of ‘giving directions’ shows inefficient management of lesson plan, class time and classroom interaction. Higher percentage of direction also implies less student involvement in the lesson.

3.3.3 Nature of Teaching Style of Teachers of ME Group

Due to below average occurrence of the categories: 2 (Praising or encouraging), 3 (Accepting or using ideas of the students), 4 (asking question), and 9 (PTI), which are major constituents of the ‘INDIRECT’ teaching style (Flanders, 1970) and above average percentage of the occurrence of the category ‘5’ (Lecturing), and category ‘6’ (giving directions) which are major ingredients of ‘DIRECT’ nature of teaching style (Flanders, 1970), it is inferred that ME group teachers are ‘INDIRECT’ in their teaching style.

A comparative study of Figures 1, 3 and 5 of teachers of EHE, HE, and ME groups depicts that higher concentration in cells ‘7-7’ (extended criticising), ‘6-6’ (extended giving direction), ‘6-7’ (criticising pupil behaviour following giving direction) are characteristic features of the teachers of ME group, which supported the ‘DIRECT’ nature of their teaching style (Flanders, 1970).

Moreover, concentration of percentage frequencies in cells ‘2-3’ (praising and using the ideas expressed by the pupil), ‘3-3’ (extended appreciation of the pupil ideas), ‘3-9’ (pupil initiation following appreciation of pupil ideas by teachers), ‘4-4’ (asking question), (4-10) and (10-10) (silence in the classroom in consequent to the asking thought-provoking or divergent question), (8-2) (praising the students’ responding), (9-9) (extended students initiation or students initiation steady state), (8-3) (appreciation of the pupil ideas and building on the ideas expressed by the pupil), which are major ingredients of the ‘INDIRECT’ nature of the teaching style, are observed to be absent in Figure 5 of these teachers; which prove the ‘DIRECTNESS’ of the teaching style of the teachers of ME group.

In addition to this, as per the Figure 6, it appears that percentage of extended lecturing (cell 5-5) is above average in the classes of these teachers, which denotes that these teachers have tendency to monopolise the duration meant for teaching and pay less attention toward encouraging students’ participation. This tendency of teachers has been further authenticated by the below average occurrence of students’ responding (cell 4-8). Incapability of teachers to stimulate active participation emerged from the below average occurrences of percentage frequencies of the extended questioning (cell 4-4) and instantaneous reinforcing or praising of students responding (cell 8-2) (Pandey, 1981). Above average occurrence of percentage frequencies of ‘extended giving direction’ (cell 6-6)
tended to present these teachers as autocratic and further this behaviour in conjunction with higher percentage of extended criticism of pupil behaviour (cell 7-7) caused the lower students responding and initiation.

3.4 Teaching Styles of Teachers Having Low Emotional Intelligence (LE)

3.4.1 Pattern of Teaching Behaviours Constituting Teaching Styles of Teachers of LE Group

As per the Figure 7, it is revealed that nearly 87.88% of the total frequencies of the teaching behaviours according to FIACs have been found concentrated in the just nine cells, patterns constituted by these cells are: **Pattern 1:** Cell “10-10” (extended confusion and mismanagement in classroom session) $\rightarrow$ cell “10-5” (teachers’ lecturing at cessation of confusion) $\rightarrow$ cell “5-5” (extended lecturing) $\rightarrow$ cell “5-10” (confusion at cessation of teachers lecturing).

**Pattern 2:** Cell “8-8” (extended students’ responding) $\rightarrow$ cell “8-5” (teachers’ statement at cessation of students’ responding) $\rightarrow$ cell “5-8” (students’ responding following teacher’s statement), this is drill
pattern (Flanders, 1970) in classes of these teachers.

**Pattern 3:** Cell “7-7” (Extended criticism at cessation of pupil talk or behaviour) → cell “6-6” (Extended giving instruction to students).

### 3.4.2 Discussion

Unlikely to teachers of EHE and HE groups, teachers of LE groups lack ability to praise at cessation or termination of PTR or PTI, this is reason why pattern of cells ‘8-2’ (praising or appreciating at cessation of pupil responding)→‘2-2’ (extended appreciation) transitions or ‘9-2’ (praising or appreciating at cessation of pupil initiation)→‘2-2’ (extended appreciation) are absent in classes of these teachers. For the teachers of LE groups, percentage (0.84) of the occurrences of the behaviour ‘praising or encouraging’ is found to be less than the mean value (2.59%) for the entire groups (Table 6).

In classes of teachers of LE group, pattern of integrating PTR or PTI with classroom communication fabric, which is manifested by pattern of cells ‘8-2’→‘2-3’→‘3-3’ transitions or ‘9-2’→‘2-3’→‘3-3’ transitions or cells ‘8-3’→‘3-3’ transitions or ‘9-3’→‘3-3’ transitions,

![Image](image.jpg)

**Figure 7:** Communication pattern in the classes of teachers LE groups as per FIACs
are found to be absent in classroom teaching of these teachers. Percentage (0.35%) of occurrence of behaviour ‘accepting or using ideas of the pupil’ is found to be less than mean value (1.76 %) of entire groups (Table 6).

Thought-provoking or open-ended questions which manifest itself by patterns of cells ‘4-4’→‘8-9’→‘9-9’ transitions or patterns of cells ‘3-3’→‘3-4’→‘4-9’→‘9-9’ transitions are observed to be absent in classes of teachers of LE groups. Percentage (1.86%) of occurrences of the behaviour ‘asking questions’ are found to be less than the mean value (6.61 %) of entire groups (Table 6).

Giving direction to students and criticising at cessation of pupil talk or undesirable behaviour are manifested in classes of these teachers by pattern of cells ‘6-6’→‘7-7’ transitions are found very frequent in classroom communication fabric of these teachers. Percentage (3.76%) of occurrences of the behaviour ‘giving directions’ are found to be slightly less than the mean value (4.24%) of the entire groups and percentage (4.21%) of occurrence of behaviour ‘criticising or justifying authority’ is found to be higher than the mean (4.05%) value of the entire groups (Table 6).

Percentage (0.68%) of occurrences of the behaviour PTI are found to be less than the mean value (2.06%) of the entire groups and percentage (9.66%) of occurrences behaviour PTR are found to be less than the mean value (14.03%) of the entire groups. This might be attributed to absent of patterns of praising at cessation of PTR and PTI, pattern of asking thought-provoking questions and pattern of integrating pupil ideas with classroom communication fabric (Figure 7).

Percentage (40.92%) of occurrences of the behaviour ‘silence or confusion’ are found to be higher than mean value (22.22%) of the entire groups. In case of least pupil talk, it is likely to be due to lack of command over classroom activities; it is confirmed by pattern of giving direction to students and criticising students’ behaviour (Figure 7).

3.4.2 Nature of Teaching Style of Teachers of LE Group

On the basis of the foregoing discussion of the teaching style of the teachers of LE group, it can be inferred that like teachers ME group, they are ‘DIRECT’ in their teaching style, too.

This deduction is based on the below averages occurrences of the categories 2 (Praising or encouraging), 3 (Accepting or using ideas of the students), 4 (asking question), 8 (PTR), and 9 (PTI), which are major ingredients of the ‘INDIRECT’ teaching style (Flanders, 1970). As revealed from Figure 7, cells ‘2-3’ (praising and using the ideas expressed by the pupil), ‘3-3’ (extended appreciation of the pupil ideas), ‘3-9’ (students initiation in consequence to appreciation of the students’ responding on the part of the teacher), ‘4-4’ (asking question), (4-10)→(10-10) (silence in the classroom in consequent to the asking thought-provoking or divergent question), (8-2)
(praising the students’ responding), (9-9) (extended students initiation or students initiation steady state), (8-3) (appreciation of the pupil ideas and building on the ideas expressed by the pupil), which are major ingredients of the ‘INDIRECT’ nature of the teaching style and found very frequent in the Figure 1 and 3 of the teachers of EHE and HE groups, respectively, are not found in the Figure 7 of the teacher of LE group (because of negligible occurrence, below 1%) which prove the ‘DIRECTNESS’ of the teaching style of the teachers of LE group.

From the inspection of the Figure 7 of the teachers of LE group, it reveals that out of 9 cells, cell ‘6-6’ (extended giving direction), ‘7-7’ (extended criticising pupil behaviour or justifying authority), ‘5-5’ (extended lecturing), ‘10-10’ (extended silence or confusion) have higher concentration of the frequencies, which further authenticated the ‘DIRECTNESS’ of the teaching style of the teachers of LE group (Flanders, 1970).

4. Conclusions

On the basis of findings, now it is likely to infer that EI of teacher play important role in shaping the nature of teaching styles of teacher. Teachers of EHE and HE groups are found to be ‘INDIRECT’ in their teaching style. On the contrary, teachers of ME and LE groups are found to be ‘DIRECT’ in their teaching style. In general, teaching styles of teachers of EHE group and HE group are characterised as teacher responsiveness rather than initiation (INDIRECTNESS). Indirectness of teaching style of EHE and HE groups accept and use of students’ ideas or opinions, ask diversified pattern of questions (blend of narrow and thought-provoking questions), encourage active participation of student, appreciate students’ responding and initiation, deal feeling and emotions in friendly manner and promote flexibility of teachers, influence more classroom interaction pattern. More than their counterpart teachers of ME and LE groups.

Constructivist compatible elements are observed to be embedded in teaching styles of teachers of EHE and HE groups. Like constructivist teachers, these teachers ensure active participation of students and ask diversified questions (low cognitive level questions and higher cognitive level questions or open-ended question or thought-provoking questions). Asking diversified questions disturb stage of equilibration (balance between assimilation and accommodation), which is likely to result into intellectual development of child through modification of existing cognitive structure or creation of new cognitive structure.

Initiations of students are found to be higher in classes of teachers of EHE and HE groups than that of their counterparts teachers of ME and LE groups. Students’ initiation refers to social constructivism embedded in teaching styles of teachers of EHE and HE groups. Due to this,
teachers promote active participation of students in learning. Asking questions based on students’ answers refers to attempt of teachers of EHE and HE groups to broaden students’ thinking. This attempts of teachers implies scaffolding (under concept of zone of proximal development). When teachers of EHE and HE groups try to ask higher cognitive level question, this refers to their role of cognitive apprenticeship in classroom teaching, through which these teachers try their best to cultivate critical thinking in students related to subject-matter being taught.

In various studies, these teaching patterns are found to be positively related to pupil achievement in different content areas, as well as to a number of other variables like-attitude, independence and self-direction, verbal recall, creativity, manipulative skills, etc.

REFERENCES


What is RTE? Some Ways of Making Education Accessible

Title of the Book : What is RTE? Some Ways of Making Education Accessible
Author/Editor : Santosh Sharma
Publisher : NCERT, New Delhi
Year of publication : 2014
Price : ₹ 90.00

The Right to Free and Compulsory Education (RTE) Act, 2009 has high recall value. In other words teachers have heard of it and most of them would be able to articulate about it in varying degrees. However, the lay person, including teachers, would not have gone through the RTE Act itself. Not that it is not accessible – it has been published for general information and is on the Government of India website—but that the hazy impression that most people have about laws and Acts is that they are written in obtuse legal terms, incomprehensible to the general public. The need is felt for books and reading material that de-mystify the laws of the land. The book under review is one such, titled ‘What is RTE? Some Ways of Making Education Accessible’, the book has been developed with the objective of creating awareness among teachers and to equip them with the necessary knowledge, skills and attitudes for effective implementation of the RTE Act. The book has six modules. The first one, ‘Understanding the RTE Act’ introduces the reader to the ten functions of the RTE Act, by gently leading him/her through the items of the first page of the Act: the national emblem, date and place of publication, the Act itself and its purpose. As the reader begins to gain confidence, the book provides activities to encourage him/her to go through the Act itself. ‘Read the Act and identify the functions that this Act serves’ (p. 3) can be done individually; ‘Read the Act and match sections and clauses of various functions’ (p. 5) can be done in a small group. The second module discusses concepts such as punishment, discrimination, bullying and harassment, and helps readers to develop a deeper level of
sensitivity and understanding. For instance, the word ‘punishment’ generally brings to mind corporal punishment, whereas the term includes presenting an undesirable experience and/or removal of a desirable one (p. 31). The third module focuses on a learner-centered classroom. One of the activities (p. 45) in this module encourages the reader to reflect on his/her own personal opinion regarding “good teaching”. Most importantly, the book explains that no classroom is completely ‘teacher-centric’; it is a question of degree. This idea is brought out by contrasting two classroom transcripts (pp. 52-53).

The fourth module is on the purpose and development of assessment plans. Three existing practices of evaluation in elementary schools are compared for teachers to reflect upon (pp. 67-79). Different methods of assessment in various curricular areas are discussed. The multiple layers of school management, building of partnerships and networking among stakeholders, as well as their roles in democratic participatory decision-making are discussed in the fifth module. The Constitution and functions of the School Management Committee (SMC) as listed in the RTE Act and stated in model rules developed by MHRD are provided. Examples of SMCs in Uttarakhand, Assam and the Andaman and Nicobar islands contribute to a deeper understanding of the concept. The last module concentrates on the concept of age-appropriate admissions and classes as well as the need for and nature of special training required for it. The objective and duration of the special training, along with development of learning material for such training are discussed, including emphasis on an in-built flexibility to accommodate Children with Special Needs. The example of the special training programme of Gujarat offers the reader a glimpse of how online information software can be utilised for getting details of out-of-school children. Peer tutoring in helping late entrants and the role of heterogeneous groups in contributing to attaining of desired levels of learning are brought out in the examples using science and mathematics (pp. 120-121).

A copy of ‘The Right of Children to Free and Compulsory Education Act, 2009’ is included as Annexure III in the book. The Act itself runs into thirteen pages and is divided into seven chapters. The point of including the Act as a sort of ready reference for the activities is not to classify responses as right or wrong, but to encourage readers to engage critically with the Act. Throughout the book, the language is simple and the tone measuring. Snippets such as the case of Brown vs. the Board of Education in U.S., which resulted in children of colour being admitted in schools and more recently, the Delhi High Court Order ensuring that private schools abide by the terms of the contract under which they received free land, add a contemporary dimension to the book. All these add up to a book that truly makes RTE accessible.

— Varada M. Nikalje
From the States

10

Elementary Education in Rajasthan

I. General Information

Number of Districts: 33
Number of Blocks: 256
Total population: 686.21 lakh
Literacy Rate: 67.06%

Educational Indicators

<table>
<thead>
<tr>
<th>Enrolment I-V</th>
<th>Enrolment VI-VIII</th>
<th>Enrolment I-VIII</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>Girls</td>
<td>Total</td>
</tr>
<tr>
<td>4478009</td>
<td>3906212</td>
<td>8384221</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GER</th>
<th>NER</th>
<th>Dropout rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>Girls</td>
<td>Total</td>
</tr>
<tr>
<td>Primary</td>
<td>102.01</td>
<td>99.66</td>
</tr>
<tr>
<td>Upper Primary</td>
<td>89.14</td>
<td>76.06</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Retention rate I-V</th>
<th>Retention rate I-VIII</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>68.49</td>
<td>67.83</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attendance Rate</th>
<th>Completion rate</th>
<th>Transition rate (Class V to VI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>Girls</td>
<td>Total</td>
</tr>
<tr>
<td>Primary</td>
<td>72.9</td>
<td>69.7</td>
</tr>
<tr>
<td>Upper Primary</td>
<td>72.5</td>
<td>74.6</td>
</tr>
</tbody>
</table>
II. Quality Issues and Challenges

1. Teacher Issues

   i. Unqualified Teachers: More

   There were 14237 single teacher schools and 20307 schools with adverse PTR as per DISE, 2012-13. The number of single teacher schools has reduced to 13061 in DISE, 2013-14, whereas the number of school with adverse PTR has come down to 16137. Department has deployed additional teacher in schools after DISE (30 Sept. 13) Now there are just 8548 single teacher schools in the state.

   ii. Teachers in Position:

   There are 22371 vacancies in the state out of these 9496 are in state head and 12875 in SSA.

   iii. Availability of Teachers

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Middle</th>
<th>Secondary</th>
<th>Higher or Senior Secondary</th>
<th>Graduation</th>
<th>Post Graduation</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of Teachers</td>
<td>5.2</td>
<td>5.2</td>
<td>20.1</td>
<td>37.4</td>
<td>32.2</td>
</tr>
</tbody>
</table>

(The minimum qualification required for primary teacher is XII Certificate as per RTE norms.)

   than 10 per cent teachers do not have the required minimum qualification of higher secondary.

   The Primary Teacher : July 2014
### iv. Attendance of Teachers

<table>
<thead>
<tr>
<th>Status</th>
<th>2013-14 Targets</th>
<th>2013-14 Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher attendance at primary and at upper primary</td>
<td>Increase in teacher attendance to 90 per cent</td>
<td>Increase in teacher attendance to 95 per cent at both primary and upper primary level</td>
</tr>
</tbody>
</table>

The teacher attendance in both primary schools and upper primary schools had increase 95 per cent in the State.

### v. Employment Status of Teachers

<table>
<thead>
<tr>
<th>Status</th>
<th>Regular full time</th>
<th>Against leave vacancy</th>
<th>Temporary</th>
<th>Para teacher</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of Teachers</td>
<td>81.3</td>
<td>1.2</td>
<td>4.7</td>
<td>7.6</td>
<td>5.3</td>
</tr>
</tbody>
</table>

The State has 81.3 per cent regular teachers, 7.6 per cent para teachers. RTE requirement is qualified trained teachers and not para teachers.

### 2. Learning Achievement

**Performance Class III (Language)**

- Class III children in Rajasthan were able to answer 58 per cent of language items correctly (National Average is 64 per cent).
- Average score of State for Class III is 238 (National Average 257 on 0 to 500 scale)
- Average score of Rural children is 238 and Average score of Urban children is 240, respectively (256 and 260 National Average, respectively)
- The score of children on Word recognition is 82 and score on reading comprehension is 52 (National average for word recognition is 86 and for reading comprehension is 59 on 0 to 100 scale).

**Performance Class V (Language)**

- The average score of Rajasthan on reading comprehension is 251 on 0 to 500 scale (National average is 247)

**Performance Class III (Mathematics)**

- Class III children in Rajasthan were able to answer 61 per cent items of Mathematics correctly (National Average is 66 per cent).
• Average score of State for Class III is 236 (National Average 252 on 0 to 500 scale)
• Average score of Rural children is 235 and Average score of Urban children is 239, respectively (252 and 253 National Average, respectively)
• The score of children abilities to performed Addition is 60 (National average is 69), Subtraction is 62 (National average is 65), Multiplication is 62 (National average is 63), Division is 52 (National average is 57) and Place Value is 55 (National average is 59).

Performance Class V (Mathematics)
• The average score of Rajasthan on Mathematics is 257 on 0 to 500 scale (National average is 251) (Source: National Achievement Survey)

3. Enrolment Retention and Other Issues

III. Quality Enhancement Initiatives by the State

i. Status of Implementation of RTE Act, 2009
• Direction and Guidelines issued to ensure 25% free admission in private schools.
• Web-portal monitored system of admission put in place.
• In 2012-13, 14755 private schools benefited 1 lakh children reimbursing 32.52 cr. in 2013-14, 2.40 lakh children benefitted.

| a | Transition rates from primary to upper primary | Improve it to atleast 90.00% | 88.41% | 92.00% |
| b | Retention at primary level | 70.00% | 68.18% | 70.00% |
| c | Retention at elementary level | 50% | 48.22% | 54.00% |

ii. Attendance of Student

<table>
<thead>
<tr>
<th>2013-14 Targets</th>
<th>2013-14 Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student attendance at primary and upper primary level</td>
<td>Improvement in student attendance by 88 per cent point</td>
</tr>
</tbody>
</table>
• SIERT, Udaipur has prepared curriculum and textbooks of Classes 1 to 8 based on NCF-2005.
• Continuous and Comprehensive Evaluation (CCE) implemented in 5861 Govt. elementary schools.
• A three-tier Grievance Redressal System has been established at district, block and SMC Levels.

ii. Continuous monitoring of learning levels of students (Reading Campaign)
• Monitoring of school performance in student learning levels.
• Self-appraisal by Teachers and Head teachers.
• Focus on learning levels in basic literacy and numeracy for Classes III, IV and V in 69,966 schools.
• Online system of monitoring and Up-dation on monthly basis.
• Feedback given to district and block level officers for improvement.
• Improvement in grade A (Excellent) from 10% to 43% since July.

iii. Early Literacy Programme (ELP)
• Started to develop reading and writing skills with comprehension in early grades i.e., Classes I and II.
• Programme started in 2098 schools.

iv. State Learning Achievement Survey (SLAS)
• Conducted to take appropriate interventions and to ensure accountability.
• 50 schools selected (1650 schools) from 40% blocks of each district on random basis.
• To be conducted in Class 5 for English, Maths and EVS.
• Likely to be completed by September 2014.

v. Continuous and Comprehensive Evaluation (CCE)
The brochure for building understanding of communities on CCE, developed by UNICEF was made available to the schools. A hand book on CCE was developed with the help of experts and supported by UNICEF and Plan India, was also provided to the teachers. Source books on CCE along with the assessment kit developed by the state with the support of UNICEF were also made available for all the schools where CCE is being implemented.
Students’ Learning Assessment

<table>
<thead>
<tr>
<th>Number of States moving to Continuous and Comprehensive Evaluation (CCE)</th>
<th>2013-14 Targets</th>
<th>2013-14 Actual</th>
<th>2014-15 Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3059</td>
<td>3059</td>
<td>22294 schools</td>
</tr>
</tbody>
</table>

vi. Girls Education: Kasturba Gandhi Balika Vidyalaya (KGBV)
- 200 KGBVs are operational and 18,711 girls have been enrolled.
- Web portal operational in all 200 KGBVs.
- 9406 Meena Manch at school level and 256 Adhyapika Manch at block level focus on creating awareness on issues related to girls.
- Academic competition Aao Dekho Sekho (ADS) conducted at Nodal Schools, Block, District and State Level.

vii. Access Programme 2013-14: School Opening and Upgradation

vi. Interventions for out-of-school children
- 2901 New Primary Schools.
- Upgradation of 2253 PS to UPS schools.
- 7 Residential Schools for orphan/homeless/street children and wards of non-earning guardians for 536 children.
- 14 Residential Hostels for 375 children of scantly populated area and minorities.
- Migratory hostel facility for 3401 children.
- 14222 Children benefitted through residential and non-residential STR.
National Early Childhood Care and Education (ECCE) Policy

MINISTRY OF WOMEN AND CHILD DEVELOPMENT
GOVERNMENT OF INDIA
National Early Childhood Care and Education (ECCE) Policy

1. Introduction

1.1 Early childhood refers to the formative stage of the first six years of life, with well-marked sub-stages (conception to birth; birth to three years and three years to six years) having age-specific needs, following the life cycle approach. It is the period of most rapid growth and development and is critical for survival. Growing scientific evidence confirms that there are critical stages in the development of the brain during this period which influence the pathways of physical and mental health, and behaviour throughout the life cycle. Deficits during this stage of life have substantive and cumulative adverse impacts on human development.

1.2 Early Childhood Care and Education (ECCE) encompasses the inseparable elements of care, health, nutrition, play and early learning within a protective and enabling environment. It is an indispensable foundation for lifelong development and learning, and has lasting impact on early childhood development.

1.3 India has 158.7 million children in the 0-6 years age group (Census 2011) and the challenges of catering to this important segment of population for ensuring the holistic development of children in the country are well acknowledged.

1.4 The National Early Childhood Care and Education (ECCE) Policy reaffirms the commitment of the Government of India to provide integrated services for holistic development of all children, along the continuum, from the prenatal period to six years of age. The Policy lays down the way forward for a comprehensive approach towards ensuring a sound foundation for survival, growth and development of child with focus on care and early learning for every child. It recognises the synergistic and inter-dependent relationship between the health, nutrition, psycho-social and emotional needs of the child.

2. Context and Need for the Policy

2.1 Social Context

2.1.1 India has a tradition of valuing the early years of a child’s life, and a rich heritage of practices for stimulating development and inculcating sanskaras or basic values and social skills in children. In the past this was delivered primarily within families, through traditional child caring practices which were commonly shared and passed on from...
one generation to another. However, there have been changes in the family as well as social context in the last few decades. Besides, there is a globally emerging realisation of the importance of the early years.

2.1.2 Strengthening capabilities of families, communities and services to ensure quality care and education for children in the early years is therefore a priority for India. Discrimination and inequities based on gender, social identity, disability and other exclusionary factors need to be addressed proactively to ensure universal access to integrated services towards fulfilment of right to free, universal pre-primary education.

The diversity in social contexts and family structures needs to be appropriately addressed in order to bring balanced parenting, including inputs from fathers, mothers and other caregivers in the family through enabling provisions in programmes.

2.2 Policy Context

2.2.1 The Government of India recognised the significance of ECCE, through the amended Article 45 of Indian Constitution which directs that The State shall endeavour to provide ECCE for all children until they complete the age of six years.

2.2.2 The Right of Children to Free and Compulsory Education Act (RTE) which came into effect from April 1, 2010, has also addressed ECCE under Section 11 of the Act high states, with a view to prepare children above the age of three years for elementary education and to provide early childhood care and education 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.

2.2.3 ECCE has received attention in the National Policy for Children (1974), consequent to which the Integrated Child Development Services (ICDS) was initiated on a pilot basis in 1975 with the objective of laying the foundation for holistic and integrated development of child and building capabilities of caregivers. In the 11th Plan period, the ICDS programme has been universalised to cover 14 lakh habitations. Reforms are afoot to ensure that universalisation with quality as well as focus on early childhood development is actualised in subsequent plans.

2.2.4 The National Policy on Education (1986) considers ECCE to be a critical input for human development and recognises the holistic and integrated nature of child development. The National Nutrition Policy (1993) has also recommended interventions for child care and nutrition during early childhood. The National Health Policy (2002) and National Plan of Action for Children (2005) along with Position Paper on ECCE in the National Curriculum Framework (2005) have also been supportive policy initiatives for early childhood. The Five Year Plans have also acknowledged the importance of Early Childhood Care and Education (ECCE) as the stage
that lays the foundation for life-long
development and the realisation of
a child’s full potential. The 12th Five
Year Plan emphasises the need to
address areas of systemic reform in
ECCE across all channels of services
in the public, private and voluntary
sectors, going beyond /CDS (AWCs).

2.2.5 India is also a signatory to both
the Convention on the Rights of the
Child (CRC) 1989 and Education for
All (EFA) 1990 which has postulated
ECCE as the very first goal to be
achieved for Education For All, since
learning begins at birth. The Dakar
Framework for Action (2000) and
Moscow Framework for Action (2010)
have reaffirmed the commitment to
ECCE.

2.3 Programme Context

2.3.1 ECCE services are delivered
through public, private and non-
governmental service providers.

The public channel is the largest
provider of ECCE services, historically
through Integrated Child Development
Services (ICDS) which is the world’s
largest programme mandated to
provide ECCE. Today the ICDS
programme provides services to nearly
80 million children under six years
of age, through a network of 1.4
million approved Anganwadi Centres
(AWCs). Programmes for universalising
elementary education such as the
Sarva Shiksha Abhiyan (SSA) and
National Programme for Education of
Girls at Elementary Level (NPEGEL)
have also supported setting up of
ECCE centres, attached to primary
schools in certain districts of the
country as stop gap arrangement till
Anganwadi Centres are universalised
in the area.

2.3.2 Creche services are provided
both through public schemes and
statutory provisions. The Rajiv Gandhi
National Creche Scheme for Working
Mothers offers care and education
services for children below 6 years
of age and figures for 2011-2012
indicate that a total of 23,785 creches
(MWCD Annual Report, 2011-12)
operational across the country.
Statutory creche services include
creches legally mandated under laws
and acts such as a) The Mines Act
(1952), b) Factories (Amendment)
Act, 1987, c) Plantations Labour
Act, (1951), d) Building and Other
Construction Workers’ (Regulation
of Employment and Conditions of
Service) Act, 996 and e) The Mahatma
Gandhi National Rural Employment
Guarantee Act(2005).²

2.3.3 Various other national
government programmes that support
quality access to basic services for
all, such as National Rural Health
Mission, Total Sanitation and Drinking
Water Campaign, targeted and
conditional schemes like the Janini
Suraksha Yojana and the Indira
Gandhi Matritva Sahyog Yojana
and provisions of maternity benefit
that support women’s reproductive
health and child care needs as also

² Exact figures are not available with respect to coverage.
schemes such as the Integrated Child Protection Scheme (ICPS) are expected to contribute towards an enabling environment for families to care for young children.

2.3.4 The unregulated private channel, both organised and unorganised is perhaps the second largest service provider of ECCE, and its outreach is steadily spreading even into the rural areas across the country although with varied quality. This channel suffers from issues of inequitable access, uneven quality and growing commercialisation.

2.3.5 In the non-governmental channel, there are small scale initiatives which are largely supported by trusts, societies, religious groups or international funding agencies.

2.3.6 There is a need to harmonise the activities of all these service providers, in accordance with service delivery norms, standards and regulations. The primary responsibility for this lies with the Government.

2.3.7 Despite the existence of multiple service providers, there is no reliable data available about the actual number of children attending ECCE provisions and their breakup as per delivery services/type of services. Out of the 158.7 million children in the below six years category (Census 2011), about 76.5 million children i.e., 48.2 per cent are reported to be covered under the ICDS (MWCD, 2011). With emphasis on quality in the strengthened and restructured ICDS, this figure is likely to increase further. Broad estimations indicate that a significant number is also covered by the private service providers, besides some limited coverage by the non-governmental service providers for which no reliable data exists.

2.3.8 The quality and coverage of non-formal pre-school/early childhood care and education imparted through these multiple service providers is uneven, and varies from a minimalist approach to accelerated academic programmes. This is largely an outcome of inadequate understanding of the concept of ECCE and its basic premises, its philosophy and importance among all stakeholders. This, coupled with inadequate institutional capacity in the existing system and an absence of standards, regulatory norms and mechanisms to ensure quality, has aggravated the problem.

2.4 In the above context, there is a need to ensure Early Childhood Care and Education (ECCE) for every child below six years across the country through appropriate reforms, measures and corrective actions enshrined in the Policy.

3. The Policy

3.1 The National ECCE Policy conforms to the vision of holistic and integrated development of the child, with focus on care and early learning at each sub-stage of the developmental continuum, in order to support children’s all-round and holistic development. This is envisaged to be provided by several care providers such as parents, families, communities and other institutional...
mechanisms like public, private and non-governmental service providers.  

3.2 The sub-stages with their age-specific needs are as follows:

(i) Conceptions to birth - ante and post natal health and nutritional care of mother, maternal counselling, safe childbirth, maternity entitlements, child protection and non-discrimination.

(ii) Birth to three years - survival, safety, protective environment, health care, nutrition including infant and young child feeding practices for the first six months, attachment to an adult, opportunity for psychosocial stimulation and early interaction in safe, nurturing and stimulating environments within the home and appropriate child care centres.

(iii) Three to six years - protection from hazards, health care, nutrition, attachment to an adult, developmentally appropriate play-based pre-school education with a structured and planned school readiness component for 5 to 6 year-olds.

3.3 These age-specific needs are the basis for providing ECCE services in accordance with appropriate technical norms and standards. The various needs of the children will be taken care of by the National ECCE Policy in convergence with related programmes and policies of other sectors such as health, nutrition, education etc.

3.4 The policy recognises that young children are best cared for in their family environment; however in a country of widespread diversity and stratification, many families need supportive measures for the optimal development of the child. The policy thus acknowledges multiple models of ECCE service delivery and would be applicable to all ECCE programmes that are offered by public, private and non-governmental service providers in all settings which could go by the nomenclature of AWCs, creches, play groups, play schools, pre-schools, nursery schools, kindergartens, preparatory schools, balwadis, home-based care etc.

4. Vision of the Policy

4.1 The vision of the policy is to achieve holistic development and active learning capacity of all children below 6 years of age by promoting free, universal, inclusive, equitable, joyful and contextualised opportunities for laying foundation and attaining full potential.

It envisages to improve pathways for a successful and smooth transition from care and education provided at home to centre-based ECCE and thereafter to school-age provision by facilitating an enabling environment through appropriate systems, processes and provisions across the country.

In furtherance of the vision of the policy, the government shall be guided by the following objectives:
(i) Facilitate comprehensive childcare supports, infrastructure and services aimed at holistic well-being of children and responsive to their developmental needs along the continuum of care from conception to age six.

(ii) Universalise and reinforce ECCE and ensure adaptive strategies for inclusion of all children with specific attention to vulnerable children.

(iii) Engage capable human resources and build their capacity to enhance and develop quality services for children and their families.

(iv) Set out the quality standards and curriculum framework for ECCE provisions and ensure their application and practice through advocacy and enforcement through appropriate institutional arrangements.

(v) Raise awareness and create common understanding about the significance of ECCE and promote strong partnerships with communities and families in order to improve the quality of life of young children through institutional and programmatic means and appropriate use of technology as required.

(vi) Recognise diversity of contexts, develop and promote culturally appropriate strategies and materials and work within the framework of decentralised governance using participatory and locally responsive approaches.

5. Key Areas of the Policy

The policy focuses on the following key areas to achieve the objectives:

(a) Access with equity and inclusion in programmes and interventions across service providers

(b) Improving quality (minimum specifications, quality standards, regulation, curriculum, play and learning material, programme assessment and child assessment)

(c) Strengthening Capacity (institutions, personnel, families and communities)

(d) Monitoring and Supervision (MIS, National ECCE Council, etc.)

(e) Research and Documentation

(f) Advocacy and awareness generation

(g) Convergence and Coordination among policies and programmes

(h) Institutional and Implementation Arrangements (ECCE Cell, National ECCE Council, Plans of Action)

(i) Partnerships

(j) Increased investment towards ECCE

(k) Periodic Review.

5.1 Universal Access with Equity and Inclusion

The Government shall take the following measures to ensure access to ECCE services:

5.1.1 The Government shall provide universal and equitable access to ECCE for all children through a decentralised and contextualised approach.
5.1.2 Access to ECCE will be mainly through ICDS and in convergence with other relevant sectors/programmes in public channel as well as through other service providers viz., the private and non-governmental. Special plans will be developed to reach the most marginalised and vulnerable groups and hitherto unreached.

5.1.3 The Government shall provide universal access to services for each sub-stage defined in Section 3 that will include health, nutrition, age appropriate care, stimulation and early learning in a protective and enabling environment. Such ECCE centres would be functional as per population norms as prescribed and preferably within 500 meters.

5.1.4 The concept of access to neighbourhood ECCE centre, including provision for admission of children belonging to weaker section and disadvantaged group, would be encouraged in private and non-governmental service provision channel also.

5.1.5 No child would be subjected to admission test, written or oral, for granting admission to an ECCE centre.

5.1.6 The AWC would be repositioned as a "vibrant child-friendly ECD Centre" with adequate infrastructure, financial and human resources for ensuring a continuum of ICCE in a life-cycle approach and attaining child development outcomes.

5.1.7 AWC-cum-creches with provision of full range of services, including care, planned early stimulation component, health, nutrition and interactive environment for children below 3 years will be developed, piloted and scaled up, if necessary, in response to community needs.

5.1.8 Implementation of Creches under schemes such as Rajiv Gandhi National Creches Scheme for the Children of Working Mothers as well as those under statutory laws by respective ministries and sectors (e.g. creches under MGNREGA Act, Building and Other Construction Worker's Act) would also be realigned and improved in accordance with the provisions of this Policy. Other models of creches responding to the diversity of needs would be supported to work in adherence to the quality standards for ECCE with flexibility to meet the needs of the target population.

5.1.9 To ensure inclusion of all children, measures will be undertaken for early detection and interventions with appropriate adaptations and referrals where necessary, for children at risk of developmental delays and disabilities. Appropriate linkages with concerned programmes/sectors would be established to facilitate participation of children with special needs in the ECCE programmes.

5.1.10 Family/Community and NGO-based ECCE service delivery model would also be experimented and promoted.

5.1.11 An urban strategy will be developed/adopted to address the specific unmet needs of children in urban slums and to expand access to all urban settlements/slums, etc. To
facilitate this, rules pertaining to area/town planning may be amended in the 12th Five Year Plan so as to provide space/provision for neighbourhood ECCE/Child Development Centres.

5.1.12 Universal access to integrated child development including ECCE for all young children remains the primary responsibility of the government through ICDS. The government may additionally explore supporting the not-for profit non-governmental and for-profit service providers by supplementing and complementing their services as may be deemed necessary and feasible.

5.1.13 Linkage with primary school system will be streamlined to address the issue of continuum and smooth transition from ECCE to primary schooling through school readiness package.

5.2 Ensuring Quality

The Government shall promote developmentally appropriate practices of ECCE through a multi-pronged approach of laying down norms and quality standards; developing curriculum framework; provision of appropriate and adequate play material; conducting programme assessment and child assessment.

5.2.1 To standardise the quality of ECCE available to children, basic Quality Standards and Specifications will be laid down for ECCE which will be enforced across public, private and non-governmental service providers.

The following base standards would be non-negotiable for promoting quality ECCE and shall be made mandatory for all service providers rendering any kind of ECCE service:

- An ECCE programme of 3-4 hours duration
- 1 classroom measuring atleast 35 square meters for a group of 30 children and availability of adequate (atleast 30 square meters) outdoor space for a group of 30 children
- Adequately trained staff
- Age and developmentally appropriate, child-centric curriculum transacted in the mother tongue/local vernacular
- Adequate developmentally appropriate toys and learning materials
- A safe building which is within easy approach. It should be clean and should have surrounding green area
- Adequate and safe drinking water facilities
- Adequate and separate child-friendly toilets and handwash facilities for girls and boys
- Separate space allocated for cooking nutritionally balanced meals and nap time for children
- Immediate health service in terms of First Aid/ Medical Kit available at the centre
- The adult/caregiver: child ratio of 1:20 for 3-6 year old children and 1:10 for under 3s should be available at the ECCE Centre. Children should not be unattended at any given point of time.
5.2.2 A regulatory Framework for ECCE to ensure basic quality inputs and outcomes, across all service providers undertaking such services or part thereof, will be developed by the National ECCE Council within one year of its establishment, and shall be implemented by states, with appropriate customisation, within three years of the notification of this policy. Such implementation may be in a phased manner moving progressively from registration to accreditation and ultimately to regulation of all ECCE service provisions.

The quality standards would relate *inter alia* to building and infrastructure; pupil-teacher interaction; learning experiences planned for children; health, nutrition and protection measures; qualification and professional development of staff; parent and community involvement and organisation and management of the ECCE provision.

5.2.3 Age and developmentally appropriate National ECCE Curriculum Framework will be developed within six months of the notification of this policy. The National ECCE Curriculum Framework will address the inter-related domains of development i.e., physical and motor; language; cognitive; socio-personal; emotional and creative and aesthetic appreciation, through an integrated, play based, experiential and child-friendly curriculum for early education and all-round development. It would also lay down the implementation details such as principles of programme planning, role of parents and caregivers/ECCE teachers, essential play materials and assessment procedure etc. An enabling and loving environment devoid of corporal punishment will be ensured.

5.2.4 The mother tongue/home language/local vernacular of the child will be the primary language of interaction in the ECCE programmes. However, given the young child’s ability at this age to learn many languages, exposure to other languages in the region and English, as required, in oral form will be encouraged in a meaningful manner. A multi-lingual strategy will be adopted respecting the children’s language and at the same time using the plasticity of the early years to expose the child to many languages.

5.2.5 The Government shall ensure provision of safe, child-friendly and developmentally appropriate play and learning materials and appropriate play spaces by appropriate instruments and instructions. The Government will promote use of traditional songs, stories, lullabies, folk tales, local toys and games as play and learning material in ECCE settings.

5.2.6 Programme evaluation of all ECCE service provisions will be undertaken by National ECCE Council, adopting consistent assessment criteria and methodologies.
health, nutrition and protection measures; qualification and professional development of staff; parent and community involvement and organisation and management of the ECCE provision including fee-related matters.

5.2.7 Formative and continuous child assessment will be conducted at the ECCE centre in order to ensure that the ECCE programme is responsive to the developmental needs of the child.

5.2.8 Modern technology including ICT potential will be optimally and appropriately harnessed to promote developmental and learning needs of children and also for monitoring, evaluation, capacity-building and training.

5.3 Strengthening Capacity

5.3.1 In view of the huge gap in the availability of trained human resources, the Government shall develop a proactive plan for strengthening existing training institutes for early childhood development like National Institute for Public Cooperation and Child Development (NIPCCD), including its Regional Centres and its outreach institutes like Anganwadi Workers Training Centres (AWTCs), Middle Level Training Centres (MLTCs) and establishing new ones, wherever necessary, within a stipulated timeframe. Similarly, other institutes like National Council of Educational Research and Training (NCERT), State Councils of Educational Research and Training (SCERTs), State Institutes of Educational Research and Training (SIERTs), District Institutes of Education and Training (DIETs), State Institutes for Rural Development (SIRDs) and Extension Training Centres, IGNOU, NIOS etc., would be associated to enhance the available trained manpower. The government will develop quality standards and a regulatory framework for accreditation and recognition of all training institutes.

5.3.2 The sector of ECCE will be professionalised at all levels with qualifications, development pathways, clear role definitions and capacity-building specified for various ECCE personnel. Capacities of ECCE workers will be strengthened to handle multiage and multilingual context. A comprehensive training and skill development strategy and plan for different levels of ECCE professionals will be pursued by respective service providers for professionalisation in the sector.

5.3.3 NIPCCD and its Regional Centres will be the main Child Development Resource Centres to provide continuous support to ECCE personnel (such as helpline; training; counselling centres; capacity development centres; assessment centres and advocacy hubs). In addition, States would be encouraged to open their own Resource Centres at the state and district level.

5.3.4 The policy recognises that the young children are best cared for in their family environment and thus strengthening family capabilities to care for and protect the child will receive the highest priority. Parents and family members would
be informed and educated about good child care practices related to infant and young child feeding practices, growth monitoring, stimulation, play and early education. Involvement of parents and other community members in the effective functioning of ECCE programmes will be encouraged and ensured.

6. Monitoring and Supportive Supervision

6.1 Monitoring and supervision of ECCE programmes will be strengthened, based on a systematic Monitoring Framework with disaggregated, tangible and easy-to-measure input, output and outcome indicators specified for ECCE quality. Appropriate authorities and the National ECCE Council along with National Commission for Protection of Child Rights may make necessary arrangements for such monitoring and supervision. Various mans of verification such as Management Information System, independent surveys etc., would be adopted.

6.2 A sound system for data collection/generation and information management will be established across the country which will allow for regular collection, compilation and analysis of the data on ECCE. Such data would be generated on processes, inputs, outputs and outcome indicators through standards, regulation framework and appropriate surveys on outcome indicators. Programme monitoring and Management Information System would feed on such data.

6.3 Technology will also be used to enable use of comprehensive mother and child cards covering the full spectrum of services under ECCE for regular monitoring and for accountability to all children. Synergy will be established with ICDS/NRHM/SSA data to identify and fill the gaps. Special strategies need to be devised for using the information system to reach out to the poorest of the poor.

7. Research, Evaluation and Documentation

7.1 Links between policy, research and practice will be strengthened. Funds will be allocated for substantive research in the area of early childhood, including longitudinal studies tracking children from the earliest years.

7.2 Concurrent and operational research will be promoted to generate indigenous knowledge and to ensure a more evidence based approach towards planning, implementation and monitoring of ECCE programmes and interventions. Impact evaluation will be made integral to all interventions and action research will be promoted for generating innovative models.

8. Advocacy

8.1 A major deterrent to ensuring the right kind of ECCE is the lack of understanding of developmentally appropriate ECCE among the parents and other stakeholders and the widespread belief that child is the responsibility of only the mother. Added to this is the lack of understanding of age-appropriate
needs, developmentally-appropriate interventions and implications of neglect.

8.2 In order to address the above, extensive use of media and interpersonal communication strategies will be made, including folk, print and electronic media, to reach out to parents, caregivers, professionals, and the larger community particularly the Panchayati Raj Institutions (PRIs) and the Urban Local Bodies (ULBs). Parent and community outreach programmes will be strengthened to enable them to get involved, advocate, plan and monitor ECCE programmes.

9. Convergence and Coordination

9.1 Children’s needs are multi-sectoral in nature and require policies and programmes across diverse sectors including education, health, nutrition, water and sanitation, labour and finance. The independently stated policies such as National Policy on Education (1986); National Nutrition Policy (1993); National Health Policy (2002); National Policy for Empowerment of Women (2001); revised National Policy for Children (2013); National Policy on AYUSH (2002) etc., programmes and other such related instruments, having bearing on ECCE, will be realigned and oriented with the current policy.

Regulatory, operational and financial convergence between these related policies, schemes and programmes will be encouraged and achieved over a stipulated period for optimal utilisation of resources.

9.2 Coordination and convergence will be achieved at different levels between, policies, programmes and schemes of various sectors through appropriate institutional mechanisms as well as between multiple stakeholders with the active participation of local communities.

9.3 Given that currently a significant number of 5 to 6 years olds are in primary schools in many states, and the Right to Education Act (2010) has the mandate for provision of free and compulsory elementary education from 6-14 years, convergence with Ministry of Human Resource Development and State Departments of Education will be of key importance, particularly for the adoption of child-centric and play based approaches and extend the school readiness interventions for children of 5 plus years of age. Mechanisms will be instituted to facilitate this convergence so as to ensure continuity and inter-linkage of centre based ECC! and school-age provisions with specific reference to Section 11 of the Right to Education Act (2010).

10. Institutional and Implementation Arrangements

10.1 The nodal Ministry for overseeing the ECCE programmes and services will be the Ministry of Women and Child Development (MWCD) along with its state level counterpart departments. All State Governments, I UT Administrations would be advised to make ECCE a subject under Business Allocation Rules of Department of Women and Child Development, as
has been made in the Government of India under the Ministry of Women and Child Development.

10.2 The major interventions to implement the main provisions of this policy will be initiated within one year of the notification of this Policy.

10.3 An ECCE Cell I Division will be established within MWCD for overseeing the implementation of the Plans of Action and act as interface, both at national and state levels, for multi-sectoral and inter-agency coordination. The Cell will include technical experts to ensure that quality norms and benchmarks are followed across states.

10.4 A National ECCE Council will be established within three months of notification of this policy, with corresponding councils at State within eighteen months of notification of this policy. The National ECCE Council will be the apex body with appropriate professional expertise, autonomy and funded by the MWCD, Government of India, to guide and oversee the implementation of the National ECCE Policy. It would contribute to strengthen the foundation of ECCE programmes in India by establishing a comprehensive ECCE system and developing an integrated framework facilitating and supporting multimodal and multicomponent interventions such as modalities of training, developing curriculum framework, setting quality standards and related activities; promoting action research among others. The Council will have representatives from all related Departments/Ministries, State Page 21 of 24 Departments/UT Administrations, Academic Resource Institutions, NGOs, civil society organisations, professionals and experts, practitioners, academicians, etc.

10.5 The policy will operate within India’s framework of decentralisation and will therefore include provision for committees at the community, block, district, state and national levels. These committees will be in appropriate harmonisation with ICDS monitoring and mission committees which have provision for involvement of community members, mother’s group, local self-government institutions (PRIs, ULBs).

10.6 In recognition of the social and geographical diversity of the country, the policy will allow for flexibility to ensure that services respond to local needs and with locally available resources. The district level administrative units and the Panchayats will be strengthened to provide for more decentralised planning and implementation of ECCE programmes. Community-based organisations such as Village Education Committees, Mother’s (Parent’s) Committees, Village Resource Groups, and PRIs will be directly involved and their capacities strengthened, to participate in and oversee the management of the ECCE centres across different service provisions and ensure accountability for quality functioning of services.
10.7 The programme of action for implementing and complementing the National ECCE Policy, National Early Childhood Education Curriculum and Quality Standards for ECCE will be reflected in the National/State Plan of Actions in SSA, ICDS, Reproductive Child Health (RCH) of National Rural Health Mission (NRHM), Creche Programme and Annual Implementation Plans of any other similarly situated programme of national/state/local bodies including PRls, across the inter-linked areas of health, nutrition, pre-school education and water and sanitation.

10.8 The Government shall create enabling environment for providing Integrated services as per the various facets laid down in the policy.

10.9 In addition to the Regulatory Framework proposed in Section 5.2.2, the Government shall bring appropriate legislation for promoting integrated and comprehensive child development detailing age appropriate interventions to address various facets of care, education, survival, protection and development of all children under six years of age assuring the right of the child in early childhood to Integrated Child Development.

11. Partnerships

11.1 Resource Groups I Voluntary Action Groups of experts and professionals and higher learning institutions will be identified at regional, state, district and sub-district levels and invited to support government efforts in monitoring, supervision and capacity-building for ECCE in a gradual and effective manner.

11.2 To achieve the objectives of the policy and support its own efforts, the Government may enter into partnerships for specific time bound initiatives with multiple stakeholders including community, non-governmental service providers and the private service providers while ensuring adherence to specified guidelines and standards.

12. Increased Investment towards Early Childhood Care and Education

12.1 Evidence indicates highest rate of return on investments made to improve child well-being in the early years of childhood.

12.2 The Government commits to increase the aggregate spending on quality ECCE interventions.

12.3 Early Childhood (from conception to 6 years) and ECCE budgeting would serve as an important dimension to assess investment in early years. The exercise of disaggregated child budgeting for early childhood may be carried out regularly so as to take stock of investments for children and to identify gaps in resource investment and utilisation. This would also assess child development outcomes.

13. Review

The implementation of the policy will be reviewed every five years. Periodic appraisals will also be made to assess progress of implementation and make mid course corrections, if and when required.
You might have observed that most children make mistakes while adding, subtracting, multiplying or adding numbers with zero. To make students understand the concept of zero, I created a poem. Children enjoyed the poem and now they do not make mistakes in addition, subtraction, multiplication or division of numbers involving zero.

**Zero is the Hero of Maths**

Zero says to number Five,
I have no value of my own, (0, 5)
But if you come to my left, your value will increase ten times, (50)
Decimal has no place between us.
Even if decimal comes between us,
Your value remains the same and I remain zero only. (5.0)

Addition and subtraction with me,
(5 + 0 = 5), (5 - 0= 5)
does not create any problem,
But if you multiply with me,
your value will be reduced to zero
( 5 × 0 = 0 )

I cannot divide you, by dividing me, you will also not get anything,
I have no value of my own,
Yet I am the hero of maths.

Vishnu Prakash Vaishnav
Principal,
Govt. Upper Primary School,
Kesampura, Rajasthan

*English translation : Santosh Sharma*
## NCERT Educational Journals

Revised Rates of w.e.f. 1.1.2009

<table>
<thead>
<tr>
<th>Title</th>
<th>Single Copy</th>
<th>Annual Subscription</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Science</td>
<td>Rs. 55.00</td>
<td>220.00</td>
</tr>
<tr>
<td>Indian Educational Review</td>
<td>Rs. 50.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Journal of Indian Education</td>
<td>Rs. 45.00</td>
<td>180.00</td>
</tr>
<tr>
<td>Bharatiya Aadhunik Shiksha (Bharatiya Aadhunik Shiksha)</td>
<td>Rs. 50.00</td>
<td>200.00</td>
</tr>
<tr>
<td>Primary Teacher</td>
<td>Rs. 65.00</td>
<td>260.00</td>
</tr>
<tr>
<td>Prathamik Shikshak (Prathamik Shikshak)</td>
<td>Rs. 65.00</td>
<td>260.00</td>
</tr>
</tbody>
</table>

For further details please contact:

--
The Chief Business Manager
Publication Division, NCERT
Sri Aurobindo Marg
New Delhi 110016