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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 !

Non-detention Policy

The low learning levels reported in National Achievement Survey conducted by NCERT and also in a study by Pratham raised questions about non-detention policy. Teachers say that promoting all children to next higher class, irrespective of their learning achievement, is responsible for low learning levels in Classes IV and V. Parents say that teachers do not teach and students do not learn because there is no terminal examination and no fear of failure. With no examination and no failure, there is no check on the performance of teachers and students.

To find answer to the question 'why students do not learn and achieve the desired levels of learning', we need to look at our existing school practices. In a traditional teacher-centred classroom, teacher teaches and covers the syllabus by reading the textbook and writing questions and answers on the blackboard. Students listen to the teacher and copy from the blackboard. Students are examined on the information provided by the teacher. Students memorise the questions and answers, and reproduce same in the examination. Students learn by 'rote'. Students are not engaged in learning activities. Self-learning is not encouraged. With rote learning practices, children fail to solve new/unfamiliar problems or to write anything on their own. Teachers need to reflect upon their traditional teaching practices and also reconsider their philosophies of teaching and learning.

The *National Curriculum Framework-2005* observes that students study to pass the examination and teachers prepare them to pass the examination. This represents a distortion in the aims of education. The aim of education is all-round development of children – physical, mental, emotional, social and spiritual. School should provide learning experiences that facilitate development and learning. Teaching to tests leads to rote learning, and fails to achieve the major objectives of education.

The non-detention policy presumes that teachers teach and ensure that all children achieve the learning levels required for their all-round development. Students learning progress is assessed continuously and corrective measures are taken when teaching learning is still fluid.

The RTE Act envisages a child-centred classroom, where children are provided opportunities to explore, discover and learn through activities. Each child must be engaged in meaningful activities. Teachers need to design learning activities that are relevant, useful and related to children's life and context. Learning progress of children must be assessed continuously. The feedback

from this assessment must be used to improve teaching-learning process. The RTE Act recommends continuous and comprehensive assessment of children. Teachers need to maintain record of students' work as evidence of learning.

Researches reveal that children learn when they are actively engaged in the process of learning. Learning is an active process and children are active participants in the learning process. How can a child fail if she/he is actively engaged in the learning process and her/his progress is continuously assessed? There is need to develop capacities of teachers to design a variety of learning activities and to assess learning progress of children on these activities.

To make non-detention policy a success, teachers and schools need to ensure that each child develops and learns. Learning environment is child-friendly, free from fear, trauma and anxiety.

— Academic Editor

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Effective Implementation of Quality Monitoring Tools: Some Reflections

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Overview

Sarva Shiksha Abhiyan (SSA) is implemented as India's main programme for universalisation of elementary education. SSA makes an effort to universalise access to and retention in schools, while at the same time, emphasises quality of elementary education through community-based monitoring system.

- **What is Monitoring:** Continuous assessment of progress for diagnosing strengths and weaknesses
- **Why it is Done:** To take timely corrective measures for optimising effectiveness and quality
- **How it is Done:** Identification of in-built milestones in programme, permeate through all its operations and components
- **When it is Done:** Total life-cycle of programme – pre-planning stage to implementation of planning and assimilation.

Government of India's commitment for quality monitoring is also highlighted in the following paragraph from *National Policy of Education (1986)*–"Within a multi-level framework of educational development, central, state and district and local level agencies will participate in planning, coordination, monitoring and evaluation and monitoring implementation *of* National Policy on Education (1986)."

Salient Features of Monitoring in *Sarva Shiksha Abhiyan*

- Community-based monitoring with transparency
- Establishment and effective use of EMIS
- Availability of monitoring structures at different levels – community, sub-district, district, state and national
- Convergence of Research and resource institutions

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- Periodicity in monitoring
- Field-based monitoring
- In-built and independent Monitoring
- Comprehensive coverage – Implementation, finance and quality
- Inclusion of various facets – supervision, monitoring, evaluation, research, etc
- Provision of feedback and follow-up.

Why Quality Monitoring Tools (QMTs)?

With a view to providing relevant and necessary inputs for enhancing the understanding of stakeholders including educational administrators, field level functionaries and teachers, a need was felt to provide a set of tools on various aspects of quality education in the context of SSA. The main objective of the document – QMTs is to equip the field level functionaries with a better understanding of the quality dimensions of elementary education so as to enable them to devise ways and means for reorganising classroom processes, adopting suitable evaluation techniques and developing harmonious relationships with parents and community leading to improvement in the quality of education at elementary stage.

Improving the quality and efficiency at school-classroom level is a major thrust area of the SSA programme. Mere focus on access, enrolment and retention without resulting into betterment of learning levels becomes counter productive, besides adversely affecting school effectiveness. It is, therefore, imperative that efforts towards achievement of quality need to go hand-in-hand with efforts directed towards increasing access, enrolment and retention. Interventions for pedagogical improvement are the most difficult to plan, apprise and implement. Adequate, rigorous, inclusive and continuous monitoring and supervision are the most important keys to successful implementation of any educational programme. The same is true for *Sarva Shiksha Abhiyan*. SSA also lays emphasis on improving the quality of elementary education, thereby making education useful and relevant for children by taking steps like improving the curriculum, child-centred activities and effective teaching-learning strategies. As the ultimate goal of all quality directed interventions is to achieve positive changes within the school-classroom settings so it is important to ensure quality in the inputs and processes for achieving quality education. All the monitoring formats are formative in nature and quality-oriented. These help the functionaries at various levels to realise 'Where do we stand?' These are quite useful for self-monitoring and self-introspection for assessing one's own strengths and bottlenecks experienced during the implementation of Quality Monitoring Tools. The feedback obtained at various levels need to be utilised to further improve the situation

and enhance quality in various aspects. Information is collected through these formats at different levels, viz., school, cluster, block, district and State. It is a system of two-way flow of information. The status is reported from one level to the next higher level and so on, which provides feedback to the preceding level for further strengthening the strengths and replicating the success stories as well as removing the bottlenecks. Thus, this monitoring system not only assesses the progress of the SSA programme but also enables the states to take timely corrective measures.

In this context, the National Council of Educational Research and Training (NCERT) has been identified as the nodal agency at the national level to bring about improvement in the quality of education at the elementary level through a multiplicity of initiatives. With a view to introducing a system of continuous monitoring of quality aspects of elementary education, the Department of Elementary Education, being the nodal Department at NCERT for SSA related activities developed a set of 14 monitoring formats and three analytical sheets, known as Quality Monitoring Tools (QMTs), through a nationwide rigorous process of consultations. These formats were rolled out by the Ministry of Human Resource Development across all the states during 2005-06. This is a self-sustaining mechanism for quality improvement at all operational levels of elementary education, viz., school, cluster, block, district and state.

Quality Monitoring Tools (QMTs) were implemented in the states and UTs with the aim to bring out improvement in quality of elementary education having focus on identified quality dimensions:

– Basic infrastructure and other Facilities
– Management and community support
– School and classroom environment
– Curriculum and teaching-learning materials
– Teacher and teacher preparation
– Opportunity time (teaching-learning time)
– Classroom practices and processes
– Learners' assessment, monitoring and supervision.

In order to achieve this aim, QMTs were developed and implemented with the following objectives such as:

1. to establish a system of periodic monitoring and regular feedback at elementary level within and outside the classroom;
2. to monitor the progress of key indicators for each quality dimension;
3. to analyse and provide feedback for improvement at different levels; and
4. to establish a community-based monitoring system at the school level.

Description of the Formats

Monitoring under *Sarva Shiksha Abhiyan* programme has been envisaged as a multi-tiered one:

monitoring at the school/ community level, at the cluster level, at the block level, at the district level, at the state level and at the national level. This necessitates development of a proper monitoring mechanism at various levels, i.e., school level/community level, cluster level, block level, district level, state level and the national level for a functional self-sustained feedback system. For this, there is a need to have an effective monitoring system through which not only the progress of the programme can be analysed but also timely corrective measures can be undertaken. The levels for monitoring and feedback mechanisms have been envisaged in Fig.1.
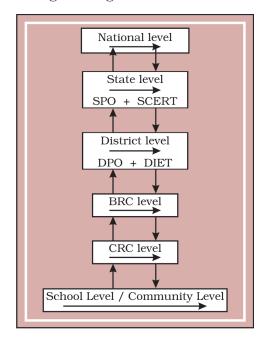

Fig. 1: Information Flow Systems in the Quality Monitoring Tools (Linkages with DIETs and SCERTs)

It was expected that the information collected at the school level and the information collected by community-based organisations would be consolidated and analysed by the Cluster Resource Centre (CRC) coordinator. However, every teacher analysed the quarterly data on learners' achievement, to reflect on her/his own students' learning and performance. CRC coordinator collated attendance and achievement data for the entire cluster and also analysed it to identify the trends and various needs. However, CRC coordinator was directly engaged through classroom observations and their quantitative and qualitative analysis. CRC coordinator sent data on attendance and learners' assessment along with his/her analysis to BRC coordinator.

At the block level, BRC coordinator was expected to go through the analysis and information sent by CRC coordinator and also to collect some information at his/ her own level. It is important to mention that the BRC coordinator collected the required information himself/herself and not through CRC coordinator. There were certain items on which BRC coordinator had to report, which do not figure in CRC coordinator's formats, for example, data on teacher appointment, etc. The reason behind this segregation was that BRC coordinator plays an important role in ensuring teacher appointment.

BRC coordinator will sent all the data and the information to District Project Office (DPO) as well as to the

respective District Institute of Education and Training) (DIET). It was envisaged that the team in DPO would reflect on the information and collate information coming from different blocks, before sending it to State Project Office and SCERT. DPO will send the data on attendance, learners' assessment and other items. The monitoring formats filled by the BRC coordinators was to be sent to the DIETs who should analyse the specific achievements and shortfalls for areas mentioned under curriculum and teaching-learning materials, teacher and teacher preparation, classroom practices and processes, and learners' evaluation, monitoring and supervision and then prepared their assessment and remedial plan for their districts.

The DIET was to send their comments to the DPO after analysis who then consolidate the information and forward it to the State Project Office. The DIET Principals send their comments to the Director, SCERT for State-wise review and consolidation. The DPOs, BRC and CRC coordinators were to take into account the areas identified by DIET faculty members, which required attention while planning in-service training of teachers and finalised it in consultation with DIETs.

The State with the help of SCERT consolidated learners' assessment data for every quarter. The State Office also reflected on information about enrolment and actual attendance of children in schools but did not send it to the National Level. DIETs and SCERTs were to own the responsibility for improving the areas mentioned under curriculum and teaching-learning materials, teacher preparation, classroom practices and processes, opportunity time, teaching-learning time and learners' evaluation, monitoring and supervision.

QMTs did gain acceptance from different States and Union Territories since its inception. But a look at the data in Fig. 2 showing Frequency of Monitoring Reports submitted by States/UTs to NCERT reveals that whereas some States and UTs like Chandigarh, Andhra Pradesh, Tamil Nadu and Madya Pradesh were quite regular in sending these formats for feedback from NCERT, there were few States and UTs like Goa, Arunachal Pradesh, Meghalaya, Maharashtra, West Bengal and Jammu and Kashmir which did not actively participate and sent very few formats. This calls for a review to apprise the system about the bottlenecks or the constraints being faced in the implementation of QMTs by these States and Union Territories.

Accordingly Secretary (SE&L), MHRD observed in the 169th meeting of Project Approval Board held on 20 May 2011 that it has become essential to assess the effectiveness of the QMTs in getting some useful insight into the quality of education in the schools. NCERT must think through the ways to analyse the report and bring out relevant takeaways from them for the states. Similarly Additional

Frequency of Monitoring Reports Submitted by States/Uts

Sl.	States/ UTs	STLF I (a)*	STLF I (b)**	STLF II***
1	Andhra Pradesh	7	7	7
2	A & N Islands	2	2	2
3	Arunachal Pradesh	1	1	1
4	Assam	3	2	2
5	Bihar	2	2	2
6	Chandigarh	8	11	11
7	Chhattisgarh	2	2	2
8	Dadra & Nagar Haveli	3	3	3
9	Daman & Diu	4	4	4
10	Delhi	5	6	6
11	Goa	0	0	2
12	Gujarat	4	8	8
13	Haryana	1	4	4
14	Himachal Pradesh	5	3	6
15	Jammu & Kashmir	1	2	2
16	Jharkhand	2	2	4
17	Karnataka	3	4	3
18	Kerala	3	3	1
19	Lakshadweep	3	5	3
20	Madhya Pradesh	6	7	7
21	Maharashtra	1	1	1
22	Manipur	1	1	3
23	Meghalaya	1	1	1
24	Mizoram	4	5	5
25	Nagaland	6	6	3
26	Orissa	3	3	4
27	Puducherry	4	7	3
28	Punjab	7	7	10
29	Rajasthan	3	5	5
30	Sikkim	5	5	4
31	Tamil Nadu	10	11	11
32	Tripura	4	9	9
33	Uttar Pradesh	4	7	8
34	Uttarakhand	3	4	4
35	West Bengal	1	1	1

* STLF I (a): Annual Monitoring Report on various Quality Dimensions
** STLF I (b): Quarterly Monitoring Report on progress in In-service Trainings
*** STLF II: Quarterly Monitoring Report on Learners' Achievement

Fig. 2

Secretary (SE) also added that QMTs are being seen as an additional data collection exercise and a burden on the CRCs and BRCs. Unless they lead to deepening the understanding of the needs and challenges of ensuring quality education at the district and sub-district levels, there is little point in collecting a large volume of data. She also expressed the opinion that the data collection formats have been revised without any meaningful consultation with the stakeholders and taking the implication of the RTE Act, into account. As regards QMTs, the appraisal team observed that the programme did serve a useful purpose in the initial years, but it needs serious rethink if it should continue in its present form for the following reasons:

- Heavy emphasis on data collection most of which is already being collected through DISE adding additional burden on the teachers and sub-district level functionaries.
- Absence of a robust mechanism for the analysis of this data at any level.
- Uniformity of tools completely does not allow the contextualisation of the whole exercise and establishing meaningful linkages with the prevailing pedagogical approaches in the states.
- The basic purpose of generating useful insights into the efficacy of the quality interventions at the school level does not seem to have been served. There is no evidence of the findings of this exercise being factored into the curriculum renewal process or teacher training

strategies at the national or state level.

- States are not enthusiastic at all about continuing it and even NCERT's capacity to provide support to the states is extremely limited.
- Despite the programme being in existence for about six years, no qualitative report or document exists on the findings of the QMTs.

Director, Elementary Education informed the PAB that all these issues regarding QMT were discussed with the NCERT team during the appraisal process and a suggestion was made that this pogramme should be replaced by a programme smaller in scale in terms of coverage of the schools, but designed to undertake intensive study and analysis of the quality interventions at the school level with reference to the preparedness level and effectiveness of the support institutions like DIETs, BRCs and CRCs to carry forward the quality agenda of the state. It was discussed that the new Quality Monitoring Programme should be implemented in schools falling under 100 clusters across the country ensuring that at least one cluster is covered in each State/UT. This exercise should result not only into the capacity-building of the schools and district and sub-districts level giving an in-depth perspective on the strengths and challenges in ensuring quality education in schools in different states. Additional Secretary (SE) supported the view that QMTs should be replaced by a more intensive and focused quality monitoring

programme and said that it should also have linkage with the findings of the national level achievement surveys. Director, NCERT also endorsed the idea of intensive monitoring of quality interventions and development of good documents for the use of states and other stakeholders. The Department of Elementary Education agreed to the suggestion to have a relook at the Quality Monitoring Formats and finalise them in active consultation with the states. It was assured to the chairperson that NCERT would strive to improve the analysis of the reports and quality of the analytical reports shared with the states. Accordingly, NCERT in collaboration with the States/UTs revised QMTs in the context of RTE Act, 2009. The revision is based on NCF-2005. *Sarva Shiksha Abhiyan*–Framework for Implementation, based on the RTE, 2009, Model Rules on RTE, and experience gained in the implementation of QMTs since 2005-06. The revised QMTs have been submitted to the MHRD and released for implementation during 2013-14 to all States and UTs. The objectives of the revised QMTs are as given below:

1. To institutionalise quality monitoring system of elementary education in the States/ UTs.
2. To promote understanding of various dimensions of quality of elementary education among State, district, sub-district and school functionaries.
3. To ascertain the participation of community in functioning and monitoring of elementary school education system.
4. To monitor the progress of and provide feedback on various dimensions of quality education at elementary level within and outside the classroom.
5. To improve the quality of elementary education as envisaged in RTE Act, 2009.
6. The revision of QMTs consisting of 14 formats and three analytical sheets resulted into seven simplified formats, to be used at different levels – school, cluster, block, district and state.

The major quality dimensions for improving quality of elementary education covered under the revised formats are:

• Children's Attendance;
• Community Support and Participation;
• Teacher and Teacher Preparation;
• Curriculum and Teaching-learning Materials;
• Classroom Process; and
• Learners' Assessment, Monitoring and Supervision.

Under the revised scheme there are four quarters of monitoring in a year, that is, the QMTs at different levels will be completed four times in a year– once in each quarter. The four quarters have been shown in Table 1.

A comparison of Table 1 (revised QMT) and Table 2 (previous QMT) shows that number of formats to be completed has been reduced from 14 to seven in number. Earlier there were 14 formats and three analytical sheets

which have been simplified to seven. The information on quality management aspects were collected for two quarters in an academic year earlier. The period covered in Quarter I was June/July to September, in Quarter II it was October to December and in Quarter III the months covered were January to March. Table 2 presents consolidated picture of quarters of monitoring at various levels of previous QMTs.

Table 1: The Quarters of Monitoring

Quarter	Period covered	Submission of tool/format to next higher level	Format to be completed/ consolidated	
I	April to June	July	SMF, CMF, COS, BMF, DMF	—
II	July to September	October	SMF, CMF, COS, BMF, DMF	SMCF, STMF
III	October to December	January	SMF, CMF, COS, BMF, DMF	—
IV	January to March	April	SMF, CMF, COS, BMF, DMF	SMCF, STMF

Table 2: The Quarters of Monitoring

Levels	Attendance	Community/ VEC support	Teacher Preparation, TLM &T-L Processes	Learners' Assessment	Total
School	1 Quarterly	1 Annually	-	1 Quarterly	3
CRC	1 Quarterly	-	1 Quarterly	1 Quarterly	3 + 1 Analytical Sheet
BRC	1 Quarterly	-	1 Quarterly	1 Quarterly	3 + 1 Analytical Sheet
District	1 Quarterly	-	1 Quarterly	1 Quarterly	3 + 1 Analytical Sheet
State			1(a) Annually 1(b) Quarterly	1 Quarterly	2
Total	4	1	4	5	14 + 3 Analytical Sheets

Suggestions for effective implementation of QMTs

Since the QMTs have been operational, the monitoring for management of quality education has made headway in terms of sensitising about the quality aspects of elementary education. These formats are being implemented in all the thirty-five States and Union Territories across the country; however, they are at different stages of implementation. Over the years, it has been found that there are variations in the way in which QMTs have been adopted by different States and Union Territories. The participation of some States and Union Territories were far behind as expected. In order to attain the desired impact of QMT, greater involvement of all concerned becomes imperative. Accordingly few suggestions have been made for not only bringing improvement in Quality education but also its sustenance.

- All the BRC and CRC structures should be functional in all States/ UTs.
- CRCCs, BRCCs and other SSA functionaries should be deployed in required number.
- Responsibilities of CRCCs and BRCCs should be specified.
- CRCCs and BRCCs should pay regular visits to schools. Sometimes, these visits may be made without any previous information.
- CRCCs and BRCCs should devote maximum time in visiting the concerned schools and in providing on-site support to the teachers.

- We should try to achieve coordination at all levels of implementation of SSA programme.
- There should be active involvement of VECs/ PTAs/ MTAs and other community members in the school activities.
- Real information should be filled-up, which will help the SSA functionaries to derive action points for improvement. For real feedback, real data is needed. Genuineness is the crux of monitoring.
- Quality assurance depends on the raw things obtained. It is possible that the persons at the grassroot level commit mistakes. Accept errors for modification.
- The analytical sheets at various levels are for reflection of real situation at that level. There should be willingness among concerned SSA officials to take corrective actions. If required, some support must be available for them in the system.
- Empowering functionaries at different levels in analysing the collected information and taking corrective measures on the basis of identified problems.
- Development of computer programme for facilitation in data compilation at different levels.
- Sharing Meetings should be organised in different states for dissemination of best practices and incentives to the concerned functionaries.

Conclusion

Monitoring gives us opportunity to assess health of the system. All the monitoring formats are formative in nature and quality-oriented. It is not useful to collect the data only. Rather, we should make efforts 'how we can enhance the utility of information gathered through QMTs'. If we strengthen our monitoring mechanisms at all levels, we will not only be able to sustain the interest of children in schools but, we will also be able to improve the achievement levels of children through effective classroom processes.

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Socio-economic Aspect of Right to Education Act

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Introduction

Education is core to development. So far as economic development of an individual or a society is concerned, it is largely determined by the quality of educational outcomes. The quality of societal development (standard and quality of life) depends essentially on the number and quality of educated people (Trapero, 1985).

A number of researches reveal that cognitive development of a child largely occurs during the age of 3 to 8. So, pre-primary and primary schooling age has been considered to be the most crucial for overall development of any child. In the pre-school years, children understand themselves as individuals; in addition, they understand themselves as part of a social world.

An Overview of Right to Education– Its Genesis and Evolution

Article 45 of the Constitution emphasises on both of these aspects, i.e., "the state shall endeavour to provide early childhood care and education for all children until they complete the age of six years." and "the state shall endeavour to provide free and compulsory education to all children of the age of six to fourteen years in such manner as the state may, by law determine".

86th constitutional amendment notified on 13 December 2002, seeks to make the following three changes in the Constitution.

• In Part III (Fundamental Rights) add the following new article:

21A. Right to Education: "the state shall provide free and compulsory education to all children of the age of six to fourteen years in such manner as the state may, by law determine."

• In Part IV (Directive Principles of State Policy), replace the existing Article 45 "provision for early childhood care and education to children below the age of six years–

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the state shall endeavour to provide early childhood care and education for all children until they complete the age of six years."

• In Article 51A (Fundamental Duties), after Clause (J), add a new Clause (K) as follows:

Fundamental Duties – "it shall be the duty of every citizen of India; who is a parent or guardian to provide early childhood care and education to his/her child or, as the case may be, ward between the age of six and fourteen years."

Right to Education, which in Article 21A seeks to confer, is that the other rights are mostly in the nature of 'protective' rights (i.e., which guarantee certain pro-active action on the part of the state vis-a-vis every child of the country who is in the 6-14 years age group.

Provision of free and compulsory education or education of satisfactory quality to children from weaker sections is the responsibility of not merely the schools or the state, but also of schools which are not dependent on state funds. Schools of the latter kind also needs to provide education to such children at least to the extent of 25 per cent of their intake. This is not merely as part of the social responsibility of such schools, but equally so that their 'fee- paying' students study in socially more representative and diverse environment, and develop into socially sensitive citizens.

Dysfunctional delivery system has been considered to be the main hurdle in universalising elementary education. This has therefore attempted to formulate a number of provisions for the proposed legislation, essentially aimed at greater decentralisation and accountability, so that the delivery system is able to rise to the challenge.

We can see the right to education act as an attempt of Indian government to create equality and enhance the skill of children. It is an attempt of government which is directly related to social welfare and economic development.

So far as the RTE act is concerned this has been described in 7 chapters and 38 sections as stated under.

• Preliminary and definition (Section 1,2)

• Free and compulsory education (Section 3,4,5)

• Duties of appropriate government, local authority and parents (Section 6,7,8,9,10,11)

• Responsibilities of school and teachers (Section 12,13,14,15,16, 17,18,19,20,21,22)

• Curriculum and completion of elementary education (Section 29,30)

• Protection of right of children (Section 31, 32,33,34)

• Miscellaneous (35,36,37,38).

The proposed study aims to analyse the provisions under Section 12 that largely talks about provision of 25 per cent reservation of seats in unaided private schools for disadvantaged and weaker sections as defined in the act.

The Section 12 (1) (c) of the RTE act states that the school belonging to

specified category and unaided school not receiving any kind of aid or grant to meet its expenses from the appropriate government or the local authority shall admit in Class 1(or in pre-school) to the extent of at least twenty five per cent of the strength of that class, children belonging to weaker section and disadvantaged group in the neighbourhood and provide free and compulsory elementary education till its completion.

Benefits offered under this section as stated in the Gazette – The state government shall reimburse schools an amount equal to either the fees charged by the school or the per child expenditure in state schools, whichever is lower (chapter IV. 12(2) of Gazette of India).

Reimbursement of per Child Expenditure by the State Government for the Purpose of Sub-section (2) of Section 12 of the Act

As specified in the notified State Model Rule of the Uttarakhand state, in respect of admission of children to schools under Sub-clause (iv) of Clause (n) of Section 2 providing free and compulsory elementary education as specified in clause (c) of Sub-section (1) of Section 12, shall be reimbursed by the State Government as determined by the State level Committee headed by the Principal Secretary/Secretary, Finance, Government of Uttarakhand, constituted for the purpose by the State Government. The child shall not be levied any other additional fee/charges or expenses by the private school. The time frame for reimbursement shall also be decided by the said committee.

The total annual recurring expenditure incurred by government whether from its own funds, or funds provided by the Central Government or by any other authority, on elementary education in respect of all schools established, owned or controlled by it or by the local authority, divided by the total number of children enrolled in all such schools, shall be the per child expenditure incurred by government.

Other important considerations (as mentioned in the state model rule) while reimbursing the per child expenditure are stated under

- If any school specified in Sub-clause (iv) of Clause (n) of Section 2 is already under obligation to provide free education to a specified number of children on account of it having received any land, building, equipment or other facilities, either free of cost or at a concessional rate, such school shall not be entitled for reimbursement to the extent of such obligation.
- Every school which receives reimbursement of fee shall maintain a separate bank account which shall be subject to audit by the State government.
- In respect of a child admitted to a private unaided school, other than a designated neighbourhood school, the child cannot

claim reimbursement of such expenditure incurred on its education in such a school.

- The Block Education Officer shall ensure that there are no fake/ double admissions by schools, who wish to take advantage of the reimbursement of fee under the Act.
- The State shall ensure that all the children admitted in unaided schools under the 25 per cent quota are given all the free entitlements which the children receive in a government school such as free uniforms, mid-day meal etc.
- So far as beneficiaries of Section 12(1)(c) of the act is concerned, the children of six to fourteen years, who belong to disadvantaged group and weaker section (Chapter I(2) (d)(e) of Gazette of India) can be treated as primary beneficiary.

Interpreting Social and Economic Aspect of this Act:

1. The act provisions for free and compulsory elementary education for all eligible children between 6 and 14 years of age. In particular provision of 25 per cent reservation for disadvantaged and weaker sections as defined in the act can be considered as the biggest economic incentive to economically poor families. The primary motive behind the Act was to provide access to the socially backward and economically weaker sections of society. At a micro level, this incentive will translate to a higher level of education in the economy and hence higher Gross Enrolment Ratio (GER).

2. As revealed by a number of studies, education is core to economic sovereignty of any welfare state, the RTE act for the first time opted for a right based approach to ensure universal quality elementary education of equitable quality to each and every child between the age group of 6 and 14 years of age. Thus it not only talks about a Fundamental Right but also paves path for achieving it. As a result, the resource and financial provisions required to achieve this Fundamental Right will definitely lead to a high increase in the cash flow of any community and so it has a clear impact on economy of the country.

Being in the Concurrent List of the Constitution, the responsibility of implementation of the act lies in both the state and the centre, so both would have to allocate sufficient financial provision to ensure adequate enforcement of the act.

Education of equitable quality being the core focus of the act, almost all the sections the act advocates for a child-centred approach, i.e., every child a future citizen of India, has a Fundamental Right like right to survival, development, participation and protection to get education of equitable quality at least up to 14 years of age.

Considering the diversified socio-cultural profile of the country the act

has considered each and every child as equally important and has provisioned for reservation for the children belonging to identified oppressed sections of the society.

The above stated references clearly indicate that equity and dignity of the children remain the main consideration of the act.

Objectives

As inferred above, the proposed study aspires to analyse the operational and other implications of the Section 12(1)(c) that includes stock taking of prevailing practices, perceptions and views of concerned stakeholders and economic impact on the family economy of the targeted beneficiaries. Thus, after going through the various provisions of the Act and their interlinkages, following objectives were decided:

1. To examine enrolment practices under the RTE act (Clause12 (1)(c) in randomly identified private schools of Dehradun city.
2. To analyse impact of this provision on education expenditure on the families from weaker sections and disadvantaged community.
3. Perceptions of various stakeholders (service providers, service seekers, service organisers) about the provision of this act.

All the above mentioned objectives are interlinked with each other and cannot be met in isolation. Considering this, it was attempted to analyse almost all important provisions of the act in the purview of the children. Efforts have been made to observe and analyse enrolment practices in private unaided schools from all three perspectives, i.e., service organiser, provider and service seeker. Similarly for 2nd and 3rd objectives also efforts have been made to evolve in depth understanding of processes and perceptions of stakeholders.

Methodology

This study aspires to examine the operational implications of Section 12(1)(c) of RTE act, i.e., provision of 25 per cent reservation in private schools for eligible children of 6 to 14 years of age. The period of my study is from 1 June 2012 to 31 July 2012.

Type of Study – It is a qualitative research and the framework used is that of a case-study on the proposed subject matter. Though different types of researches could be chosen to address our question, we chose to carry out case-study mainly because, we started this study in the month of May when the school was likely to close for summer vacation so we could not explore it in a big geographical area since time was a constraint for data collection from schools. Moreover, we thought it advantageous and pertinent to understand in detail, processes taking place in particular schools and experiences of school authorities and parents associated with those schools. We are pursuing this research in some private schools in urban areas of Dehradun.

Respondents – Since we have decided to carry out a qualitative study, and thus, collect primary data

through observations and discussions, we have identified the groups of people with whom we will have these discussions. These are the respondents for the study. We have divided the respondents in three categories:

1. Service seekers - The service seekers are the parents whose children are eligible to get admission to private schools under this act.
2. Service providers - The service providers are principals of some private schools who are taking admission of eligible children under this act.
3. Service organisers - The service organisers are the government officials who are responsible or got appointed from government to implement and monitor the implementation of the provision of this act. In this study we have identified *Nagar Shiksha Adhikari*, BEO and DPO as respondents.

Issues – Having identified the objectives, type of research as well as the respondents, now to provide further focus to the study we have enlisted specific issues to be probed for each objective. The objectives are broad and open to some extent and can be addressed in different ways. It was felt important to provide some specificity to the study also keeping in mind the limited availability of time. Following are the issues selected for each objective:

Issue for objective 1

(i) Whether the enrolment is going on or not under this act? Whether the enrolment is going on or not as per the norms of this act? What is the full procedure of admission under this act? What are the problems occurring in implementation of provisions of this act?

Issue for objective 2

(ii) What is the difference of expenditure per child education between private school and government school? The detail area of expenditure on child.

Issues for objective 3

(iii) What is the perception of service seekers? To analyse the perception of service seekers, we divide it into three parts: What is the perception of service seekers when the act came into practice? What is the perception of service seekers at the end of one year from the act came into practice? Are they thinking the act as an opportunity for their children?

(iv) What is the perception of service providers? To analyse the perception of service providers, we divide it into three parts: What is the perception of service providers when the act came into practice? What is the perception of service providers at the end of one year from the act came into process? Are they thinking act an opportunity for children education?

(v) What is the perception of service organisers? To analyse the perception of service organisers, we divide it into three parts: What is the perception of service organisers when the act came into practice?

What is the perception of service organisers at the end of one year from the act came into process? What do they think about their role in implementation of the provision of this act?

We have studied the Gazette of India (Part II, section I), Uttarakhand notified RTE rules. In addition to providing basic understanding and background information about the RTE act, this literature review was used to cull out the issues to be probed, as well as compare practices to actual provisions in the Act.

Data collection: In collecting the data we used following steps –

Selection of schools: We decided to visit schools from the list provided by District Education Office. Ten schools were selected from areas of Dehradun, Raipur and Nagar Chhetra. However, data was collected from five schools only.

Development of interview schedule: A set of questions was prepared for each type of respondent, to guide the interviews, though the interviews were not based just on these questions. Developing these questions helped to ensure that all issues get probed in a specific way. Interviews were kept flexible enough to get details of particular experiences.

Conducting interviews: Principals or vice principals of schools were interviewed. In some schools we were asked to take appointment and in some schools prior appointment was not needed for meeting them. We did not record our conversations. Specific schedule or set of questions was not strictly followed for the interviews to keep discussion open. Efforts were made to listen to the particular experiences of each interviewee, keeping conversations focused on the topic and directly related to the selected issues.

Interviewing parents of the children who belong to disadvantaged group and weaker section, we met with the parents at their homes, who got admission last year. We got information of the parents from the DEO, they gave us list of parents whose ward got admission last year, their name (mother and father), ward's name, ward's date of birth, name of school in which they got admission, class in which they got admission, the criteria to which they belong to, their brief address. We also met the parents who were trying to get admission this year. We met them at *Nagar Sikhsha Adhikari Karyalaya* with the permission of officials, when we had gone there to interview the *Nagar Shiksha Adhikari.*

Interviewing parents of children who do not belong to disadvantaged group and weaker section, we visited schools in the morning at the time when children come to school. We randomly selected some parents who had come to drop their children to school, and talked to them.

Interviewing some government officials, we spoke to government officials after seeking prior appointment with them.

Observations

We visited different schools in urban areas of Dehradun, *Nagar Shiksha*

Adhikari office, district education office. We interviewed some school principals, government officials, parents whose ward got admission last year and who are trying to get admission of their wards this year. We were trying to find from government officers whether the schools are admitting children under this act or not, whether they are taking the admissions in accordance with the norms of this act, what is the whole procedure they gave us in admission under this act and what are the problems they have faced or what are the challenges in the implementation of this provision of the RTE act. After collecting information from there we discussed similar issues with school principals and parents. We collected following observations from there:

Admission Procedure

- From the office of DEO we got the information that 1838 wards got admission under this Act last year. We also got a list of schools which admitted children under this act last year.
- Meeting with the parents whose children were admitted last year revealed that the parents (chapter I. (2)(k) of the Gazette of India) of children who belonged to disadvantage group and weaker section (chapter I.(2)(d)(e) of the Gazette of India, part I.4(2)(g)(h) Uttarakhand notified RTE rules) effortlessly got admission in schools that come under their school limit (chapter II.3.(I), chapter III. 6, chapter VII. 38 (2)(b), part

I.4(1) (a) Uttarakhand notified RTE rules). Some parents were assured by the government officials and schools have helped them in admission procedure last year. On the other hand, this time, from discussion with parents, it was felt that such help was not received. Some of the parents (chapter I. (2)(k) of the Gazette of India) told us, they got information about this act by the teachers or principals of schools.

- The schools were interested in admitting children under this act because the act is helping them to increase their strength and they also fear that if they do not follow this rule they may lose their recognition (chapter IV 19 (3) of the Gazette of India).
- A meeting with government officers and talking to parents on the same issue, helped us to understand that the government officer (from *Nagar Shiksha Adhikari Karyalaya*) has helped the parents in admission procedure. Parents have been advised about the documents that they need for admission, and also given suggestions about which schools may be applied to for admissions. Some of the parents told that the government was cooperative with them.

    After one year: We interviewed parents and school authority after one year of admission.

- Meeting with parents, who were trying for admission under this act this year revealed that some parents

got their wards admitted effortlessly but some parents were facing problems in admission. Some parents were running for weeks but they were not getting admission under this act and some parents' admission application was not accepted by the school.

• Meeting with principals of schools which admitted children last year under this act revealed that some schools are admitting children under this act but other schools are refusing admissions under this act. Schools run by minority communities refused admission to children from ESW sections saying that things are not within the purview of this act. There are some schools who cancelled the admission with the excuse that they (children) do not fulfil the criteria of admission under this act.

• Government officers and principals of some schools informed us that the government officers are performing their job, but they have not monitored the performance of the schools, whether schools have provision of admitting 25 per cent children from ESW sections. The schools complained that the government officers have not instructed them how to implement the provision of this act.

Some schools were admitting children in Class I while others were admitting in LKG. Very few schools were admitting children in nursery and UKG. According to the act, children should be admitted to age appropriate class as per chapter IV.14 (1) of the Gazette of India. The age required for admission in LKG is 3-4 years and for Class I, 5-6 years.

We got following information from two days observation at *Nagar Siksha Adhikari* office and by interrogating parents who were trying to get admission for their wards:

• The children who are 4-5 years old are not eligible for admission. They have to wait one year to become eligible under this act. So there are two options for parents either they educate their child for one year (UKG) with their own expenditure and apply for admission next year for Class I or they apply for admission to LKG when the child is 3 years old.

• Some schools are admitting children in LKG. The parents cannot apply for admission if their ward's age is more than 4 years because the eligibility of admission in LKG is 3-4 years.

• Some schools are taking admission only in Class I. A child who is 3-4 years old and comes under this school limit (chapter II.3.(I), chapter III. 6, chapter VII. 38 (2)(b) of the Gazette of India, part I.4(1)(a) Uttarakhand notified RTE rules), cannot take admission. He/she has to wait for two years to take admission in same school.

  – According to act, the government will bear the expenses for school dress, mid-day meal, school books and notebooks of students. The

schools who are providing these to children have not received payment from the government.

– We got information from the schools that they did not get any instruction for implementation of provisions of this act from government and they never get inspected by the government whether they are implementing the provisions of this act or not.

Details of Child Expenditure

We met parents of children who belonged to disadvantaged group and weaker sections of the society at their residence. We got their addresses from DEO, which the parents had given at the time of their ward's admission under this act last year. As told by the parents, the breakup of expenditure on education of their children is as follows.

• School dress = ₹ 750 - 2000
• School books = ₹ 650 -1500
• Notebooks = ₹ 200- 500
• Other stationeries = ₹ 200 -400
• Extra tuition fee = ₹ 10 -450
• Identity card = ₹ 50
• Some parents told that they need to contribute for school events and cultural programmes. It costs them ₹100 to 200 for every events.
• Parent of a child reported that they spend ₹ 380 per month for their child in the same school since he is not eligible to take admission under this act. One parent said he pays ₹ 850 per month as school fee and ₹ 1200 as building maintenance fee in the same school.

• The government officials told that they are performing their job well and trying to give the benefits to the beneficiaries through this act. They told the schools are very cooperative with them.

Inferences

1. Lack of uniformity in admission rules followed by schools is creating hurdles in admission procedure. Different schools are admitting children in different classes. Some schools are taking admission in nursery class; some in LKG and some in Class I. Age criteria is different for different classes. It creates hurdles in admission procedure. If a parent wants to apply for admission of his 5 years child in a school, which comes in his school limit, but the school is taking admission only in nursery, then he is not eligible to apply for admission in that school.

2. 4-5 years old children are not eligible to get admission under this act:

    The age eligibility for admission in LKG is 3-4 years old.

    The age eligibility for admission in primary school is 5-6 years old.

    The schools are not taking admission in UKG. So the children who belong to 4-5 years old age group are not eligible for admission in schools under this act.

3. Parents are using fake age certificates of their wards for

admission to school to meet the eligibility requirements. However, the act allows the school to give admission without any age proof (chapter IV.14(2) of the Gazette of India).

4. Parents are providing fake address, fake income proof for admission of their wards. Some parents are using fake address to admit child in the desired school (chapter II.3.(I), chapter III. 6, chapter VII. 38 (2)(b) of the Gazette of India, part I.4(1) (a)Uttarakhand notified RTE rules). Some parents are giving fake income proof to come under the weaker section group (chapter I.(2)(e) of the Gazette of India, part I.4(2)(h) Uttarakhand notified RTE rules) to take advantage of this act.

5. Some schools are providing school dress, school books, notebooks, mid-day meal to their students who come under this act while some schools are not providing these facilities. This is leading to different economic impacts on the families. In some cases, the schools and parents are not getting reimbursement from government for their school dress, notebooks, mid-day meal, etc.

6. As evidenced from the cases encountered, it seems that in some cases the schools are not getting their school fee as it is promised by government (chapter IV. 12(2) of Gazette of India). Since the schools are not getting their reimbursement from government, they are avoiding admission under this act. Some schools have already closed admission under this act and some are thinking to close.

7. The parents whose wards got admission under this act are really satisfied with the improvement in their ward's performance due to the quality of education they are receiving in private schools.

Conclusion

The RTE act is really advantageous for providing educational opportunities to those children who otherwise may not get such opportunities. Unfortunately, many such children are unable to avail of these benefits mainly because of lack of awareness or information about this act. Even when some information gets communicated, it is generally not clear and precise. Schools are the main source from where parents get information. School authorities themselves do not have information in many cases or find it difficult to understand the intricate nuances of the provision, leading to confusions, non-uniformity in implementation and non-communication of information to parents.

The schools are changing their perception and do not want to cooperate because they are not getting their reimbursement from government. The schools are neither getting instruction from government officials about the act's implementation nor are monitored for the implementation of the act. This raises several concerns about the implementation of the act

and ensuring that children from EWS, get the required opportunities. In the beginning, the implementation was not proper and now also some schools, which admitted children last year, are getting discouraged.

It is increasing the opportunity cost of parents to teach their children in private schools but they are ready to afford it for the quality of education of their children.

This study has highlighted some issues related to the implementation and economic effect of the provision of twentyfive per cent enrolments in private schools. This study does open up the scope for further detailed studies, such as planned and unplanned expenditures incurred by families, implementation and process of fund transfers among the involved stakeholders etc.

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3

Management of Training and Skill Development Activities of *Sarva Shiksha Abhiyan (SSA)*

Kuldeep Gairola *

Background

"Knowledge has to be improved, challenged, and increased constantly, or it vanishes."–Peter Drucker (Management thinker).

The programme for universalisation of elementary education – *Sarva Shiksha Abhiyan* (SSA) was launched in India in the year 2001-2002. *Sarva Shiksha Abhiyan* (SSA) is a flagship partnership programme of Government of India and the states for universalisation of elementary educationes, i.e. for Classes 1-8. SSA has been extraordinarily successful in providing access and improving infrastructure in the elementary schools. State of Uttarakhand is one such beneficiary. In Uttarakhand, SSA interventions have been successful in increasing enrolment and decreasing dropout. The state has achieved almost 100 per cent enrolment at elementary level.

During the last decade, there has been paradigm in school education system and school processes due to constant focus on universal access and quality of education. Quality of education is a national concern as well. That is why the SSA in its mandate, has focused on quality in school education. Moreover, the ultimate success of school organisation lies with the success of teacher, who is responsible for the quality of education at school level. The quality of education can only be ensured, if teachers are motivated and well equipped with the knowledge and skills required to perform. The development of NCF-2005, a guiding document for school education has raised the expectations from teachers. The *NCF-2005* talks on learning and knowledge, curriculum areas, school stages and assessment, classroom environment and systemic reforms. *NCF-2005* sees teachers as

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facilitators of children's learning and as a co-constructor of knowledge in the teaching-learning process. NCTEF (2009) document voices the concern by quoting "People in this country have been slow to recognise that education is the profession for which intensive preparation is necessary as it is in any other profession." Concern expressed in the University Education Commission (1948-49) Report is alive in its relevance even today.

"Teaching is the only major occupation of man for which we have not yet developed tools that make an average person capable of competence and performance. In teaching we rely on the 'naturals,' the ones who somehow know how to teach" Peter Drucker (Management thinker).

Due to this paradigm shift in approach to education during the last decade, the teachers need to be updated and trained for attaining the goals of education in the state's as well as national perspective. It is in this background that *Sarva Shiksha Abhiyan* (SSA) had mandated 20 days annual in-service teacher training programme in its framework. Therefore, SPO (SSA, Uttarakhand) organises 20-days annual teacher training for primary and upper primary level teachers.

SSA programme is implemented in project mode in the state of Uttarakhand by the society called *Uttarakhand Sabhi Ke Liye Siksha Parishad.* The executing offices of this society are State Project Office (SPO) at state level, District Project Office (DPO) at district level, Block Resource Centre (BRC) at block level and Cluster Resource Centre (CRC) at cluster level.

So far, 10 rounds of in-service training have been organised since the inception of SSA in Uttarakhand. The management of such training is a major concern due to large number of teachers involved.

Purpose of the Study

• Proper planning, controlling, coordinating, monitoring, assessment and evaluation help in the identification of the strengths and weaknesses of a particular programme and are necessary in earmarking the grey areas. Further it has been noticed that management of training has been a less researched area in the education sector though there is plenty of work done by researchers in the field of corporate management.

• Realising the importance of this fact, the study entitled "Analysis of Management of Training and Skill Development Activities of *Sarva Shiksha Abhiyan* (SSA) for Elementary School Teachers of Raipur and Doiwala Blocks of Dehradun District (Uttarakhand)" was conducted. Elementary schools include primary schools (from Class I to Class V) and upper primary schools (Classes VI to VIII).

1. Objective of the Study

The core objective of the study was to make an analysis of the training and skill development activities of the SSA

for elementary teachers, focusing on the qualitative and organisational aspects.

The specific objectives of the study were :

• To ascertain and assess the process of organisation of the trainings and development of training modules, with special focus on the role of –
  – State Project Office (SPO) of SSA,
  – District Institute of Education and Training (DIET), Dehradun, Block Resource Centres (BRCs),Cluster Resource Centres (CRCs) and MTs (Master Trainers)
• To study the perception of organisers and resource persons on the relevance and effectiveness of the programme.
• To take feedback of the teachers on:
  – Applicability, relevance, availability and usability of the contents of the training module.
  – Feedback on the methods, quality, and efficacy of the trainers.
  – Feedback on the facilities available at the training centres
    ➢ Training and Demonstration Facilities, Session Management; Evaluation.
    ➢ Boarding and Lodging Facilities
• To assess the efforts to monitor and evaluate the in-service training programmes.
• To elicit suggestions from teachers/sub-district/district level on how the training can be improved in terms of the key

components mentioned ahead–
  – Duration, Organisation, Methodology.

2. Research Tools and Instruments

2.1 Survey Design

For the purpose of assessing the management of 20 days In-service Teachers Training Programmes, the training provided during 2009-10, 2010-11and 2011-12 was covered. Qualitative approach of research was adopted for this study. Semi-structured In-depth Interview (IDI) schedules was developed and used for the study. The schedule included both close-ended and open-ended questions for teachers, SSA official, DIET officials, DPO, BRCCs, MTs, CRCs and teachers.

2.2 Sample Selection

Selection of Blocks: Out of the six blocks of Dehradun, the study was conducted in the two developmental blocks of Raipur and Doiwala. Doiwala has a mix of rural and urban areas whereas Raipur is predominately urban block with small portion of rural areas. Therefore, the sample is representative of the rural and urban areas of the district.

Number of Primary and Upper Primary Schools in Doiwala and Raipur Blocks (Dehradun)

Block	Primary Schools	Upper Primary Schools
Doiwala	144	46
Raipur	166	50

Source: DISE data 2011-12

Selection of Schools: From each block, schools were selected randomly from the list available on DISE data 2011-12. Both urban and rural areas were given equal representation in the sample, that is, 10 schools from rural and 10 schools from urban areas were selected from the list of schools prepared area-wise.

Selection of Teachers: The overall sample covered for the study is presented in the table below.

3. Key Findings

Based on the analysis of the data collected for the study, the following key findings emerge as regard the management of the trainings:

3.1. Feedback on the Quality and Efficacy of the Trainers

- None of the respondents have rated the trainers to be 'Excellent' or 'Poor'.
- However, as per the analysis of the responses of all categories of respondents, the rating of trainers was found to be 'good'.
- 63% of primary teachers and 77% of Upper primary teachers have rated trainers as of good quality.

3.2 Motivation Level

- As per the 63% PS teachers, 77% UPS teachers,75% CRCs, 80% of DIET and BRC personnel, the motivation level of MTs is good, whereas a few teachers feel it is low.
- As per the CRCs, only two MTs per batch are deployed for trainings, due to which there is too much load on MTs and because of this fact also, many good people do not come forward to act as MTs.

Units	Numbers	Details
District Institute of Education and Training, Dehradun	06	Persons concerns with execution of training programme
District Project Office, Dehradun	06	District Project Officials SSA, Coordinators and Resource Persons of the district
BRC	02	Block resource centre coordinator
CRC	06	06 Cluster resource centre coordinators per block
School	20	10 primary (classes 1-5) and 10 Upper primary school (classes 6-8)
Teachers	30	01 Teacher from each primary school, 02 teachers from each upper primary school
Master Trainers	06	Who imparted in-service training
State Project Office Officials	06	The officials involved

3.3 Training Methods Adopted

Moreover, teachers are adults and they must feel the urge for capacity-building and the global experience needed to be looked into also. According to Zemke and Zemke (1995) adults undertake learning experiences when they see a need for a new or different skill or knowledge. Further information that goes into the learner's memory will likely be remembered if the teacher provides opportunities in the session for activities such as application exercises and discussions.

The methods of training adopted by the master trainer as reported by teachers and implementers are listed as under:

- The DIET personnel said that the methods such as simulation, group work, lecture, etc., are adopted for imparting trainings.
- DPO personnel said that the training is activity based.
- About 77% of upper primary teachers and 75% primary teachers find training methods good; whereas 16% UPS teachers rated methods excellent.
- The most common used method cited by the trainees (teachers) was lecture method.
- The analysis of the training modules for the year 2010-11 and 2011-12 shows group work is also part of training methods. None of the respondents reported use of audio-visual equipments in the trainings.

However, the analysis reveals that there is no common agreement between DIET and DPO on methods. This is a gap between planners and executers of the trainings. Further, most of the modules are in self-instructional mode which has scope of making trainings monotonous.

3.4 Appropriateness of Training

All the respondents rated the trainings to be appropriate, however, they have also suggested that the trainings should be more subject-specific.

3.5 Feedback about the Quality of the Trainings

Most of the respondents have rated the quality of the trainings 'good' or 'average'. However only 11% DIET personnel and 11% UPS teachers rated the trainings as excellent. 56% DIET personnel, 80% MTs rated it as good, 17% UPS teachers and 22% PS teachers rated trainings as average. There is a significant section of respondents who feel that quality of training need to be improved.

3.6 Feedback about the Facilities at the Training Centres

- Most of the respondents have rated the availability of facilities to be 'good' or 'average'.
- The DPO personnel feel that the facilities available at training centres are adequate.
- The DIET,CRCs personnel said the training venues do not have adequate space, toilets, boarding and lodging facilities, proper drinking water, electricity and furniture facilities.

- Nearly 37.5% CRCs said that teachers are not satisfied with facilities at training centres.
- Both primary and upper primary level teachers cited improper facilities like fans, drinking water, furniture, toilets at training sites.

  Onsite visits of training centres also reveal that the training venues lack facilities or there are problems in

- Improper seating arrangement as furniture is not available in the sites as per number of participants.
- Erratic supply of electricity causes problems in summer season.
- Non-availability of audio-visual based training facilities.

3.7 Attitudinal Change in Teachers after Undergoing Training Programme

- Teachers are willing to use trainings in the classroom situation.
- DIET personnel said that they did not monitor classroom execution of teacher training; besides they also said that there is transmission loss of trainings though teachers are willing to use the learnings. Master trainers also feel transmission loss of training.
- Nearly 50% CRCs and all BRCs and BEOs feel that the training learnings are used in the classrooms by teachers.

3.8 Monitoring of Trainings

- The district teams monitor trainings by making daily visits to training sites.

- Nearly 11%, 33% and 56% of the DIET people rated the coordination between DIET and DPO to be excellent, good and average, respectively.
- The State Project Office deputes teams from the state level to monitor the ongoing trainings. This is a good practice to get the feedback from the trainees, trainers and as well as from executers. Teams visited each district. The team consists of state level personnel from SIEMAT, SPO, a person from concerned DIET and District Project Office.

The experience of a researcher from the neighbouring State of Himachal Pradesh is worth to mention. "Strong monitoring mechanism need to be developed at the institution level in particular, block and the cluster level in general to identify and resolve the issues on the spot." — A study by SSA in Sunni Educational Block of District Shimla by D. R. Chauhan and others.

From the above, it appears that there is well thought out programme for monitoring of these trainings in the state of Uttarakhand.

3.9 Evaluation of Training

The most common way that training has been evaluated, when it is done, is through the reaction of the participants to the training (Brown, 1980; Dunn and Thomas, 1985). This assumes that if the participants like the training, it must be effective. Such evaluations provide little substantive information

regarding the value of the training. Obviously, a more rigorous assessment of the effectiveness of the training is needed (Brown, 1980; Carnevale and Schultz, 1990; Dunn and Thomas, 1985).

Evaluation plays an important part in planning and choosing a training method, monitoring the training programme and suggesting changes to the training design process. Thus, evaluation is not only important for the organisation and trainer but also for the trainee. It is also important to improve training delivery.

The analysis of training content and responses of the respodents shows that feedback is being used as only means for evaluation of training which does not compensate evaluation of training. Therefore no formal evalution is taking place for in-service trainings of teacher.

4. Suggestions and Recommendations

Based on the overall analysis of data and the responses of various categories of respondents, the following suggestions are made for enhancing efficacy of the In-service Teachers Training Programme in Uttarakhand:

Organisation of Trainings

- The training should be organised and imparted as per time table; and not as per the convenience of the organisers/trainers.
- The 20 days limit of teacher training should be observed strictly and for this purpose, all other training should be made part of this 20 days training to avoid incoherence.
- Some of the trainings should be organised in distance mode followed by a short contact programme, this will help in ensuring teacher presence in school while learning.
- The DIETs need to given more roles in planning and executing trainings.
- The training venues need to be provided with facilities such as fans, drinking water, and furniture and clean toilets.
- The MTs selection is required to be made more rational and the MTs should be provided incentives and be imparted specialised training to play their effective role as a master trainer.
- The coordination between institutions (SCERT, DPO, DIET, BRC and CRC) needs to be improved.
- The block level trainings should be residential as teachers cannot commute daily to reach the training venue.
- The in-service teacher training should be organised during vacations as the absence of teacher from schools decreases the opportunity time of children.
- The combo approach of training should be avoided, that is, too much multiplicity of issues in the same training.

- Incentive-based distance mode professional development programmes for teachers need to be planned.

Process

- Variety of training methods should be adopted in line with the adult learning principles.
- Move away from pedagogy-based approach to andragogy-based training methods for more effective trainings. Kolbs learning cycle may be considered while designing trainings.
- The future trainings should focus on more specific areas like school management, hard spots in various subjects, etc.
- Proper Training Need Analysis (TNA) needs to be undertaken to ensure need-based trainings.
- Profile-based training need to be organised which means the common module format based training should be avoided.
- The training objective should be clear and must lead to quantified evolution. There is need to move from feedback to and using proper evaluation process.
- Master trainer selection process should be revamped the criteria based MT selection process need to be designed and executed.
- Incentive-based long-term professional development programme should be undertaken.

- Master trainers should be trained on training skills.
- The major training method such as self-learning mode may be supplemented by methods such as sensitivity training, coaching, audio-visual sessions, simulation, case study, role play, workshops etc.
- Training on managerial issues should be started for head masters.
- Teachers have in general expressed the need of training on hard spots in various subjects.

This implies that the SSA mission should undertake the analysis of exam answer sheets in various subjects to locate common hard spots of children or the other way out is to take a survey among the teachers for this. The findings of external studies on achievement level of children can also be useful.

Evaluation of training

- Pre-test and post-test of participants is necessary to ensure training effectiveness.
- Standard training evaluation tools and techniques may be used to ensure effective training.
- There has to be follow-up programme for training utilisation.

Therefore the whole process of organisation of in-service training need to be planned and executed in such a way that the training meets its objective more effectively and evidences are available for feedback on the whole process.

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4

Job Satisfaction among the Primary Teachers: a Case Study of Senapati District, Manipur

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Abstract

Teachers are regarded as one of the most important group of professionals for nation building. As the teachers are directly involved in the academic progress of the children and educational system, their job satisfaction is prerequisite to imparting quality education. Job satisfaction of the teachers is also directly linked with their competence and effectiveness. If educational policies are formed taking researches into consideration, there can be more realistic resulting improved in proficiency of teachers. This can also contribute towards the successful outcome of education programmes being undertaken in the country. The study is an attempt to assess the job satisfaction of primary teachers in Senapati District of Manipur.

It is a gigantic task to estimate the influence of teachers on the children. The role of a teacher in moulding the character of the children is very crucial for their overall growth and development. In Indian context, teachers are assigned with many splendoured roles, she/he is a guide, purveyor of philosophy and knowledge, one who imparts values of 'oughtness'. Teachers who have academic excellence and apt training are selected to impart education. If educational policies are framed after thorough research, these can radically boost the teachers' morale and improve their proficiency. This can also contribute towards the successful outcome of education programmes being undertaken in the country. As job satisfaction plays a major role in imparting excellent education to the children as it acts a motivating factor.

There are various factors that determine job satisfaction – individual factors such as level of education, age,

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family and social life; nature of job and job environment factors which include occupational level, job content, and situational factors like working conditions, supervision, equitable rewards, opportunity for promotion and working group relations. The effects of job satisfaction are on individual's physical and mental health, productivity, absenteeism and turnover. Smith, Kendall and Hulin have identified five dimensions of job satisfaction. These are (a) Work itself, (b) Pay, (c) Promotional opportunity, (d) Supervision, and (e) Co-workers.

Teachers spend better part of their life and work, influencing the children who come in contact with them year after year. Therefore, it is essential that teachers are sufficiently satisfied with their work. It is also necessary to keep the teachers away from stress that affects their teaching.

Quality teaching staff is the cornerstone of a successful educational system. Daily interaction between teachers and students is the centre of the educational process, which also attracts and retains high quality teachers. Satisfaction with teaching as a career is essential since it is associated with teacher's effectiveness which ultimately effects student achievement. A teacher's satisfaction with his or her career may influence the quality and stability of instruction given to students. Teachers in high achieving schools reported greater levels of job satisfaction than those in low achieving schools. Teachers' job satisfaction is a multifaceted construct that is critical to their retention, commitment and school effectiveness.

Objective of the Study

The objective of the study is to assess the job satisfaction of primary teachers in relation to their job/working conditions in the Senapati district, Manipur.

Research Methodology

For the study, random sample method was used. Ninety primary school teachers were randomly selected as a sample ensuring that they represent the total strength of the teachers in the schools in Senapati district. Of the total respondents, 16 were in the age group between 20-30 years, 36 between 30-40 years, 30 between 40-50 years and 8 were more than 50 years. Further, there were 49 female teachers and 41 male teachers. For collecting primary data, interview schedule was prepared to find out the job satisfaction of the primary teachers. The primary data so collected was analysed using cross tabulation with the help of the statistical package SPSS using relevant statistical techniques like Chi-square test, Karl Pearson's correlation. The data analysed has been presented in the tabular form for easy comprehension.

Satisfaction of the teachers regarding their job/working conditions was examined by posing statements such as
1. You like teaching as a profession.
2. The working hours of the school suits you.

3. You are satisfied with the emoluments which you receive in lieu of your services.
4. You enjoy your work more than leisure.
5. You have the freedom to prepare your work plan in the job.
6. You get time for recreation with your family and friends after school hours.

Analysis and result

Table 1
You like teaching as a profession

Attributes/ Responses	Ranks	Strongly Agree	Agree	Un-decided	Dis-Agree	Strongly Disagree	p
Age (in years)	20–30	6 (37.5)	10 (62.5)	0 (00.0)	0 (00.0)	0 (00.0)	
	31–40	17 (47.2)	18 (50.0)	1 (2.8)	0 (00.0)	0 (00.0)	0.86
	41–50	12 (40.0)	16 (53.3)	2 (6.7)	0 (00.0)	0 (00.0)	
	>50	4 (50.0)	4 (50.0)	0 (00.0)	0 (00.0)	0 (00.0)	
Gender	Male	21 (42.9)	27 (55.1)	1 (2.0)	0 (00.0)	0 (00.0)	
	Female	18 (43.9)	21 (51.2)	2 (4.9)	0 (00.0)	0 (00.0)	0.74
Academic Qualification	Matric/ETT	15 (36.6)	26 (63.4)	0 (00.0)	0 (00.0)	0 (00.0)	
	Graduate	20 (47.6)	19 (45.2)	3 (7.1)	0 (00.0)	0 (00.0)	
	Graduate with Education	2 (66.7)	1 (33.3)	0 (00.0)	0 (00.0)	0 (00.0)	0.43
	Post Graduation	2 (50.0)	2 (50.0)	0 (00.0)	0 (00.0)	0 (00.0)	

Source: Computed from Primary Data. Figures in parentheses are percentages. $p < 0.05$.

Table 1(a)
Pearson's correlation between the variables

		Value	Asymp. Std. Error	Approx. T	Approx. Sig.
Interval by Interval	Pearson's R	0.000	0.099	0.000	1.000
		(–) 0.016	0.106	(–) 0.151	0.880
		0.081	0.098	0.760	0.449

The data in Table 1 shows that highly significant majority of the respondents (above 90 per cent) were in agreement with the statement that they liked teaching as a profession. Further all the respondents (100 per cent) in the age group of 20-30 years, more than 50 years, matric/ETT, graduate with education and post graduation had affirmed the query that they liked the teaching as a profession. Statistically, no significant association was found between the variables and the query.

The Pearson's coefficient of correlation has been presented in Table 1(a) which revealed a positive relationship between the variables and the responses of the teachers. The age variable had elicited perfect positive relationship whereas the gender variable had established high relationship. However, the variables academic qualification demonstrated low relationship.

Table 2
The working hours of the school suits you

Attributes/ Responses	Ranks	Strongly Agree	Agree	Un-decided	Dis-Agree	Strongly Disagree	p
Age (in years)	20–30	3 (18.8)	13 (81.3)	0 (00.0)	0 (00.0)	0 (00.0)	
	31–40	7 (19.4)	29 (80.6)	0 (00.0)	0 (00.0)	0 (00.0)	0.86
	41–50	4 (13.3)	25 (83.3)	1 (3.3)	0 (00.0)	0 (00.0)	
	>50	1 (12.5)	7 (87.5)	0 (00.0)	0 (00.0)	0 (00.0)	
Gender	Male	9 (18.4)	40 (81.6)	0 (00.0)	0 (00.0)	0 (00.0)	
	Female	6 (14.6)	34 (82.9)	1 (2.4)	0 (00.0)	0 (00.0)	0.50
Academic Qualification	Matric/ETT	5 (12.1)	36 (87.8)	0 (00.0)	0 (00.0)	0 (00.0)	
	Graduate	9 (21.4)	32 (76.2)	1 (2.4)	0 (00.0)	0 (00.0)	
	Graduate with Education	1 (33.3)	2 (66.7)	0 (00.0)	0 (00.0)	0 (00.0)	0.68
	Post Graduation	0 (00.0)	4 (100.0)	0 (00.0)	0 (00.0)	0 (00.0)	

Source: Computed from Primary Data. Figures in parentheses are percentages. $p < 0.05$.

Table 2(a)
Pearson's correlation between the variables

		Value	Asymp. Std. Error	Approx. T	Approx. Sig.
Interval by Interval	Pearson's R	(–)0.087	0.099	(–)0.819	0.415
		0.078	0.104	(–)0.738	0.462
		0.025	0.084	0.238	0.812

On the query to the teachers that their working hour in the school suits them, the data in Table 2 shows that highly significant majority of the respondents (above 90 per cent) regardless of any variable were in agreement. Interestingly, there were more of agreed responses. Further, all the respondents (100 per cent) in all the categories of age except the respondents in the age group of 41-50 years, male respondents and matric/ETT, graduates in education and post graduates supported the viewpoint. The finding was dully supported by the observation of the researcher. Interestingly, there were not any negative response which indicated that the working hours of the school suited the teachers. Statistically, no significant association could be seen with the variables and the viewpoint.

The data presented in Table 2(a) relates to the Pearson's coefficient of correlation between the variables showing a positive relationship with the responses of the teachers. The age and gender variables established low relationship while the academic qualification variable established high relationship to the responses.

Table 3
You are satisfied with the emoluments which you receive in lieu of your services

Attributes/ Responses	Ranks	Strongly Agree	Agree	Un-decided	Dis-Agree	Strongly Disagree	p
Age (in years)	20–30	0 (00.0)	5 (31.3)	5 (31.3)	6 (37.5)	0 (00.0)	
	31–40	3 (8.3)	19 (52.8)	5 (13.9)	8 (22.2)	1 (2.8)	0.28
	41–50	3 (10.0)	18 (60.0)	2 (6.7)	5 (16.7)	2 (6.7)	
	>50	1 (12.5)	5 (62.5)	1 (12.5)	0 (00.0)	1 (12.5)	

Gender	Male	4 (8.2)	28 (57.1)	7 (14.3)	8 (16.3)	2 (41.1)	
	Female	3 (7.3)	19 (46.3)	6 (14.6)	11 (26.8)	2 (4.9)	0.79
Academic Qualification	Matric/ETT	3 (7.3)	26 (63.4)	4 (9.8)	6 (14.6)	2 (4.9)	
	Graduate	3 (7.1)	20 (47.6)	9 (21.4)	9 (21.4)	1 (2.4)	0.06
	Graduate with Education	1 (33.3)	1 (33.3)	0 (00.0)	1 (33.3)	0 (00.0)	
	Post Graduation	0 (00.0)	0 (00.0)	0 (00.0)	3 (75.0)	1 (25.0)	

Source: Computed from Primary Data. Figures in parentheses are percentages. p<0.05.

Table 3(a)
Pearson's correlation between the variables

		Value	*Asymp. Std. Error*	*Approx. T*	*Approx. Sig.*
Interval by Interval	Pearson's R	0.180	0.105	1.721	0.089
		(–) 0.118	0.105	(–) 1.113	0.269
		(–) 0.268	0.116	(–) 2.608	0.011

On assessing the responses of the teachers on their emoluments which they received in lieu of their services, as per the data given in Table 3, it was found that there were split responses to the query. In the age variable, there was increase in agreed responses with the increase in the age. Barring the youngest age group (20-30 years) where the responses were nearly equally divided between agreed (31.3 per cent) and disagreed (31.3 per cent) and undecided (37.5 per cent) responses dominating the results, in all other categories of the age the majority respondents varying from fair majority to high majority were in agreement with the statement, implying thereby the young teachers were not satisfied in comparison to the senior teachers. Analysing on the basis of gender variable, it was found that fair majority of male respondents (65.3 per cent) as compare to simple majority of female respondents (53.3 per cent) were satisfied with the emolument. Interestingly more of male respondents were found satisfied than female respondents. On the basis of academic qualification variable, except the respondents with post graduation all other categories of respondents in majority varying from simple majority to high majority were in agreement

with the statement. Statistically, no significant association was found between the variables and the statement.

The data presented in Table 3(a) relates to the Pearson's coefficient of correlation between the variables which shows a positive relationship with the responses of the teachers. However, the variable age, gender and academic qualification had low intensity relationship.

Table 4
You enjoy your work more than leisure

Attributes/ Responses	Ranks	Strongly Agree	Agree	Un-decided	Dis-Agree	Strongly Disagree	p
Age (in years)	20–30	3 (18.8)	9 (56.3)	3 (18.8)	1 (6.3)	0 (00.0)	
	31–40	4 (11.1)	26 (72.2)	3 (8.3)	3 (8.3)	0 (00.0)	0.74
	41–50	2 (6.7)	22 (73.3)	2 (6.7)	4 (13.3)	0 (00.0)	
	>50	1 (12.5)	4 (50.0)	2 (25.0)	1 (12.5)	0 (00.0)	
Gender	Male	9 (16.3)	29 (59.2)	4 (8.2)	8 (16.3)	0 (00.0)	
	Female	2 (4.9)	32 (78.0)	6 (14.6)	1 (2.4)	0 (00.0)	0.03
Academic Qualification	Matric/ETT	6 (4.9)	33 (80.5)	2 (4.9)	4 (9.8)	0 (00.0)	
	Graduate	6 (14.3)	25 (59.5)	6 (14.3)	5 (11.9)	0 (00.0)	
	Graduate with Education	1 (33.3)	2 (66.7)	0 (00.0)	0 (00.0)	0 (00.0)	0.10
	Post Graduation	1 (25.0)	1 (25.0)	2 (50.0)	0 (00.0)	0 (00.0)	

Source: Computed from Primary Data. Figures in parentheses are percentages. $p < 0.05$.

Table 4(a)
Pearson's correlation between the variables

		Value	Asymp. Std. Error	Approx. T	Approx. Sig.
Interval by Interval	Pearson's R	(–) 0.101	0.110	(–) 0.948	0.346
		0.064	0.099	0.605	0.547
		0.020	0.105	0.183	0.855

The data highlighted in Table 4 reveals that irrespective of any variable and also any category within a variable the respondents in majority varying from simple to significant majority enjoyed their work more than leisure. In the context of age, it was found with the increase in the age the responses which were in agreement decreased, though marginally. The trend indicated the most senior teacher did not enjoy their work as much in comparison to middle age category of the respondents. This could be attributed to the reason that the youngest teachers struggled to establish themselves whereas the senior most teachers had enough of the work. Gender did not show much of variation as both male and female respondents in majority enjoyed work than leisure though female respondents in higher proportion agreed with the statement. Academic qualifications reflected interesting and noticeable finding that all the respondents with graduation in education (B.Ed.) enjoyed the work more than leisure for the reason that

Table 5
You have the freedom to prepare your work plan in the job

Attributes/ Responses	Ranks	Strongly Agree	Agree	Un-decided	Dis-Agree	Strongly Disagree	p
Age (in years)	20–30	5 (31.3)	10 (62.5)	0 (00.0)	1 (6.3)	0 (00.0)	
	31–40	6 (16.7)	28 (77.8)	1 (2.8)	1 (2.8)	0 (00.0)	0.53
	41–50	9 (30.0)	20 (66.7)	0 (00.0)	1 (3.3)	0 (00.0)	
	>50	4 (50.0)	3 (37.5)	0 (00.0)	1 (12.5)	0 (00.0)	
Gender	Male	17 (34.7)	29 (59.2)	0 (00.0)	3 (6.1)	0 (00.0)	
	Female	7 (17.1)	32 (78.0)	1 (2.4)	1 (2.4)	0 (00.0)	0.13
Academic Qualification	Matric/ETT	12 (29.3)	27 (65.9)	0 (00.0)	2 (4.9)	0 (00.0)	
	Graduate	10 (23.8)	30 (71.4)	1 (2.4)	1 (2.4)	0 (00.0)	
	Graduate with Education	1 (33.3)	2 (66.7)	0 (00.0)	0 (00.0)	0 (00.0)	0.73
	Post Graduation	1 (25.0)	2 (50.0)	0 (00.0)	1 (25.0)	0 (00.0)	

Source: Computed from Primary Data. Figures in parentheses are percentages. $p < 0.05$.

Table 5(a)
Pearson's correlation between the variables

		Value	Asymp. Std. Error	Approx. T	Approx. Sig.
Interval by Interval	Pearson's R	0.059	0.128	0.551	0.583
		(–) 0.097	0.105	(–) 0.911	0.365
		(–) 0.091	0.141	(–) 0.859	0.393

they were trained teachers. In other sub-categories of this variable the respondents in majority varying from simple majority to significant majority enjoyed the work as well. Statistically, highly significant association was found with the gender variable and the statement.

The data pertaining to the Pearson's coefficient of correlation between the variables and the responses of the teachers as given in Table 4(a) indicated a positive correlation between the two. The variable age evinced low relationship whereas gender variable elicited moderate relationship. However, the relationship with the variable academic qualification was high.

On analysing the data presented in Table 5 it could be seen that majority of the respondents varying from high majority to cent per cent, irrespective of any variable were in agreement with the raised query that the teachers enjoyed freedom while preparing their work plan. Only few dissenting responses were recorded which were not significant. Interestingly, the strongly agreed responses to the query were outnumbered by the agreed responses since these were in higher proportion. Yet the point of interest was that the strongly agreed responses were also in significant proportion. Those who disagreed or remained undecided may be for the reason that they were teachers on substitutions and were not incharge of a particular class/section. Statistically, no significant association was found between the variables and the statement.

Pearson's coefficient of correlation tested the relationship between the variables and the responses of the teachers as given in Table 5(a). The age variable had moderate relationship whereas the low intensity in relationship was found with the variable gender and academic qualification.

The data in Table 6 clearly indicates that the majority of the respondents varying from fair majority to significant majority were in agreement with the statement that they had time for recreation with their family and friends after the school hours, though there were some dissenting responses. Not much of variation was observed in the proportion of responses in the categories of all the variables. Statistically, no significant association

Table 6
You get time for recreation with your family and friends after school hours

Attributes/ Responses	Ranks	Strongly Agree	Agree	Un-decided	Dis-Agree	Strongly Disagree	p
Age (in years)	20–30	2 (12.5)	9 (56.3)	3 (18.8)	2 (12.5)	0 (00.0)	
	31–40	5 (13.9)	26 (72.2)	2 (5.6)	3 (8.3)	0 (00.0)	0.72
	41–50	7 (23.3)	15 (50.0)	4 (13.3)	4 (13.3)	0 (00.0)	
	>50	2 (25.0)	5 (62.5)	0 (00.0)	1 (12.5)	0 (00.0)	
Gender	Male	11 (22.4)	26 (53.1)	6 (12.2)	6 (12.2)	0 (00.0)	
	Female	5 (12.2)	29 (70.9)	3 (7.3)	4 (9.8)	0 (00.0)	0.37
Academic Qualification	Matric/ETT	5 (12.2)	30 (73.2)	2 (4.9)	4 (9.8)	0 (00.0)	
	Graduate	9 (21.4)	22 (52.4)	6 (14.3)	5 (11.9)	0 (00.0)	
	Graduate with Education	1 (33.3)	1 (33.3)	1 (33.3)	0 (00.0)	0 (00.0)	0.48
	Post Graduation	1 (25.0)	2 (50.0)	0 (00.0)	1 (25.0)	0 (00.0)	

Source: Computed from Primary Data. Figures in parentheses are percentages. $p < 0.05$.

Table 6(a)
Pearson's correlation between the variables

		Value	Asymp. Std. Error	Approx. T	Approx. Sig.
Interval by Interval	Pearson's R	0.066	0.110	0.622	0.536
		(–) 0.002	0.104	(–) 0.019	0.985
		(–) 0.024	0.117	(–) 0.223	0.824

was found between the variables and the statement.

The Pearson's coefficient of correlation between the variables is presented in Table 6(a) highlighted a positive relationship with the responses of the teachers. Further, the relationship with variable gender,

demonstrated significantly high relationship and the relationship with the academic qualification variable was found to be high. Further, the age variable had shown moderate relationship with the responses.

Major Findings

1. The highly significant majority of the respondents (above 90 per cent) were in agreement that they liked teaching as a profession including all the respondents (100 per cent) in the age group of 20-30 years, more than 50 years, matric/ETT, graduate with education and post graduation.

2. The highly significant majority of the respondents (above 90 per cent) regardless of any variable were in agreement that the working hours in the school suited them including all the respondents (100 per cent) in the age group of 20-30 years, 31-40 years, more than 50 years, male, matric/ETT, graduate with education and post graduation.

3. The simple majority of the respondents (above 50 per cent) were in agreement that teachers were satisfied with the emoluments in lieu of their service except the respondents from 20-30 years of age group and post graduates who responded otherwise.

4. The high majority of the respondents (above 70 per cent) were in agreement that the teachers enjoyed their work more than leisure. Responses from more than 50 years of age (62.5 per cent) and

post graduation (50 per cent) showed less agreement on this item.

5. The highly significant majority of the respondents (above 90 per cent) were in agreement that the teachers had freedom to prepare their work plan in their job. However, respondents in the age group of more than 50 years (87.5 per cent) and post graduation (75.0 per cent) do not agree with this statement.

6. The high majority of the respondents (above 70 per cent) were in agreement that they got time for recreation with their family and friends after the school hours. Respondents from 20-30 years of age group (68.8 per cent) and graduate with education (66.7 per cent) showed low agreement with this statement.

Conclusion and Suggestions

The satisfaction of the primary teachers about their job/working conditions in the district of Senapati, Manipur was assessed in this study. The study establishes that the teachers liked their profession and enjoyed the work of teaching more than leisure. The working hours of the school suited them. Teachers enjoy the freedom in preparing work plan of teaching activities. Teachers have comparatively lower satisfaction with the emoluments in lieu of their service. However, they get time for recreation with their family and friends after school.

The teachers are accepted as the central figure in the educational

system as they mould and influence the young minds turning into the human resource of the nation in multiple ways. It is also inevitable that the quality of education depends on the quality of the teachers. Therefore, it is required to create conditions, which will motivate and inspire teachers to engage in constructive and creative activities. They should be given the freedom to innovate, to devise appropriate activities relevant to the needs, capabilities and concerns of the students. The teachers also need training on proper understanding of the instructional materials and teaching skills to motivate and perform for higher achievement. Further, positive co-operation from parents can boost the teachers' work in the classroom. In short, the effectiveness of school education can be realised only when the teachers are satisfied with their job and are competent enough to discharge the responsibilities.

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5

Accessing Children's Ideas of the Natural World: an Exploration

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Abstract

The paper begins by examining different terms used to describe a variety of learners' ideas. The almost similar terms like concepts, conceptions; alternative conceptions, misconceptions are dwelt upon. The paper then goes on to describe the different approaches that cognitive researchers have adopted to understand the learners' thought processes in varying contexts. Most studies that have examined the alternative conceptions in different areas have attempted to categorise them. Some have tried to arrange these ideas in a hierarchical order based on their level of sophistication. Others have only juxtaposed these ideas into lateral categories, treating them as different ways of interpreting reality. Such attempts to impose order upon and look for similar patterns in the thinking processes of the students have then been discussed. Once the ideas have been accessed, the next step is to analyse them for any deviation from contemporary shared understanding and reflect upon the significance of these ideas in planning the course of further interactions with the learners. This has been attempted towards the end.

Introduction

By its very nature, science often poses comprehension linked challenges which could be attributed to factors such as lack of first-hand experiences, difficulty in comprehending the language, difficulty with mathematics and most significantly to difficulty in overcoming intuitive ideas. On the basis of our evolving understanding in the area of cognition and learning, it has come to be widely admitted among the educationists that learners' existing ideas in a particular domain

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need to be essentially taken into account and treated as starting points for planning future teaching-learning experiences for them. It is observed that 'idea' researches dominated the late 1970s, 1980s and 1990s science education research and brought to light many alternative beliefs that the learners may hold across various domains. The understandings of different concepts such as force, heat, light , energy, current etc., came to be widely documented across age groups and cultures. However, it is a challenge to unearth the subjects' underpinning ideas and world-views as their ways of looking at or reasoning about different aspects of the world do not get manifested in response to standard questions. Specially designed probes and innovative pathways are therefore needed that would provide a peep into the thought processes of the learners. Researchers in the field have had to devise different tools, such as the tiered multiple choice diagnostic test items, based on the need of the subject at hand. This paper presents a synopsis of the range of ways and means which the researchers have employed to get to the learners' basic understandings about the different aspects of the world.

Unpacking the 'Idea' Nomenclature

Various terms have been used for learners' ideas. In fact, usage of different terms in education literature often leads to confusion and a need to develop a theoretical framework based on shared language is now recognised.

Concepts and Conceptions

Though the terms 'concepts' and 'conceptions' sound and seem similar, there is a distinction between them that needs to be understood. Larson and Halldén (2010) explicitly distinguishing between 'concept' and 'conception ' say that 'concept' is used to describe a grouping of objects or behaviours on the basis of certain common features arrived at through research or wide spread use while 'conception' refers to the way an individual thinks about that grouping. So, while 'concept' is a category conception is the way that category is perceived and understood.

Alternative Conceptions, Misconceptions vs. Shared Conceptions

The origin of the term 'alternative conceptions' may be attributed to the term 'alternative frameworks' which was originally used by Driver (1981) to describe certain ideas that children bring to school which do not coincide with the scientific view. She says: "In some areas pupils hold beliefs which differ from the currently accepted view and from the intended learning outcomes of learning experiences. Such beliefs I shall call 'alternative frameworks'." (Driver, 1981, p.94). The term 'alternative conceptions' when initially used in the education literature referred primarily to pre-conceptions, naïve ideas or intuitive notions (i.e. conceptions held before receiving formal instruction) of children. However, gradually the scope

of the term expanded to include all ideas that varied from the currently accepted scientific understandings. Traditionally, all ideas that were different from the scientific view were called the 'misconceptions' because they were considered to be incorrect and inaccurate conceptions that obstructed learning. Hawkins (1978) referred to these as 'false ideas' that 'block learning' and called them the 'critical barriers' but the contemporary understanding looks at these ideas differently. These ideas, instead of being considered as obstructions to be overcome are rather taken as starting points for future instruction. Further, many times these ideas may not be entirely incorrect but may incorporate certain correct features as well. Some of these ideas may also be pre-conceptions that have been resistant to formal instruction. The learners may also at times evolve some kind of 'hybrid knowledge' which incorporates ideas from classroom instruction as well as some beliefs students held prior to the instruction (Galili, 1996). Gilbert (1983) described alternative conceptions as 'ideas which differ significantly from the accepted scientific view at any time'. Dykstra et al.(1992) describe the following characteristics of 'alternative conceptions':

1. The 'mistaken' answers students give when confronted with a particular situation, e.g., "The sun goes around the earth."
2. The ideas about particular situations students have which lead them to make incorrect predictions.
3. The fundamental beliefs students have about how the world works, which they apply to a variety of different situations. These are beliefs in an explanatory sense about causality, e.g., 'motion implies force'.

They emphasise that 'alternative' in 'alternative conception' refers to the fact that students' knowledge about how the world works is different than that of the physicist. Gonzales-Espada (2003) noted that there could be many 'labels' for these variant ideas such as 'pre-conceptions', 'näive conceptions', 'näive theories', 'alternative frameworks' and 'misconceptions' but the term 'alternative conceptions' is preferred, because it values the idea construction process over the accuracy of conceptions. Also, the term allows space for the possibility that what is considered as an alternative conception today may become the shared conception in future and vice-versa. History of science throws up many such examples such as, in seventeenth century, the combustion process was thought to involve the absorption of a substance called 'phlogiston' and other observations were made to correspond with this fundamental idea which included assigning a negative weight to phlogiston. Then in the eighteenth century, Antoine-Laurent Lavoisier and Joseph Black came up with the caloric theory of heat according to which heat was considered a fluid called 'caloric'. It was only in early nineteenth century

that heat came to be regarded as a form of energy. The usage of the term 'alternative conceptions', reinforces the dynamic and evolving nature of science.

Dykstra et al. (1992) also find the term 'misconceptions' inappropriate because according to them it ignores the rational basis of these explanations i.e., these conceptions are rationally based on students' experiences of the world. The term 'alternative conception' refers to the fact that students' knowledge about how the world works is different than that of the physicist but is based on reason. Smith, Di Sessa and Rochelle (1993) also criticised the misconceptions position as it only highlighted the erroneous aspects of the prior knowledge of the learners while ignoring their productive ideas which could form the basis of a more scientific understanding. They argue that 'misconceptions' need to be reconceived as faulty extensions of productive knowledge.

Pardhan and Bano (2001) who examined science teachers' alternate conceptions about direct current say that alternative ideas are those scientific ideas held by individuals which do not match expert scientific views. They acknowledge that these ideas have been given different names but add that the most common and appealing one to them is 'alternative conceptions' because these ideas are an individual's mental constructs, which make sense to the individual and work for the individual to make sense of new knowledge. It is personal knowledge that is at variance with public (accepted) knowledge. They point out that children as well as adults hold alternative conceptions and even teachers at all levels hold alternative conceptions. They found that not only many of teachers' alternative conceptions were similar to those of children but also that teachers show resistance to change just like children.

Siry et al. (2008) criticise the word 'misconception' because it had negative connotations vis-a-vis the learner. They elaborate that what teachers should do in soliciting prior knowledge of students is to respect the rudimentary 'misconceptions' they bring into scientific understanding and not view them as right or wrong but rather as an 'otherness' or alternative way of understanding a concept or phenomenon. Some researchers like Eijck (2010) do not distinguish between alternative, naive conceptions or misconceptions and talk of them as parallel terms. In physics education the intuitive knowledge of learners has been referred to by different terms such as facets, phenomenological primitives, coordination class, mental models and so on.

It is observed that usage of different terms often leads to confusion and there is a need to develop a theoretical framework based on shared language. The term 'alternative conceptions' may then be understood to refer to all 'ideas which differ significantly from the accepted scientific view' (Gilbert, 1983) of this day. Therefore, the term

'alternative conceptions' may include within its purview:

- Pre-conceptions that have survived formal instruction.
- 'Hybrid conceptions resulting from the interplay between formal and pre-conceptions. These may not be entirely incorrect ideas but may incorporate some correct ideas as well.
- Limited conceptions.

The term 'shared conceptions' may refer to those ideas about a particular concept or subject, that are presently shared by the scientist community. The use of the term 'shared conception' instead of the 'correct' conception is depictive of the dynamic nature of science and allows scope for the possibility of revision of scientific knowledge which is how the disciplinary knowledge develops. The alternative/shared conception terminology is therefore more in consonance with our view of science. Rochelle (1992) who analysed the process by which two school children arrived at a 'shared understanding' of velocity and acceleration called this process 'the convergent conceptual change'.

Accessing Children's Ideas in Science

As discussed in the prior section, 'alternative conceptions' are the intuitive understandings of the world that differ significantly from the currently accepted scientific explanations. During the last four decades, the alternative ideas of the learners have been studied aceoss differenrt domains. Mechanics remained a prominent area of study as many of the commonsense notions of force and motion were found to clash with the Newtonian mechanics. Many tools that attempted to assess the learners' understanding in specific areas were also devised. Optics because of its peculiar subject matter also emerged as a fertile area for study of alternative conceptions. In the last two decades, research efforts have also begun to be directed at designing instructional interventions taking the alternative conceptions as the spring board. Moreover, these efforts did not remain confined to school education but extended up to undergraduate and even teacher education level since it was realised that alternative conceptions are tenacious and resistant to change. The alternative conceptions though prevalent among children as well as adults may be difficult to identify and diagnose because learners may often respond correctly to standard questions while retaining their alternative ideas. To investigate such ideas, therefore suitable assessment tasks and focused probes need to be designed. The researchers in the field have employed a variety of methods to study these ideas. As noted from the review of studies on optics, researchers have adopted a variety of pathways to access subjects' ideas such as *questionnaires* (e.g. Anderson and Karqvist,1983), *clinical interviews* (Goldberg and McDermott, 1987;

Guesne,1985), *class discussions* (Fetherstonhaugh and Treagust, 1992), *multiple choice diagnostic instruments* (Chen, Lin and Lin, 2002) and *openended questions* that may include predictive paper-pencil tasks where the subjects are required to predict what they are likely to observe under given situations (e.g. Ambrose et al.,1999 ; Atwood et. al., 2005). The process of construction of multiple choice diagnostic items has received much attention. The objective has been to dig out the underpinning ideas that lead to the elicitation of learners' overt responses and thereby understand their reasoning processes. For young learners the oral interactions or drawings, instead of paper-pencil work, are to be preferred.

Informal conversations or children's talk provides a helpful peep inside children's minds. *Children's drawings* often make up for articulation gaps and provide a helpful path to their conceptualisations of the world and could be used

– at the beginning of a teaching-learning session to learn what pre-conceptions children bring to the classroom,

– during the teaching-learning session to as a facilitative tool to help children sort out their own ideas, and

– at the end of teaching-learning session to see how their ideas have or have not progressed.

Shepardson and Britsch (2001) provide certain performance categories to assess a graphic product (drawing-cum-text). These are: sequence of activity, sense of scale and relationship between objects, level of detail, relationship between drawing and writing and carefulness. Minute examination and analysis of drawings could lead to cultivation of extremely useful insights.

Osborne (1980) put forward an 'Interview about Instances' (I.A.I.) approach to investigate students' understanding of a particular concept using an interview situation and a set of simple line drawings. It is posited that individual interview situation not only allows flexibility but also is helpful in evoking students' responses. Bell, Brook and Driver (1985) noted that if the alternative ideas of children are not addressed explicitly, the students maintain their alternative conceptions despite instruction. They present an overview of the approaches used by different researchers in recording the alternative conceptions of school students and report the following:

(a) Some researchers attempt to make inferences about students' conceptions based on patterns in their actions.

(b) In a few studies, students have been tested in groups through written responses or the use of diagnostic tests based on coded answer questions have been used.

(c) Many approaches have relied on student talk in various interview situations, the assumption being that, to varying degrees, oral language reflects cognition. The

use of manipulative material or other referents e.g., drawings also aid in the task of checking the interviewers' interpretations.

(d) Some researchers have followed up interview studies with surveys designed to indicate the prevalence of conceptions using larger or more representative samples.

Tsai and Chou (2002) also developed and tested a computer supported two-tier test system in which only one item per screen was presented. Every item was presented in two steps to prevent the influence on the first response by the information given in the second step in the sequence. However, when making the choice of the second tier, the first tier is kept on the screen. This may help students to select a reason that is consistent with their choice made in the first tier.

In a two-tier multiple choice test instrument, the first tier of each test item consists of a content question asking the students to predict the outcome of a situation and usually provides several distracters along with the correct answer. The second part of the item asks for a reason for the answer the student provided in the first part. The provided reasons from which the students choose include the correct answer and possible alternative conceptions identified in questionnaires and interview studies. Opportunity is also provided for students to give their own ideas in case none of the distracters fits their understanding. This consideration minimises the chance that students will just guess when they do not have any strongly held conception about the asked question.

Treagust (2006) presented a review of the development, in particular, of two-tier multiple-choice diagnostic instruments that have been reported in the science education research literature. It is noted that supporters of alternative approaches to assessment have not specifically elaborated on the value of specially created diagnostic tests but have recommended assessment items that require an explanation or defence of an answer, given the methods used. Three major aspects to development of these items that are highlighted are : (a) the content is defined by the identification of the propositional content knowledge statements, (b) information about students' conceptions is obtained from the extant of research literature, (c) development of the two-tier-multiple-choice diagnostic items. The first tier of each multiple choice item consists of a content question having usually two to four choices. The second tier of each item contains a set of usually four possible reasons for the answer given to the first part. The reasons consist of the designated scientifically accepted answer, together with identified students' conceptions and/or alternative conceptions. The alternative reasons are culled from the students' responses given to each open response question as well as from the information gathered from the interviews and the literature. When more than one alternative conception is given, these

are included as separate alternative reason responses. Students' answers are considered to be consistent with the presently held view of the scientific community only if both, correct choice and correct reason are given.

Documenting and Learning from Learners' Ideas

Investigation of children's ideas in whichever way is deemed suitable, must however logically lead to their clear articulation by the investigators so that these can be analysed threadbare and appropriately addressed during the course of teaching-learning . These articulations will not come from the learners themselves but from the researchers who would have to creatively work out the thinking pattern of children on the basis of their interactions with the children. Reproduced below is a transcript of an interaction between a teacher and an 8-year-old.

Teacher (T) : light *kya hai?*
Student (S) : *matlab?*
T : *matlab agar kisi ko light ka nahin pata aur tumhe batana hai to tum kya kahoge?*
S : *batti*
T : (pointing to the tubelight): Yeh?
S : *Han par aap koun si light pooch rahi hain ? Waise to light roshni hoti hai.*
T : *Aur roshni kise kahoge?*
S : *Jo cheez chamakti hai.*
T : *Kaun si cheez?*
S : *Jaise jab torch jalate hain to uske aage jo cheez chamakti hai who roshni hoti hai:*

The above interaction gives some important clues about the way children think about light which is that
(a) children equate light with its source,
(b) children equate the effect (shine) with the source, and
(c) children think of light as matter.

Interestingly, these particular thoughts have been highlighted by many other studies as well. What is important to consider is that these cues to children's idea of light have been gauged from the above interaction and never at any point of time explicitly stated by children themselves. This should persuade all interested researchers to think up innovative ways to get to children's ways of thinking. Most studies that have examined the alternative conceptions in different areas have attempted to categorise them. The categories are sometimes hierarchical in order of sophistication. For instance, Selly (1996) presented a novel structure for displaying a phenomenographical hierarchy then constructed this hierarchy for children's ideas on light and vision. The structure proposed for displaying the hypothetical relationship between the conceptual models was called the Tower Block Analogy.

Level	Criteria
0	The most rudimentary level of understanding requires only an awareness of the conditions for sight: open eyes, unimpeded line of sight, and some kind of illumination.

1   Model A0. Recognition that there is a physical entity linking or travelling along a straight-line-path between object and eye, but retaining an ego-centric viewpoint.

2   Model A1. Recognition that there are two links, one involving the path of light from the source; but still ego-centric in the assumption that it is the eye, rather than the object which receives this illuminating ray.

3(a)   Model A2. Recognition of the necessity for the conjunction of two straight line rays (one from the source and other from the eye) to meet at the object, if vision is to occur. This model fully satisfies the empirical evidence available to the learner.

3(b)   At this same level there can be the growth of a very basic Reception model, for primary sources only. Light travels from the source, in a straight line until impeded (which would explain shadows), or until it reaches and enters an eye, giving a dazzling impression of the source.

4.   Model B1. Acceptance of the theory of sight as the reception by the eye of light from the secondary source (which scatters or remits illumination).

Shipstone (1985) identified four conceptual models of electric current. These are termed as (a) unipolar model (current flows from the battery to the bulb–only one wire is considered active), (b) clashing currents model–current flows from both the terminals of the battery to the bulb, (c) current consumption model (the current is 'used up' by the bulb connected across the battery so that there is less current travelling back to the battery), and (d) the scientific model. The prevalence of the models is found to vary with different age groups so that the unipolar model is least prevalent among secondary students. The progression from models (a) to (d) is therefore also indicative of an increase in sophistication level of the model. However, there may not always be an evident sequence of sophistication in alternative conceptions and they could just come across as lateral and loose conceptions of reality. An example would be that of alternative ideas related to force and motion such as, 'constant motion requires constant force' and 'if a body is not moving, there is no force acting on it'. Further, these that may not be mutually exclusive as children may simultaneously subscribe to more than one of these ideas.

Having documented children's ideas, it logically follows that these are systematically taken into account by teachers and addressed during the course of teaching-learning. Appropriate addressal would require a thorough analysis of each one of these ideas. Analysis demands an in-depth reflection and contemplation on the factors that may have led to the formation of these ideas in the first

place. The factors could be multifarious such as the subjective interpretation of everyday experiences or those that have to do with the represented knowledge such as the imagery or the language used to describe these experiences by people, teachers or even at times the formal texts. For instance, the 'light rays' used in ray optics may be taken as actual depiction of reality thus resulting in students assigning a materialistic status to rays and therefore to light. Chi et. al. (1994) propound that there are three primary ontological categories into which the entities of the natural world can be clubbed viz., matter, processes and mental states. The language used to discuss these entities therefore has to be in tune with their ontological status. Use of ontologically inappropriate language by the teachers in classroom explanations (e.g. referring to an entity belonging to the 'process' category as 'matter') leads to reinforcement of intuitive notions and strengthens the alternative views. However, there is little effort by the academic systems at the college, university or even at teacher preparation level to help the learners appreciate these subtleties of represented knowledge. Teachers recognising and acquiring a conscious awareness of these nuances of science pedagogy and responding to them by allowing them to bear upon classroom teaching-learning would be the first step towards addressing the alternative conceptions of children.

CONCLUSION

It is a challenge to unearth children's ways of thinking about the world as these often operate at the sub-conscious level and therefore are not freely available to clear articulation. Innovative means therefore have to be employed to actually assess the nature of these ideas and lay them out for analysis and reflection and examine them for some patterns if any. Each conception has to be dealt with separately and addressed during the course of the teaching-learning process. The approach has to be conception specific as the considerations for addressing different alternative conceptions would differ. Sometimes though, addressing an underlying conception may also lead to the addressal of some related conceptions. Children's 'variant ideas' have to be looked upon not as cumbersome 'obstructions to be overcome' but as 'strategic points for anchoring future interactions'. It may be pointed out that the teachers are crucial links that mediate between 'formal knowledge' and children's ideas that are acquired informally. Helping teachers develop insights into the nature of children's knowledge and how it is acquired can encourage them to revisit several of their own understandings thereby leading to improved teaching-learning practices.

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6

Analysis of Home Assignments of Students at the Primary Level: an Evaluative Study

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Abstract

Home Assignments (HA) are not meant to keep children occupied at home. These serve several educational needs which are essential to receive complete education. Practising home Assignments allow children to review what they have learnt in the class. Doing HA increases comprehension of a subject or topic by helping children retain it for a longer period of time. Extension of home assignments includes long term assignments such as small projects appropriate to the age and class of the children. If a teacher can create a desire to engage the children in activities and to participate in learning experiences, learning will become more functional and better designed to meet the objectives. An assignment denotes this aspect of teaching. To know, how far teachers in primary schools have realised the potentialities of the assignment as an important part of teaching, the present study was taken.

Introduction

Primary education is the first tender step towards planned and deliberately organised learning process with specific objectives, which constitute a very important part of the entire structure of education. It is to let children know their environment better and perform to the best of their abilities. Children should be able to read, write and perform arithmetical operations whenever they need to. They should be able to express themselves orally as well as in writing. They should also be able to perform activities, and express their feelings to an extent children are expected to at the age of 10+.

Unfortunately children get very little time in school to work independently and do some of the

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learning activities on their own. In a classroom they either listen to the teacher or they copy the work from the blackboard. According to *National Curriculum Framework–2005*, "the concept of time on task is an essential reckoner for taking stock of the total time that children spend actively on learning. This would include time spent on listening, reading, writing, doing activities, discussing, etc. Total study time that is expected from students in both face-to-face and self-study/ home work needs to be accounted for while planning the syllabus or course of study for students".

Home work or home assignment not only gives the opportunity to children to work independently but it is also an important tool to know the progress of the children. It gives children an opportunity to manage and organise their routine in such a way that they get time to revise the concepts and lessons learnt in the class. HA reduces the gap in terms of time span between teaching-learning processes and is used to encourage children to study outside the school also. It also helps children to develop the ability to take responsibility for their own learning.

Opinion and practices with respect to home work vary widely. Arguments are both for and against giving home assignments. There are some who vehemently criticise the quantum of home work given in schools while others think HA are necessary as practice makes one perfect. Parents sometimes complain that excessive home work retards the child's all-round development, arouses rebelliousness, contributes to careless work habits and promotes un-wholesome attitudes in children towards school and even towards life. Whatever may be the criticism parents, teachers and school authorities approve of home assignments as a measuring tool to know the progress of their children. Undoubtedly, if home assignments are skilfully planned, intelligently distributed and systematically checked, will result in meaningful progress.

Researches carried out in India, Australia and some other countries show a clear link between time spent by the children on study out of classroom and achievement. Home work helps bridge the gap between the home and the school. It should be seen by teacher, children and parents as a vital part of home-school partnership which supports children as they learn.

The purpose of the present study is to analyse home assignments in some of the primary schools of Delhi.

Terms Used in the Study

Home Assignment
It refers to tasks assigned to the students by their teachers to be completed outside the class. Home assignments may include reading, writing, problem solving, project work and other skills to be practised. In layman's language it is also known as home work.

Analysis
Analysis of home assignments has been done with reference to their

number, frequency, type, content, feedback, etc. It included quantitative and qualitative analysis of home assignments.

Objectives of the Study

The study was conducted keeping following objectives in mind:

- To assess assignments with reference to their type, periodicity (frequency), number and utilisation in feedback of teaching and learning,
- To analyse the strengths and weaknesses of assignments with reference to strengthening learning among learners, and
- To give suggestions, if required and to provide training to teachers, if needed.

Sample

Incidental sampling technique was used for selection of schools. All the MCD primary schools and primary sections of Sarvodaya Vidhyalayas of North-West District comprised the population. Schools selected for School Experience Programme by DIET Pitampura, comprised the sample of the study.

Procedure of the Study

Every researcher evolves a plan to tackle best the research problem on which she works in the best possible way. This makes the conduct of the research not only planned correctly to the last detail but systematic as well.

- All the course books of the students of Class IV were studied in order to analyse the content of different subjects taught.
- Tools were developed by the coordinator.
- A workshop was conducted in which tools were got validated by the experts of the field namely, Professor M.C. Sharma (IGNOU) and Professor Anita Rastogi (JMI Univ.). Suggestions regarding the tools were incorporated and tools finalised.
- Just before the School Experience Programme, one-day orientation programme was organised to acquaint the pupil teachers of DIET, Pitampura regarding the administration of tools of the study.
- A set of all the tools were provided to the pupil teachers.
- Coordinator of the study visited maximum number of schools during the administration of tools in the sample schools.
- Data was collected and compiled.
- Analysis of the data was done.
- Conclusions and suggestions were made accordingly.
- Complete report of the research study was prepared.

Developments of Tools

A workshop was conducted for the finalisation of tools where Professor M.C. Sharma (IGNOU) and Dr. Anita Rastogi (Professor, JMI) were invited. They appreciated the first draft of the tools as maximum aspects of the study were included in the tools. They gave many valuable suggestions regarding the improvement of the tools further

e.g., proper classification of items of the tools in three categories namely, Questionnaire, Interview Schedule and Content Analysis.

Administration of Tools

All the three tools–Questionnaire, Interview Schedule and Content Analysis–were compiled in the month of October 2010 as School Experience Programme (SEP) was scheduled from 22 October to 22 December 2010. The pupil teachers were oriented about the study as well as about the administration of the tools before the start of SEP. The tools were administered during SEP by the pupil teachers of ETE first year in the MCD schools selected for SEP. Tools were administered to teachers and students of selected classes in all the fifteen schools selected for the study. Since the tools were to be administered in Class IV of the sample schools, all the sections of Class IV were selected for the study. This way the Interview Schedule was conducted on forty-four teachers and the Questionnaire and the Content Analysis were administered on 1923 students.

Delimitations of the Study

Each research problem has to be delimited to some extent, as the researcher cannot cover all aspects of any problem. In view of the resources available, the present study had the following delimitations:

– Student sample comprises students of Class IV in MCD schools and Sarvodaya schools of North-West district of Delhi.
– Selection of the school sample is based on incidental sampling technique.
– Tools are validated using content validity by the experts of the field.

Data was collected during School Experience Programme, i.e. from 22 October to 22 December 2010.

Gender and socio-economic background have not been treated as significant variables in this study.

Major Findings

Type of Assignments

(i) Nature of home assignments:
– 2 per cent HA in English subject were repetition of the class work and all these HA were the answers of the questions given at the end of the lesson in the textbook.
– 87 per cent HA in Hindi subject were repetition of the class work and all these HA were the answers of the questions given at the end of the lesson in the textbook.
– 91 per cent HA in Mathematics subject were repetition of the class work and all these HA were the solutions of the problems given in the textbook. 9 per cent HA involved practice problems based on the class work and 10 per cent HA involved activities related to class work.
– 93 per cent HA in Social Studies subject were repetition of the class work and all these

HA were the answers of the questions given at the end of the lesson in the textbook.

– 85 per cent HA in Science subject were repetition of the class work and all these HA were the answers of the questions given at the end of the lesson in the textbook.

(ii) Quality of home assignments:

– In English 85 per cent HA were mechanical and 7 per cent HA were interesting in nature. 8 per cent HA involved drawing and colour activity.

– In Hindi 77 per cent HA were mechanical and 8 per cent HA were interesting in nature. 10 per cent HA were related to specific objectives of the lesson. 8 per cent HA involved drawing and colour activity.

– In Mathematics 70 per cent HA were mechanical and 10 per cent HA were interesting in nature. 5 per cent HA were related to specific objectives of the unit. 15 per cent HA involved drawing and colour activity.

– In Social Studies 64 per cent HA were mechanical and 7 per cent HA were interesting in nature. 15 per cent HA were related to specific objectives of the lesson. 14 per cent HA involved drawing and colour and filling of map activity.

– In Science 55 per cent HA were mechanical and 12 per cent HA were interesting in nature. 15 per cent HA were related to

specific objectives of the lesson. 18 per cent HA involved drawing and colour activity.

(iii) Skills and Levels of learning involved in home assignments:

– No HA was given in language subjects i.e., English and Hindi for the development of listening skills in students.

– No HA was given in language subjects, i.e. English and Hindi for the development of speaking skills in students.

– Nearly 20 per cent HA in language subjects i.e., English and Hindi involved improvement of reading skills in students.

– Rest 80 per cent HA in language subjects i.e., English and Hindi involved writing skills of the students.

– In Mathematics, 20 per cent activity-based questions were given as HA.

– In Social Studies, 8 per cent activity-based questions were given as HA.

– In Science, 19 per cent activity-based questions were given as HA.

Frequency of home assignments

– The frequency of HA in Mathematics (50 per cent) was found to be the maximum and in English (18.75 per cent) and Social Studies (12.5 per cent) was the minimum.

– In a few schools (6.25 per cent) no HA were given in any subject.

– In a few schools (6.25 per cent) HA were given once a week in all the subjects except English.

Periodicity of home assignments
– 43.75 per cent students required on an average one hour or more in completion of HA in English.
– 37.5 per cent students required on an average one hour or more in completion of HA in Hindi.
– 37.5 per cent students required on an average one hour or more in completion of HA in Mathematics.
– 43.75 per cent students required on an average one hour or more in completion of HA in Social Studies.
– 62.5 per cent students required on an average one hour or more in completion of HA in Science.

Utilisation of Feedback
(i) Evaluation of home assignments:
– In 20 per cent of the sample schools HA in English were never checked.
– In 28 per cent of the sample schools HA in Hindi were never checked.
– In 20.5 per cent of the sample schools HA in Mathematics were never checked.
– In 27.3 per cent of the sample schools HA in Social Studies were never checked.
– In 22 per cent of the sample schools HA in Science were never checked.
(ii) Nature of Feedback:
– In most of the sample schools the HA were checked by ticking right or wrong in English (48 per cent), Hindi (45 per cent), Mathematics (44.3 per cent), Social Studies (47.3 per cent) and Science (42.6 per cent).
– In a few of the sample schools the HA were checked with remarks in English (10 per cent), Hindi (10 per cent), Mathematics (8.6.3 per cent), Social Studies (11.4 per cent) and Science (12.6 per cent).
– In nearly one-third of the sample schools the HA were checked by highlighting the errors in English (31.4 per cent), Hindi (23.3 per cent), Mathematics (30.3 per cent), Social Studies (25 per cent) and Science (32.9 per cent).
– In nearly one-sixth of the sample schools the HA were checked by correcting the errors in English (10 per cent), Hindi (12 per cent), Mathematics (16.3 per cent), Social Studies (15.7 per cent) and Science (10.6 per cent).
– In a very few schools (negligible in number) of the sample schools the reinforcement was provided after checking HA in English (6.6 per cent), Hindi (1.3 per cent), Mathematics (0.6 per cent), Social Studies (0.6 per cent) and Science (1.3 per cent).
(iii) Frequency of Correction Work:
– The maximum number of students in sample schools did

correction work regularly in Mathematics (43.4 per cent) and the minimum number of students in sample schools did correction work regularly in Hindi (20 per cent).

– The maximum number of students in sample schools did correction work sometimes in Hindi (53.3 per cent) and the minimum number of students in sample schools did correction work sometimes in Mathematics (20 per cent).

– The maximum number of students in sample schools never did correction work in Mathematics (46.6 per cent) and the minimum number of students in sample schools never did correction work in Hindi and Science (26.6 per cent).

– In Mathematics either students did correction work regularly (43.4 per cent) or they never did correction at all (46.6 per cent). The proportion of students who did correction work sometimes in Mathematics was just one-tenth (10 per cent) of the total sample.

– In Hindi, Social Studies and Science most of the students (53.3 per cent, 40 per cent and 46 per cent respectively) did correction sometimes.

(iv) Follow up of Correction Work:

– Follow up of correction work was done regularly by the maximum number of teachers (60 per cent) of the sample schools in Mathematics.

– Follow up of correction work was done regularly by the minimum number of teachers (13.7 per cent) of the sample schools in Hindi.

– Follow up of correction work was done sometimes by the maximum number of teachers (53.3 per cent) of the sample schools in English and Hindi.

– Follow up of correction work was never done by the maximum number of teachers (40 per cent) of the sample schools in Social Studies and Science.

Support required in doing the home assignments

– Nearly 25 per cent of the students in the sample schools did HA independently.

– Nearly 50 per cent of the students in the sample schools did HA with the help of others.

– Nearly 25 per cent of the students in the sample schools did HA with the help of sibling/ parents.

Keeping record of the defaulters

– Nearly 25 per cent of the teachers in the sample schools maintained the record of defaulters.

– Nearly 50 per cent of the teachers in the sample schools never maintained the record of defaulters.

– Nearly 25 per cent of the teachers in the sample schools

maintained the record of defaulters sometimes.

Status of Home Assignments

–   Nearly one-third students of the sample schools completed their HA in Hindi, Mathematics, Social Studies and Science.
–   The negligible number of students (6.25 per cent) of the sample schools completed their HA in English.
–   The maximum number of students (47.25 per cent) of the sample schools not completed their HA in English at all.
–   The maximum number of students partially completed HA in Hindi (50.5 per cent) and Social Studies (62.5 per cent).
–   The maximum number of students (39.8 per cent) of the sample schools did not have notebooks for attempting HA in English.
–   The minimum number of students (6.25 per cent) of the sample schools did not have notebooks for attempting HA in Social Studies.

Conclusions

Based on findings of the present study and the experience gained while conducting study, the coordinator has come to the conclusion that the planning and assigning of Home Assignments (HA) in Class IV of the selected Primary Schools is a much neglected area of school teaching. Teachers are not aware of the importance and utility of HA in teaching-learning process. No efforts are being put by the teachers to plan HA in such a way that extension of classroom teaching can be done. Students' interests are not taken care of while assigning work to the students. Answers to the questions given at the end of the lesson/unit are written on the blackboard and the same questions are given as HA for the practice of the students. Other uses of HA like confirmation of the concepts taught in the class, better understanding, improvement in students' learning, providing appropriate to the students and the application of the concepts taught in the class are being ignored. The whole process of assigning HA, their checking, correction work, follow up of correction work, maintenance of record of defaulters etc., are being taken in a routine way. Many students in the sample schools are not doing their assignments due to the reason that they do not have notebooks to work on. Those students who are not very regular in attempting HA given to them either due to the reason that they are not regular in schools or sometimes they do not bother to complete their HA, are not motivated effectively to make them regular in doing HA. It has been felt by the coordinator that by the implementation of Continuous and Comprehensive Evaluation in classroom teaching, it is necessary to improve the status of Home Assignments in schools. If well organised and systematic HA are planned and checked by providing

need based feedback to the students then it will not only help in improving learning in students but it also in assigning appropriate grades for Formative Evaluation i.e., FA-I, FA-II, FA-III and FA-IV to the students as well.

Implications of the Study

Based on the various findings and conclusions of the study, the following implications have been formulated:

Type of Assignments

(i) *Nature of home assignments*

The importance of home assignments as extension and enrichment of class work may be realised by the teachers. Efforts may be put into prepare those assignments for the students which confirm their classroom learning, develop their interest in class room teaching and explore concepts related to class work.

(ii) *Quality of home assignments*

Home assignments at the primary level should be more interesting, joyful and related to specific objectives of the lesson/unit. Assignments should be planned in such a way that students complete them on their own without any feeling of burden and boredom. Students' interest may be taken care of while planning assignments for them as at the primary level they are at the take on stage of developing the habit of self-learning and working independently. Students usually take more interest in drawing and colour work, so more assignments involving drawing and colour work may be planned. Assignments involving cross-words, puzzles, riddles, matching, exploring, collecting objects, locating on map etc., should be planned more. Students may be motivated to perform activities mentioned in the textbook along with the activities given as assignments by their teachers. One thing should also be taken care of those activities given as assignment must be discussed the very next day and positive reinforcement is provided otherwise students would not take interest in assignments.

(iii) *Skills and Levels of learning involved in home-assignments*

For teaching languages like English and Hindi, home assignments which strengthen skills of listening and speaking in students, may be given. Teachers may chalk out certain activities like giving a list of programmes on radio or television to the students for listening and a discussion regarding the same may be held the very next day. Students who have listened to these programmes must be appreciated and others may be motivated for the same. Likewise students may be given opportunities to speak about their school, any successful event or celebration that has taken place in the school to their family members and friends and discuss with other students of the class for a period or two in a week. This will help in developing the speaking skills of the students.

For teaching at the primary level more activity based assignments may be given so that students' interest be created in doing home assignments.

Teachers may plan activities to be given as home assignments, related to the concept or lesson they are teaching in such a way that students not only feel joy in performing them but their interest in learning is also developed. If possible group activities may be planned for the social development of students. Group activities also help in developing the feeling of cooperativeness and respect for others in the group.

Frequency of home assignments

Teachers may be advised to design assignments according to the nature of the topic/subject. The assignments should be provided to the students as they facilitate better understanding and clarity of the subject matter. Coordinated policies on HA may be formulated at the district, schools and classroom levels by the consensus of the concerned authorities and teachers.

A clear and broad rationale for assigning homework, as well as general guidelines for the amount of how much HA should be assigned may be prepared at the District level. Schools need to provide more specific time requirements, coordinate assignments between classes, and describe the role of teachers and principals.

Periodicity of home assignments

No home assignment should require more than half an hour for completion because if students get home assignments in two subjects then these would require more than one hour to complete them which may become a burden for students, rather than

learning process. While assigning home assignment students' age group, mental level and their concentration span must be taken care of, otherwise the purpose of assigning home work will be defeated.

For development of good study habits, learning on one's own and to enrich/revise the concepts taught in the class learners may be assigned tasks which require about one hour of inputs at home. Since, the five subjects are being taught in the class, the teachers may develop a HA time table. They may also decide upon a minimum number of assignments at class level to be given from each lesson. It would be certainly better if this activity is done by consensus of all the concerned teachers before the beginning of the session.

Utilisation of Feedback

(i) *Evaluation of home assignments*
Regular evaluation of the home assignments has always motivated the students for doing their home-assignments for all the subjects. Teacher should plan their work in such a way that regular evaluation may be done by them in the class.

(ii) *Nature of Feedback*
Not only regular checking of home assignments motivates the students to work assigned to them but the way the checking is done, has deeper impact on their motivational level. Checking with mark of right/wrong neither makes them aware of their errors nor motivates them to work better. Very few teachers checked the assignments with remarks or by correcting their errors.

Number of teachers provided reinforcement while checking/evaluating was negligible. Teachers may provide positive reinforcement wherever possible as it motivates students not only to work but to work to their best. Also errors may be highlighted and corrected, otherwise the very purpose of giving and checking home assignments of the students fails.

(iii) Frequency of Correction Work

One of the benefits of giving assignments to students and checking them is that teachers and students come to know the errors, difficulties and bottlenecks of learning. These errors and difficulties may be overcome by doing correction work. In correction work the practice of the correct spellings, meanings of difficult words, correct method of solving problems, correct diagrams, exact location on the map etc., are done and repeated three to five times, thereby reducing the chance of committing the same mistake again to a great extent. Therefore, students need to do correction work regularly for every home assignment.

(iv) Follow up of Correction Work

Every home assignment may be followed by correction work. Teachers may develop a habit that before evaluating any assignment they turn back the pages of the notebook to see whether correction work of the previous assignment has been done or not. Adopting this practice by the teachers will definitely help to develop the habit of doing correction work by the students.

The support required in doing the home assignments

It was informed by the teachers that a significant number of students who sought others help had joined private tuitions. The students therefore may be given adequate inputs in the class so that they may complete the home assignments on their own. Moreover the assignment may be explained well in the class by the teachers and if still students have some difficulty then they should be motivated to ask the teachers for help rather than joining private tuitions.

Keeping record of defaulters

Teachers should maintain a record of students who do their home assignments regularly and those who default. Students who are regular and punctual should be given some credit in the form of badges etc., or stars on their assignments so that defaulters may also be motivated.

Status of Home Assignments

The present status of HA shows that little attention is paid to them in schools. It may be due to the reason that during most teachers education courses, prospective teachers discuss home assignments or home work in relation to specific subjects, but receive a little training to devise good assignments, how to decide how much home work is to given, and how to motivate students for attempting work assigned to them? Attention may be paid on "how to make effective assignments?" during in-service and pre-service teacher trainings.

Demand on the part of Teachers

Mostly home assignments are written without any novelty. This is one of the many reasons why to most of the students home assignments are not a challenge or joyful activity but a burden. Some other reasons may be:

– Assignments may be mechanical and repetition of class work;
– Assignments may not be interesting and students get bored in doing them;
– The teaching methods may not fit the student's learning style;
– The expectations from the students may be unclear or unreasonable;
– The students may have poor social skills;
– The students may not be able to communicate well;
– The students may have low self-esteem.
– The students may not have note books for attempting HA.

It has been suggested in *NCF–2005* that in primary classes, no home work should be assigned up to Class II and two hours assignments may be assigned a week from Classes III to V.

General Policy Guidelines

Based on results of various researches, articles, and findings and conclusions of the present study the coordinator felt the need of following general policies to be adopted for improving the status of home assignments in schools–

1. Coordinated policies on HA may be put into practice at district, school and classroom levels by consensus of the concerned persons.

2. A clear and broad rationale for assigning home work, as well as general guidelines on the quantity of HA be assigned, may be prepared at District level. Schools need to provide more specific time requirements, coordinate assignments between classes, and describe the role of teachers and principals.

3. Examples of various motivational strategies may be provided to the teachers to make use of in their classrooms.

4. Some underlying philosophical points regarding the policies are:

   i. Primary school students should be assigned home work, even if it does not improve their achievement, as home assignments help young students develop good study habits, promote positive attitudes toward school and communicate to students that learning takes place outside as well as inside school. The assignments to elementary students should be brief, involve materials commonly found in the home and should not be too demanding.

   ii. The academic function of HA as a motivational tool should not be ignored.

   iii. Teachers should *never* use home work as punishment.

   iv. Teachers should view the home work as an extension of the classroom. Home work that

involves practice and review of lessons previously taught and simple introductions to material prior to its coverage in class is desirable. Assignments that require students to integrate skills or differing parts of the curriculum should also be involved in HA.

v. Regardless of students' ages, the formal role of parents in home work should be minimal.

vi. It is also advised that teachers should individualise few assignments within the class. However, developing individualised home work demands considerable teacher time and has few benefits.

vii. Finally, teachers should not view home work as an opportunity to test the students. Almost all students may complete assignments successfully; thus, teachers should not differentiate much among performance levels. Having students do home work out of fear of negative consequences turns a situation ideal for building intrinsic motivation ("I must enjoy this; I'm doing it and the teacher isn't standing over me") into one that implies that the teacher believes students need rewards or punishment in order to complete assignments. Teachers may collect home work, check it for completeness, and give intermittent instructional feedback. This procedure shows that the teacher takes home work seriously and that it is purposeful. The major purpose should be to identify individual students' learning problems.

Suggestions for the Follow up of the Study

Teachers should be well oriented about the purpose, importance and implementation of assignments.

In the beginning of the session a meeting to develop assignments may be organised so that standard assignments may be developed according to the need of the learners and nature of the subject and may be provided to the learners.

Special attention may be paid to sensitise the teachers about the remarks/comments made on the assignments while correcting the assignments.

Follow up action of correction/ improvement to be carried out in the assignments is needed. This will reinforce the better understanding of the subject matter to the learners.

An indepth study on home assignments for one or two sessions on various subjects at the elementary level may also be taken.

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7

Continuous and Comprehensive Evaluation

Arti Dwivedi *

We all are aware about the Right of Children to Free and Compulsory Education Act, 2009 (RTE Act, 2009), implemented since April 2010. It says, "Every child of the age group of 6-14 years shall have a right to free and compulsory education in a neighbourhood school till completion of elementary education." With the implementation of Act, every child has the right to get quality education. The Act demands that CCE should be implemented for each child till the completion of elementary schooling. The field experiences and interactions with teachers suggested that teachers are facing problems in implementation of CCE. Teachers are largely engaged in compiling the data and keeping the records of children's test results rather than implementing CCE during the teaching-learning process. CCE is generally considered by them as an external activity to be conducted after the teaching. Most of the teachers are not confident about implementing CCE.

The Background: The Kothari Commission Report (1966) had stated that "the internal assessment or evaluation conducted by schools is of greater significance and should be given increasing importance. It should be comprehensive, evaluating all those aspects of students' growth that are measured by the external examination and also those personality traits, interest and attitudes which cannot be assessed by it." (9.84).

National Policy on Education-1986 had also stated that "continuous and comprehensive evaluation should incorporate both scholastic and non-scholastic aspects of evaluation spread over the total span of instructional time" (8.24 (iii)).

*The National Curriculum Framework-*2005 also proposed examination reforms. Its position paper on Aims of Education says: School based CCE

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system should be established to... reduce stress on children; make evaluation comprehensive and regular; provide space for the teacher for creative teaching; provide a tool of diagnosis and remediation; produce learners with greater skills.

On 27 August 2009, Government of India adopted a new act "Right to Free and Compulsory Education for Children between 6-14 Years of Age (RTE Act)". This law came into force for the entire country (except Kashmir) w.e.f. 1 April 2010. It states that students up to Class VIII should not be made to appear for any board examination. From the year 2010-11, a scheme of continuous and comprehensive evaluation was implemented for Classes I to VIII.

Meaning of Continuous and Comprehensive Evaluation

There are misconceptions related to various terms used under CCE scheme. 'Continuous' is generally considered by teachers as a regular conduct of 'tests'. Many schools are practising weekly/monthly tests in all subjects under continuous evaluation. 'Comprehensive' is considered, adding various aspects of child's behaviour, personal social qualities (empathy, co-operation, self-discipline, taking initiatives, etc.). 'Evaluation' is equated as record keeping exercise. Teachers are engaged in compiling the data of CCE during the teaching-learning time. This has resulted in a loss of opportunity time of learning for children.

Broadly, the term 'Continuous and Comprehensive' means that evaluation should be treated as an integral part of teaching-learning process rather than as an event which follows after the completion of teaching the syllabus. It refers to the fact that the teaching-learning should be continuously guided by the child's response and her/his participation in classroom activities. In other words, assessment should be seen as a process whereby the teacher learns about the child in order to be able to teach better.

Comprehensive evaluation means taking into account child's development, i.e., cognitive, connative and psychomotor. During the teaching-learning process, the teacher should create learning condition such as asking/probing questions, peer group interaction/discussions, providing enriching material, opportunities for sharing learning experiences. With the above mentioned processes, children would reflect, discuss, listen to others' responses and generate knowledge.

Purpose of Assessment

Assessment for learning: When assessment is used as an in-built part of teaching-learning process and is an inseparable component of this process, its purpose is to improve learning rather than to judge what they have learnt. Assessment for learning is used by the teacher through various ways such as asking questions, creating situations for discussion, peer interactions and sharing, written or

oral activities or many other ways. This assessment provides opportunities to teachers to get information/data about children's progress of learning. This kind of assessment has a formative purpose and is the most effective way to improve children's learning. In this assessment process, teachers create learning situations (assessment tasks) to assess what children know already, and can do, and use those insights to design the next steps for learning. In this assessment process, expectation is not to make comparative judgements among children but to highlight their strengths and diagnose learning gaps. This process facilitates teachers to provide timely feedback that will further enhance their learning. This kind of assessment (Assessment for Learning) happens during teaching-learning process, often more than once, rather than at the end.

Assessment as learning: During teaching-learning process children also get opportunities to reflect on learning processes to assess themselves. In this process the learners become assessors themselves. This is called assessment as learning. It is natural and automatic where learners oversee their own progress; assess their own strengths and gaps in learning. With this, children get the insights for future attempts and scaffolding on their own to remove the learning gaps. Assessment as learning provides opportunities for the student to develop abilities for lifelong learning, which is one of the prime goals of education. It is a simultaneous activity in the process of assessment for learning. If teachers provide regular opportunities to children for self-assessment and peer assessment, this kind of learning will be encouraged. Classroom learning must provide opportunities and space to students to monitor their own learning so as to critically assess/reflect and analyse their own work during teaching-learning process. Let students identify their strengths and gaps. The student may be asked first to identify, if there are mistakes, and if so what are those before providing feedback. Assessment for learning prepares students for assessment of learning and assessment as learning. If the student is unable to do so herself/himself the teachers may help. Students may be encouraged to assess themselves many times during the process of learning. Opportunities may be provided to students to assess and reflect on peer and group work. After identifying their strengths and gaps in learning, they themselves plan and make efforts to look for the suitable resources to seek further knowledge in order to address the gaps to enhance their learning.

Assessment of learning: When assessment is used by the teacher to know what have they learnt, it occurs after completion of transaction process. This is termed assessment of learning. This kind of assessment provides comprehensive information/data about the extent of student learning vis-à-vis curricular objectives on all aspects of curriculum including skills (academic, interpersonal) interests,

attitudes and motivation. Assessment of learning does not imply that the grades of all subjects may be aggregated. As the objectives of each subject may vary as per its nature and summing the grades will defeat the objective of assessment. It is based on evidences collected using multiple methods/techniques of assessment such as paper-pencil tests, oral tests, performance of tasks, portfolios, experiments, project work etc. Each task may be assessed on the basis of the objectives and indicators of that particular subject. The indicators may be decided at the teacher/school level to make a judgement on the extent of student learning with reference to curricular objectives of each class.

In order to implement assessment and evaluation in correct perspective of various subjects the following steps need to be followed by the teachers:

Implementing CCE

Step I: Identifying expected learning

The first step of your teaching-learning plan is to identify expected learning from the lesson. Expected learning can be drawn substantively from the objectives of learning for that subject area. The expected learning helps in a number of ways by:

• focusing on understanding of children's learning on a continuum of learning, as a continuous process;

• providing a reference point for parents, children and others to understand the progress of every child in a simple way and;

• providing a framework for monitoring, learning and reporting progress about the child.

Step II: Identifying existing learning level of children

Whenever we initiate any teaching-learning process in classroom, we need to relate it with children's previous learning experiences. Teacher visualises and creates the learning situation before initiating the new learning. This situation she/he could create keeping in view the context of the children. For example, if she/he plans to provide learning experiences related to diversity in plants, such as leaves, flowers, trunk, fruits, she/he may initiate discussion on the plants, which they have seen in their immediate environment. This informal discussion/interaction is a kind of assessment of children's prior learning. With this interaction she/he can also judge the involvement of children in the discussion/interaction. This experience about plants would help her/him think the course of action to build further on the desired learning that she/he intended to take up. Thus, in this way children relate with the previous experiences and move forward in a spiral way.

Step III: What kind of methods to be used for assessment?

No single assessment tool or method is capable of providing information about a child's progress of learning in different areas. While organising teaching-learning process, you would have realised that a lot can be understood from observing, listening to them, discussing informally with

their peers and parents as well as talking to other teachers, reviewing written work (class work and home work) and other articles/learning material made by children. In such situations teachers can know various ways in which children learn. Teachers need to provide different kinds of situation to assess learners.

- *Individual assessment* – which focuses on one child while she/he is doing an activity/task and thus individual work and accomplishments.
- *Group assessment* – which focuses on the learning and progress of a group of children working on a task together with the objective of completing it. This method of organisation is found to be more useful in order to assess social skills, co-operative learning processes and other value related dimensions of a child's behaviour.
- *Self assessment* – refers to the child's own assessment of her/his learning and progress in knowledge, skills, processes, interests, attitudes etc.
- *Peer assessment* – refers to one child assessing other children. This can be conducted in pairs or in groups. These methods could be used during the process of teaching-learning (assessment for learning) for improving children's learning. All these methods may be used by the teacher individually or simultaneously as per her/his need. She/he uses these methods to improve their learning by using

various ways. After completing unit/lesson teacher would like to know the performance of each child. For this, summative assessment (assessment of learning) could be done.

Step IV: What could be various sources for collecting information/ data of child's learning?

If we all accept and agree that every child learns differently and that learning does not take place only in schools. We need to collect information from a variety of sources:

- Each child is actually learning while going through a variety of experiences, activities and learning tasks doing in the classroom. Thus child is the prime source. The other sources could be:
  1. Parents   – child's friends/ peers/ classmates
  2. Other teachers – community members
- Portfolio is a rich source of child performance. It should be used while assessing and reporting child's progress. Portfolios should *not contain only the best work but all kinds of work,* to show the growth and progress of the child over the entire school year. Such a collection shows to teachers and parents what the child has accomplished and is a record of the *actual work* done rather than just the 'test scores'.
- Child's home work, project work, other assignment etc., can provide useful assessment data.

Step V: Recording of Information
Information to be recorded of two kinds:

• The information collected during the teaching process. This is for teacher's own record and used by teacher only for (assessment for learning and assessment as learning).

• The second kind of information is related with the data collected after completion of chapter/unit. This will be reported by teacher in one quarter called summative assessment (criteria based assessment) for this:

– Assessing the child's work during an activity/when it is completed.

– Making a special effort to write qualitative/descriptive statements of a child's work or any interesting incident.

– Preparing a child's profile.

– Keeping samples of a child's work in a portfolio.

– Making a conscious effort to note down important changes, problems, and positives/strengths and learning evidences.

Step VI: Reporting Process
Teacher assesses children during the teaching-learning process and accordingly she/he provides feedback and inputs to children through many ways. After the repeated use of such assessment and feedback/inputs to children as planned for any lesson/theme, teacher would like to know the learning levels of children. For this, she/he would conduct assessment of learning. The purpose of this assessment (assessment of learning) is to know the extent of learning against the criteria decided by the teacher. This kind of assessment data need to be recorded by the teacher. Most of the time teachers conduct such assessment through paper-pencil tests only. This defeats the whole purpose, because we know children learn through many ways. Paper-pencil tests do not provide the true picture of the children's potential.

Another major issue is that schools generally conduct such kind of assessment once in one quarter or half yearly basis. This again is not a correct way of assessing children's progress.

The third major issue related with reporting is that school reports the child's progress in the form of 'grades' such as 'A', 'B','C' without giving any remarks. This kind of reporting is neither communicating to children about their strengths or area of interest nor communicating to parents/elders.

While preparing a report the teacher needs to communicate and share the feedback with the child and parents. This aspect is important and needs to be done carefully and in a constructive and positive manner. It would be better, if we could report assessment data in three quarters and it should be criterion based. While reporting child's progress following points need to be taken into account:

• using a collection of illustrations of a child's work to help understand at what level of learning she/he is;

- focusing on strength of a child what she/he can do, her/his interest areas;
- providing examples of the kind of work that has been done by the child; and
- also highlighting those aspects requiring further improvement.

A sample of such reporting could be Class III Subject

Learning Band II: Child's performance as per expected level.

Learning Band III: Child needs support to reach the expected level

One example is given in the table given on next page.

The another way of reporting could be that teacher records assessment on test, activities/written work/oral work (the ways through which child have

Criteria	*Progress*
Observation, Recording *Reporting, Narrating and Drawing; Picture Reading, Making Pictures, Tables and Maps*	A child can observe fine details. For example, she can identify and list common plants and animals of her immediate environment (around home and school). She can report certain observable features of these animals (such as their colour, beaks, feathers, claws) and plants (such as shape, size, colour, texture of leaves, shape, colour of flowers). Given an opportunity, she draws leaves and floral patterns she has seen on several objects at home/school. If she is allowed to write freely in her own language, without being corrected for grammar or spellings, she can begin to write a short report–say, on a visit to a garden, organised by her school.

Another way of reporting children's progress could be assigning the grades along with qualitative remarks. The learning grades/learning bands could be assigned against pre-determined criteria that may be decided at the school level to make judgement on the extent of children learning with reference to curricular objective.

These could be:

Learning Band I: Child's performance beyond the expected level

learnt in the respective lesson/theme. Teacher assigns grade on the quality of work. This reporting can be done once in one quarter.

A. Sharing with the Child on Regular Basis

Most teachers provide informal feedback to the child while she/he is involved in a task/activity. Children also correct and improve themselves while observing the teacher, observing/

Learning Band	Remarks
I.	—————————-
II. Observation and reporting	Bisaniya observes fine details: When asked to look for objects with patterns of leaves and flowers, she observed floral patterns on many things at home – bed sheet, dresses, crockery, bathroom tiles, and she also recorded her observations in a table. She observed birds and animals around the trees in the school garden and wrote detailed reports.
III. Classification	She developed many categories about where we see birds, like in water, on tree, in the house and on the ground. However, she could not list similarities between different birds. She needs more opportunities to look for similarities and differences.
IV. Discussion	Bisaniya has original ideas, which she shares only when asked, and is hesitant to participate in group discussions. In the unit on Food she listened to her group members, but needed probing for examples about food items, which are eaten raw, fried and baked. It will help if family members involve her in discussions and decision-making.

working in pairs or groups. This kind of feedback monitors and improves child's learning during the teaching-learning processes. These feedbacks would not be reported in the report cards. More importantly, what needs to be encouraged through feedback is for the child to *compete with herself/ himself rather than what others are doing.* It should be with reference to *Where was I yesterday or a week ago and where am I today?* Comparisons between/among children do not really help. By and large it leads to feelings of *I am no good* or if a child has done very well and got the highest marks, she/he is put under pressure to keep up the performance at school and by parents at home.

B. Sharing with Parents/Elders in Monthly Meetings

Parents are likely to be most interested in knowing how their children are *doing* in school, what they have has learnt, how are their children performing and what are the progress of their children over a given period of time. More often than not, teachers feel they have communicated effectively through comments made to parents such as – *can do better, good, poor, needs to put in more effort.* For a parent what do these statements mean? Do such statements provide any clear information of what their child can do or has learnt, etc. In order to enrich the feedback being communicated, it is suggested that you

focus in simple and easily understood language on:

- What the child can do and what are strengths of the child such as oral communication skill, level of confidence, team-spirit, habit of sharing material/food?
- What does a child like or not like to do?
- Qualitative statements observed by you with samples of the child's work. Parents always like to see what their children do in the school.
- How the child has learnt (processes) and where did she/ he face difficulty?

- Indicate areas of success and improvement.
- Talking on aspects such as cooperation, taking group responsibility, sensitivity towards others, interests, etc., with both the child and parents.
- Discuss with parents what does child does at home, what they have observed at home about the child.
- If some children, who are not performing well after making consistent efforts by you, ask parents what kind of behaviour child reflects at home. This will help you to identify personal problem of a child.

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8

Environmental Awareness in Early Grades

Kavita Sharma*

Introduction

Environmental awareness and understanding, sensitisation towards the related issues and concerns to take appropriate action by all citizens for their addressal has emerged as an important concern of the new millennium. The United Nations (UN) has launched a Decade of Education for Sustainable Development (DESD) since 2005 'emphasising that education is an indispensable element for achieving sustainable development'. A curriculum based on the principles of learning of, for and through the environment can play a major role towards accomplishment of the objectives of Education for Sustainable Development (ESD). In India, efforts at the national level reflect the commitment to address this issue as envisaged in the National Policy on Education (NPE) 1986, (modified in 1992) wherein it is clearly mentioned

that 'protection of the Environment' is a common core around which National Curriculum Framework (NCF) would be woven. This concern has been taken care of by all the National Curriculum Frameworks for School Education developed subsequent to the NPE and even prior to this by the National Curriculum Committee, in 1975 policy document. At the primary level 'The Curriculum for Ten Year School: A Framework' recommended Environmental Studies(EVS) as a subject that takes into account natural and social environment wherein the textbooks from Classes III to V included separate sections for social science and general science. Continuing with a disciplinary approach to teach EVS at the primary level, the *National Curriculum Framework for Elementary and Secondary Education-1988,* proposed to introduce it in two parts, i.e. EVS I

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and EVS II in Classes III-V. In Classes I and II, it was introduced in integrated form through the use of teachers' handbook since in Classes I or II children are not fully equipped to cope with EVS in a formal way.

Recognising that a child understands his/her environment is in a holistic manner, later NCFSE- 2000, recommended integrated approach for EVS curriculum at the entire primary stage wherein, at Classes III-V, children would be introduced to the environment in its totality with no clear-cut distinction between natural and social environment . In Classes I and II, it was not kept as a curricular area and environmental concerns were addressed through language, mathematics and AHPL. The content at that stage has to be drawn from the immediate environment of the child and it would be integrated with language and mathematics.

NCF-2005 recommends EVS as core curricular area at primary stage. From Classes III to V, EVS is a separate subject while for Classes I and II, EVS is integrated with language and mathematics.

EVS, EE and ESD

A few decades ago, we did not have a subject like EVS in our primary Classes. Till today, most of us, usually, consider it at par with Environmental Education and sometimes interchangeably. Considering environmental education as a way of transforming the education system and its various processes to develop a fresh and concerned perspective towards environment, it is taught through different subjects to promote environmental ethics and inculcate responsibility towards environment. On the other hand, Education for Sustainable Development (ESD) is based on an integrated approach to economic, environmental and societal development, and encompass a broad range of related issues, such as democracy, gender equity and human rights. This broad approach needs to be recognised in both natural and social sciences, and should complement and build on existing initiatives in environmental education. ESD should be grounded in the local economic, social, cultural and ecological context and community followed by regional, national and global contexts and needs to be integrated in all teaching-learning and in all school life.

However, Environmental Studies helps not only in addressing the objectives of ESD but at the same time it helps reduce the curriculum load on children at the primary level as it is envisaged as an integration of science, social science and environmental education. It can be considered as an approach to the learning of environment in its totality without being burdened by any disciplinary considerations. It is an opportunity to let children use their surroundings holistically as a source of information, a ground for learning and a collection of experiences for lifetime instead of segregating into different compartments of natural, social,

cultural, physical environments etc. It includes understanding network of interactive linkages between human beings and their natural as well as socio-cultural environment. It aims at providing an awareness and appreciation of the natural and built environment; understanding of the range of current environmental issues; and the ability to use investigative, critical thinking, and problem-solving skills towards the resolution of environmental issues.

Therefore, limiting it to create awareness or mere knowledge updating through the so-called green textbooks defeats the entire purpose of ESD. Until it leads to transformation of a favourable attitude in order to promote suitable action towards promoting environmental activities, the goal of and overcoming environmental crisis will be distant dream.

Paradigm Shift in NCF-2005

In order to accomplish the desired objectives of EE at all levels of school education , a new paradigm proposed by the position paper on *Habitat and learning* is expected to promote positive environmental actions towards sustainable development to bring about the desired change. There are eight such aspects and each one has been discussed in the context of children in early grades.

Learning rather than teaching– NCF-2005 states that during the early childhood years the child's interest and priorities must direct learning. Children coming to school from diverse backgrounds bring diverse experiences as resources of knowledge that they acquire from an exposure to various means. Their previous experiences must be acknowledged such that the learning experiences must provide scaffolding to the child for constructive interaction with her environment to facilitate the process of assimilation and accommodation chooses appropriate tasks and strategies as per the need of the learners. In other words, an enabling environment for children would be that which is rich in stimulation and experiences and allows them to explore experiment and freely express themselves.

Building capacity for critical thinking and problem-solving– Children between the ages of 4 and 7, are curious by nature and love to explore and raise questions. They learn better through play, trying out different things with their hands and bodies, exploring, experimenting and improvising new things and then making meaning or drawing conclusions based on their previous experiences and learning. In order to nurture their curiosity they need to be engaged in learning situations and be provided opportunities exposing them to have a constructive interaction with their physical and social environment so as to let them explore these through active learning and play based experiences. During the process, they get actively involved through a variety of learning processes namely observing, identifying, inquiring,

estimating, classifying, introspecting, recalling, describing, relating and interacting with their immediate environment and extending it to discover new meanings and relationships by working together in groups. At this age, exposure to such different skills and can create a sound base for the concept formation in different curricular areas at a later stage. Thus, introduction of environmental education through problem-solving, action-oriented approach will help children be empowered to take action on issues that directly affect them. They should not only be made aware but also be provided a variety of tools that they could use to effect change. This approach encourages them to confront real world problems that are within their everyday experience.

Multidisciplinary Approach– Different subjects evolved to help us understand this universe but over the last few years the teaching-learning process of these has deviated from their objectives when it comes to actual practice in the classroom. Teachers teaching a particular discipline think of that particular body of knowledge in isolation and eventually end up transacting it in that manner to their students. In the process, they fail to let their students develop interconnections existing between various subjects, themes and thus the concepts relating that. Environmental Education includes national, social and cultural dimensions, which are very closely related influencing one another.

The environmental issues and concerns appear to be quite simple but actually they are very complex and it requires understanding them through knowledge of the basic disciplines. It is all the more important that these issues may not be understood through individual disciplines but through an integrated perspective of their learning.Thus one can say that it is not restricted to only one subject area but requires the appropriate usage of knowledge from all disciplines. Moreover, the multidisciplinary and interdisciplinary aspects of EE become apparent when we promote critical thinking and problem-solving approaches through various learning tasks. Further, till the age of 7 children should not be burdened with the load of different curricular areas, therefore, integrated approach becomes a meaningful tool for teaching in early grades. Also knowing the fact that children look at their environment in a holistic rather than compartmentalised manner and they develop an understanding related to it in holistic and integrated form. This requires breaking the watertight compartments and overcoming the traditional boundaries of disciplines and looking at priority which address essential and common concerns.

Local specificity in the context of global vision – Exposure and constructive interaction with one's surroundings is the best way to learn. The prime objective of learning EVS is to let the child connect with the immediate surroundings. *NCF-2005*

clearly states that children's knowledge should not be limited to the life within the classroom as they grow up in different backgrounds in their social world with varied perceptions and experiences and thus bring a previously acquired set of knowledge base with them while coming to school. In order to develop new learning, it is important to build on their authentic past experiences emphasising active and collaborative learning so to provide concrete experiences that are essential to integrate children's knowledge of their immediate surroundings into school knowledge to let them and their teachers discover and construct knowledge together. Therefore, at the primary level, emphasis should be to provide, scaffolding to the child for constructive interaction with her environment to facilitate the process of assimilation and accommodation for the child to build a mental representation.

Participating with broad involvement of peers and other community members – Since EVS learning primarily occurs outside the walls of the classrooms, Environmental studies forms a bridge between the school environment and that of the environment outside the school. An effort should be made to relate the child's local knowledge to the school knowledge. Children should be encouraged to tap sources other than the textbook and teachers. It is important to consider the elderly, community and the neighbourhood as a rich source of knowledge that also helps in developing a concern and sensitivity towards important issues of equity, diversity and gender. Their access to multiple resources such as newspapers, media and other books makes learning effective as it is crucial to children's thinking. *Knowledge generation* – The focus group report on *Habitat and learning* emphasises understanding different facets of India's environment through documenting student projects on a publicly accessible website, thereby creating a comprehensive database on India's environment. This is possible with children in early stages only when they are constantly given such opportunities right from the pre-primary and primary grades. Exposing children to problems and issues related their surroundings and emphasising on the processes of learning rather than the product can help achieve the desired objectives of EVS.

Empowerment rather than indoctrination – Mere preaching about various issues and problems may not help but empowering children (who are the future citizens) with appropriate awareness, dispositions and skills will enable them to identify and address the problems surrounding their environment. Allowing children to experience such situations, discuss and deliberate on related issued and helping them develop their own understanding will need to their empowerment later.

We know that pre-primary and primary stages are the best to nurture suitable dispositions and skills among

children to enable them identify and be sensitised about the environmental problems and issues prevailing around. Thus, in order to make it meaningful, it needs to begin right from the primary stage (including pre-primary level) making young children the most important target group. However, for its effective transaction, the approaches to its teaching-learning should be as per the developmental needs of the target group.

Recognising these aspects, the National Focus group in *Teaching of science* while not prescribing a textbook for EVS at Classes I and II states that 'the teaching-learning process should be contextualised by her experiences rather than being structured formally. Also a teacher should be free to devise his/her teaching-learning strategies to provide an enabling environment which is rich in stimulation and experiences and that allows children to explore, experiment and freely express themselves relevant'. Endorsing this view the position paper on *Teaching of Social Science* states that 'for Classes I and II, the natural and social environments will be explained as integral part of languages and mathematics.

Hence, it is the need of the hour to emphasise the emotional and attitudinal aspects of a learner's personality along with the requisite cognitive component in order to generate a concern that leads to effective action for conserving and improving the environment and becomes imperative right from the initial stages of learning to inculcate the necessary skills among children to sensitise them towards various environmental concerns. Some of these concerns include - Relationships between natural, social and physical and cultural environment, Conservation (preservation and improvement) of natural resources, culture and heritage and public property, safety, security and health and hygiene of self and others, Equality and justice against issues of human dignity, gender bias, disability, marginalisation and rights and duties of different living organisms, Nurturing creativity and aesthetic sense. These concerns are relevant for all stages of education and young children also cannot be kept oblivious about these where EVS is not a separate subject. As discussed, these can be transacted during the teaching-learning process of language and mathematics in such a manner so as to integrate the skills and concerns of EVS with them. A careful planning and preparation in this regard will lead to an effective implementation of this approach.

Teachers are the key agents for the success of any curriculum related exercise. They generally find difficulty in integrating environmental concerns with these subjects without enhancing their load and go beyond the textbooks. Keeping the environmental concerns in view, if they use a broad array of approaches emphasising experiential learning in child-friendly manner which includes story telling,

picture reading, poems, riddles, worksheets, art and craft activities, puppetry, role play, field visits, interactions, make and do activities, games, narration of experiences to design the learning situations in languages and mathematics for children of early grades, then they would be able to accomplish the objectives of learning EVS and even reduce the load of curriculum on young children.

Learning EVS through Mathematics and Languages

Mathematics is all around us but we as teachers confine its learning to the four walls of the classroom. As mentioned earlier, it is important to acquire knowledge as well as and the necessary skills of learning to learn, which include literacy, numeracy, reasoning , logical thinking and be able to access relevant information so as to apply it meaningfully to solve day-to-day situations. Mathematics learning helps to acquire all these if its teaching-learning relates it to the child's immediate environment and experiences. A careful look reveals that there such close resemblance of the processes of learning EVS and mathematics that one may wonder as to why these two are separate curricular areas. Essentially, it is the content of mathematics which differentiates it from EVS where issues and concerns of environment are central to the curricular area.

Keeping in view, the Early Childhood Education up to the age of eight years, Classes I and II can be considered an extension of the Pre School. Therefore, the concept of pre-numbers has been emphasised a lot in mathematics in these grades. In addition to this children learn about patterns, numbers, measurement, money and data handling.

Teaching EVS through mathematics using an integrated approach will require amalgamation of the concerns of EVS with mathematical concepts. Some examples given below will throw some light on it.

If we talk about *pre-numbers,* one way of doing it would be giving children an idea of small/big, long/short, near/far etc., through pictures or real objects existing in their surroundings. But, if we take it up through or a poem on family members and discuss with them about their families using questions such as:

• How many members are their in your family?
• Who is the tallest member of your family?
• Whose hands and legs are bigger than yours?
• Is your family a big family or a small family?

This will help them compare their physical features such as height, size of other body parts, age etc., and appreciate the differences and similarities in traits of family members thus helping them understand pre-numbers in the context of their family. They can even be asked to observe real objects in their surrounding by taking them out for a visit, and collect some

items of their interest in a bag. They can be encouraged to sit and discuss their find, e.g.

• What did they collect?
• Which out of these is (short/shorter/shortest, big/bigger/biggest)?

They may be asked to group these things based on their size, shape, colour, etc.

Games on things big/small, long/short or inside/outside can be organised. In place of family, one can take up the animals which exist inside/outside their homes and children can compared or group them into big/small, thereby introducing pre-numbers in mathematics to the children along with EVS. During the process they get exposure to the processes of observation, comparison, logical thinking, grouping, discussion, etc.

Similarly, under *Patterns* in Mathematics, generally, patterns in numbers are talked about in textbooks but the learning would be enriched and enhanced if children may be familiarised with the patterns existing in the nature around them. For example, patterns existing in the arrangement of leaves in a twig, lines (veins) in different leaves , animals (squirrel, tiger, leopard, etc.) and birds (quills of peacock), fruits (horizontal, vertical sections of apple, orange, etc.), vegetables (horizontal sections of ladyfinger, onion, cucumber, etc.), flowers, wings of butterfly, etc., are some examples of their nature whereas patterns existing in their physical environment example windows, doors, floor, fabrics, etc., are human made. A variety of styles, e.g., riddles on various animals/birds and plants can make the learning quite interesting and joyful. Children can also organise *Rangoli* decoration, *salad* decoration or handkerchief printing while learning patterns. They can also try some dance sequences (*mudras*), drill exercise or a yogic exercise following some pattern. The abstract form of patterns in numbers can be introduced later. Children not only learn the concept of pattern in a joyful manner but they can also relate it to their surroundings. Needless to mention that such an exposure will help them imbibe a variety of skills such as observation, identification, improvisation, discussion besides nurturing art and aesthetics among them.

For concepts such as *time* and *calendar,* different activities of sequencing related to daily routine of self, important events (example festivals) during a month or a year, different seasons and activities related to the school calendar can be taken up. Children can also be asked to enlist/draw and colour different activities that occur or they perform during day or night. Children can be divided into groups named from Monday to Sunday. Different responsibilities of keeping the school or classroom tidy, switching of fans/lights when not in use, closing the water taps, shutting the windows after school etc., can be assigned to them. Children not only learn the days of a week but also

develop sensitivity towards care of public property. Further, they can be sensitised to work on the issues of wastage and conservation of water and electricity while learning to work in a group. It is important that each of these activities needs to be followed by a meaningful discussion.

We know that environment constitutes the content of different curricular areas including languages. Different chapters developed in any textbook relate to various things from environment. It is common belief that language is only an effective tool for communication and listening, speaking, reading, writing as its important skills. It is equally important at the same time, to understand that minute observation, classification, expression, discussion, questioning, estimation, thinking, memorisation, creativity and problem-solving are some of the skills which are crucial to language learning as well and are nurtured through it, which otherwise are considered to be the dominance other curricular areas especially mathematics and EVS. Language learning includes almost all processes and skills that are related to other disciplines. It is seen that in our day-to-day life, language is a pre-requisite to peep in, inquire and understand other subjects. Thus, development of knowledge, skills and language is needed simultaneously.

In languages, taking up an activity of picture reading requires a picture/illustration of appropriate size and rich in content to let the children minutely observe, analyse and reflect on it. For example, if we select the picture of the scene of a park (where some children are on swings, others playing different games, some people walking, exercising, chatting etc.), then, raising relevant questions will help to expose children to different skills such as observe, discuss, explain, estimate, analyse, express etc., along with sensitising towards environment .

• What all do you see in this park? (Observation)
• What are children doing in it? (Observation)
• Does it seem to be a morning or an evening scene? Why? (Observation, comparison and critical thing)
• Why are some of the fallen leaves yellow, some are brown and other are green in color? (Critical thinking)
• Have you ever plucked any flowers or leaves of plants? Why did you do so?
• It is right to pluck the flowers or leaves? (sensitivity for environment)
• Why do you think one child is sitting all alone and not playing with other children? (Guessing expressing)
• Do you think all these children go to school? Why? (Guessing, thinking logically).
• What do you think is missing in the picture? Draw it (Analyses, expression).

Similar questions can be framed using the pictures of bus stand, market, school etc. There can be a variety of questions and even children

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can be asked to frame questions, thus, using integrated approach to EVS learning without enhancing the load of curriculum.

It can be easily done through other methods such as poem recitation and story narration as well. Children can be encouraged to make their own poems and stories. For this the teacher can provide some clue words. The whole class can be made to sit in a circle with the teacher and she can initiate a story, for example, Seema's mother purchased her a new water bottle and a pencil box. During the break she went out to wash her hands before taking meals. When she came back she found the pencil box missing. Then, each child may be asked to carry the story forward by adding one line. The students may be encouraged to complete the story with the help of children such that each child adds one line to the story. If any child is unable to do so, some clues may be provided to her.

For example,
• What do you think Seema would do?
• Will she ask her mother to purchase a new pencil box for her or not? Why?
• Will she ask her friend or complain to the teacher?

Children may be asked to prepare word webs related to certain themes such as water, classroom etc. Children can speak a number of words related to these (for example, rain, fish, sea tap, bath etc., could be some words). They may then be encouraged to write a poem of four lines using these words and efforts of each child need to be appreciated even if a poem has non-rhyming words. Children can also be encouraged to prepare a portfolio in which they would include information related to self/their family (the teacher can conduct this activity throughout the year). Each child can express his/her likes or dislikes about different things, for example, family members, food, clothes etc. They can also be encouraged to draw or decorate these with pictures. This could be an important source for the teacher to know about her students.

Different local and regional games (e.g. *Hopscotch, Water-Ice, Treasure hunt, Kho-kho, Posham pa, Chinese whisper* etc.) which children play, need to be given a due place in the school curriculum because children not only enjoy these games but also acquire various skills of language and EVS through these that include nurturing their psychomotor skills, the spirit of working, singing and playing together through these activities.

Thus, it is imperative and quite easy to transact languages and mathematics by not limiting the teaching-learning to only textbook and classroom but going beyond these and help children connect and learn through their experiences, daily lives and surroundings. Care may be taken about the level needs, style and especially the contexts of children in early grades while planning and designing any activity to accomplish

the objectives of each curricular area along with integrating EVS skills and concerns as per the vision of *NCF–2005* and Right to Education, 2009.

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9

Early Childhood Education and Spelling Age

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Key Words: *Spelling difficulties, Reading difficulties, Spelling performance, Dyslexia, Learning disability.*

Abstract

Spelling is a challenging subject for many people. While some struggle with it life time, others do not take spelling seriously. While rote learning can help some children, most children soon forget how to spell difficult words once their school exams are over. If the children are not able to deal with the level of spellings at a particular age, their spelling age is considered to be lower as compared to the chronological age. Interest in learning new spellings start at young age, sometimes during early childhood, which prepares the children for basic formal school skills. If the children do not receive ECE their chances of coping with the further and formal education diminish. Keeping this hypothesis in mind that spelling age must be benefitted by ECE, the study aims to observe the difference between the students who received ECE as compared to those who did not. The present research focused on the study of the spelling performance of the students in Classes IV – VI who received ECE as compared to those who did not.

The research aimed to check out spelling performance through "Schonell Spelling Test" by Schonell and Goodacer (1971) which assesses the spelling age from 6 to 15+ years of age. The sample consisted of 60 students (30 boys and 30 girls) taken from the private schools of an urban slum, where 50% of the boys and girls came from the ECE background and the rest 50% of the boys and girls came from the non-ECE background. The data was collected through

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convenient sampling, tabulated and t-test was applied to study the significant difference. The result revealed that the spelling performance of students in both the groups were different, the spelling age of children who attended early schooling was better as compared to those who did not. Also, girls had poor spelling age if they did not attend the early education as compared to boys because their education is not given attention at home in respect to the social norms.

Introduction

Spelling is an important subject because it applies to many areas of life. Understanding the roots and origins of words is an important part of proper spelling. Rather than memorising unrelated words, children need to know the roots and sources of those words, which will give them the power to spell and to use other words with the same roots. The ability to spell gives a child the power to put their thoughts onto paper, and express themselves fully.

As Gentry (2007) shows, word-sorting is another extremely useful activity. Children can group words based on the way the words begin and end, or by similar letter clusters or vowels. Once children understand how to sort words, they can group them into columns and practice speed-sorting to help them automatically make the right connections.

There are two different types of spelling difficulties. The first type is a difficulty spelling phonetically regular words – words that children "sound out" – such as: fat, mat, bat, cat, rat, sat, hat or more complex words that include vowel combinations such as: stork, wound, repeat, claim, weather, hour (Friend, 2008).

If children have problems with phonetics, they will also have problems spelling in other languages (Treiman,1993). The second type of spelling difficulty is a difficulty spelling words that children have to recognise by sight because they are hard to "sound out" - such as: wear, quay, island, Wednesday, know, yacht. Some people have both difficulties.

Most people with spelling difficulties try hard to learn their spelling words but then forget them almost instantly. Most people with spelling difficulties cover the fact that they can't spell by spelling the same word in several different ways on the same page. Most people with a spelling difficulty develop poor, or very small, handwriting to disguise the fact their spelling is not good or that they have spelled the same word in several ways on the same page. As spellers, children fall into three main categories:

- *Children who become competent readers and speller.* These children are able to integrate many different kinds of knowledge in their spelling as they do in their reading, and use sound, visual, meaning and structural knowledge to spell words. They

make links between their reading and spelling.

- ***Children who are good readers but poor spellers***. These children draw on more limited visual information in reading; rely more heavily on phonological (early) strategies in spelling; don't make links between strategies for reading and those for spelling.
- ***Children who are poor readers and poor spellers***. These children have limited information to draw on from reading; they have few effective strategies in spelling – either phonological or visual (Yang Shuang, Ning Ning, liu Xiang-Ping, 2009).

In all cases however, children exhibit different strength and weakness and must therefore be considered as individuals. Children who experience difficulties need targeted support, often over several years of the primary school *(O'Sullivan and Thomas, 2007).*

The research aimed to check out spelling performance through "Schonell Spelling Test" by Schonell and Goodacer (1971) which assesses the spelling age from 6 to 15+ years of age. The sample consisted of 60 students (30 boys and 30 girls) taken from the private schools of an urban slum, where 50% of the boys and girls came from the ECE background and the rest 50% of the boys and girls came from the non-ECE background.

Objectives

1. To assess the spelling age of the students (grade 4-6) who received early childhood education as compared to those who did not.
2. To study the gender differences in spelling age of students in Grade 4-6.

Hypothesis

The hypotheses are as follows:

$H_0 1$ The spelling age of students who receive early childhood education would be better as compared to those who did not.

$H_0 2.$ The spelling age of boys would be better as compared to the girls.

$H_0 3.$ The spelling age of the girls who receive early childhood education would be better as compared to the girls who did not.

$H_0 4.$ The spelling age of the boys who receive early childhood education would be better as compared to the boys who did not.

Sample Size

The total sample consisted of 30 boys and 30 girls from the private schools of an urban slum, where 15 boys and girls came from the ECE background and the rest 15 boys and girls came from the non-ECE background.

Locale of Study

Sample was collected from the private school of an urban slum of Jaipur city.

Tools

Schonell Spelling Test by Schonell and Goodacer (1971) was used to test the spelling age of children. The tool assesses the spelling age from 6 to 15+ years of age. Schonel's spelling test which was written in Australia and first published in Britain 1950 and has been republished several times since. The tool is being rigorously used for diagnostic purpose.

Statistical analysis

The data was tabulated and t-test was applied to study the significant difference.

Results

The results were compiled in accords to the framed hypothesis:

$H_0 1$ The spelling age of students who receive early childhood education would be better as compared to those who did not.

Table 1 shows that there is a significant difference between the spelling scores of students at 5% level of significance. The students who received ECE performed much better in spelling test as compared to the students who did not receive ECE, most probably because of better and regular educational facilities as well as good phonetic practice given in ECE curriculum.

$H_0 2.$ The spelling age of boys would be better as compared to the girls.

Table 2 shows no gender difference in the spelling age of children at 5% level of significance. They are equals to each other in spelling performance as school provides equal opportunities and facilities to children, whether girl or boy.

$H_0 3.$ The spelling age of the girls who receive early childhood education would be better as compared to the girls who did not.

$H_0 4.$ The spelling age of the boys who receive early childhood education would be better as compared to the boys who did not.

Table 1: Descriptive Statistics and t-value of Spelling Scores of Students

	Mean	N	SD	t	P
Students who did not receive ECE	7.6968	31	.78761	−3.334	.002
Students who received ECE	8.4419	31	.70558		

Table 2: Descriptive Statistics and t-value of Spelling Scores of Boys and Girls

	Mean	N	SD	t	P
Boys	7.9781	32	.74563	1.932	.063
Girls	7.6188	32	.69209		

Table 3: Descriptive Statistics and t-value of Spelling Scores of Boys and Girls

	Mean	N	SD	t	P
Boys who did not receive ECE	7.8500	16	.90037	−.872	.397
Boys who received ECE	8.1063	16	.55072		
Girls who received ECE	7.6187	16	.70353	−3.771	.002
Girls who did not received ECE	8.7563	16	.68893		

Table 3 shows that there is no significant difference in the spelling age of boys from the two groups at 5%. They are equally given get good educational opportunity and facility, both at home and school.

On the other hand, it was observed that the strength of girls who did not receive ECE as compared to those who received ECE was much lower in spelling age. Although the government provides equal opportunities to girls, the implementation seems to be rather difficult. This might be because they have more responsibilities at home and are given lesser educational motivation from home to attend the school and study.

Conclusion

The children do not go to the schools due to ignorance about importance of ECE in early childhood years and lack of proper encouragement by the family. They do not understand that ECE fosters children to develop their skills and helps in better overall development. The spelling age of students who receive ECE differ from those who did not as ECE is observed to improve the spelling age in later stages of development. The boys who receive ECE or not, did not have difference in this aspect, while the girls spelling age was observed to be poor if they did not receive ECE. The society does not understand the importance of ECE and refrain girls from seeking their basic educational rights. Hence, it is still the need of the hour to make society understand that education benefits, both the sexes and no gender discrimination should be made.

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10

Gender Issues in School and Classroom Practice: a Case Study of Pondicherry

Amruthraj R.M*

Abstract

Increasing concern has been expressed about the role of the formal education system in reproducing gender differences and inequalities. Research studies indicate that issues that impact girls' education include discrimination against girls in classrooms, interaction between boys and girls, effect of gender on education and other submerged hidden curriculum. The present paper focuses on gender issues prevailing in the school settings in Pondicherry (Puducherry). The analysis shows how classroom practices, teacher attitudes and classroom structure disaggregate boys and girls. It also put forward few suggestions for a gender sensitive education.

Research studies indicate that issues that impact girls' education include discrimination against girls in classrooms, interaction between boys and girls, effect of gender on education and other submerged hidden curriculum (Sabbah 2005:15).

Researchers (Longwe, 1998, Kimmel, 2000, Sadkar, 1994, etc.) suggest that schools reflect practices in societies, gender bias and problems are socially and culturally constructed. Cultural and societal practices affect children in schools, especially the way they look at their peers of the opposite sex. Cultural beliefs and societal structures play major roles in how children are raised and how they differentiate between the powers given to men versus those allocated to women.

Increasing concern has been expressed about the role of the formal education system in reproducing gender differences and inequalities particularly since the early 1970s. The

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present paper focuses on gender issues prevailing in the school settings in Pondicherry (Puducherry).

The Union Territory of Pondicherry

The Union Territory of Pondicherry (Puducherry) comprises the former French establishment Pondicherry, Karaikal, Mahe and Yanam, which lie scattered in South India with a total area of 479 sq km. Pondicherry, the capital of the territory, was once the original headquarters of the French in India. It was under the French rule for 138 years and merged with the Indian Union on 1 November 1954. It is bounded on the east by the Bay of Bengal and on the three sides by Tamil Nadu. About 150 kms south of Pondicherry on the East Coast lies Karaikal. Mahe is situated on the Malabar coast on the Western Ghats surrounded by Kerala.

Though trivial in terms of size, Pondicherry has proved its educational potential in the primary education sector. As in the case of 2007-08 in 2008-09 also the Union Territory of Pondicherry has retained its top rank in Educational Development Index (EDI) for primary and upper primary schools in the country (NUEPA, 2010).

The qualitative data on gender bias in institutional practices like gender segregation in classroom and playground, gender bias in teacher-student interactions, gender bias in student-student interactions were collected using focus group discussions with students and teachers, observations inside and outside the classroom and interview with head teachers, teachers and students from six schools purposively selected for the study. The names of the schools are not mentioned on request.

Among the six schools selected, two were private schools and four were government schools. School A and B were urban private schools. School C was an urban government school. School D was a rural government school in a predominantly *dalit* (lower caste) area. School E was a rural Smart School, a government school equipped with modern infrastructure facilities including computer and internet facilities. School F was a rural government school.

Gender Bias in Institutional Practices

Gender bias is insidious because it can be almost invisible. But studies point out that the classroom setting reproduces gender inequality. From elementary school through higher education, girl students receive less active instruction, both in the quantity and in the quality of teacher time and attention (Kimmel, 2000). Teachers often discriminate against girls, unaware that they are doing so. Discrimination often arises out of ignorance and deeply ingrained way of thinking related to commonsense assumptions. Though it is difficult to identify the overt and covert forms of gender discrimination, the researcher tried to give extra care and effort to note

invisible and subtle forms of bias in institutional practices. A genuine attempt was made in the present study to analyse the gender bias in class-room practices, particularly teacher-student interactions and student-student interactions.

Gender Segregation in Schools

"During the early nineteenth century, many cities began establishing separate high schools for girls. Most communities built one high school, but designated separate entrances for the sexes. The classes were on separate floors in single-sex areas where girls were taught by women and boys by men". Wrote Sherry Lyn Owens et al. in "Are girls victims of gender bias in our nation's schools", while examining the historical struggle fought by women to gain participation in America's schools. Matters have not changed much in India even in the 21st century. In all the six schools selected for the study in Pondicherry, there were visible forms of gender segregation inside the classroom and school. In five of the schools boys sat on one side of the classroom and girls sat on the other side. In the remaining one school girls sit in the front row and boys in the back row. Similarly, during school assembly girls and boys are lined up separately. Students remained in the same-sex groups during the breaks and before and after school. Every time students are seated or lined up by gender, teachers are affirming that girls and boys should be treated differently (Chapman, 2003). Though not covered

under the present study, the researcher found that there are schools in Pondicherry where separate staircases were assigned for boys and girls and schools where boys and girls are punished and fined for 'speaking' to each other. Sex segregation both during play and in the classroom polarises the sexes and contributes to female invisibility. Well meaning teachers often think they protect girls by this separation when, in fact, they encourage stereotypical pattern of passivity in girls and aggression in boys (Wellesely College Center for Research on Women 1992; Sadkar and Sadkar, 1984, 1994). Nonetheless, by separating girls from boys we have to question how they are going to deal with each other when they leave the school. The solution may be to change teaching methodologies, encouraging better involvement of both girls and boys, rather than segregating them. (Teixeira, 2008).

Healthy inter-gender socialisation based on mutual understanding are a crucial aspect in gender equality. Teachers and administrators in schools should ensure that girls and boys are comfortable in each other's company.

Gender Bias in School Practices

Classroom interaction between teachers and students put males in the spot light, and relegate females to the sidelines or to invisibility (Sadkar, 1994). In 1992, the American Association of University Women (AAUW) found the females receive less

attention from teachers than males, and this attention is often negative or critical, resulting increased self-doubt about their abilities. Dale Spender (1982) believes that sexism is a bias that is practically impossible to eliminate because it is the foundation of education in our male-dominated society. Alice Christie states that even in a classroom firmly grounded in feminist pedagogy, gender bias was almost impossible to eliminate.

The researcher along with two fellow scholars spent a minimum of three hours for observation in each school where the study was conducted. Along with this, the researcher had conducted purposeful visits and informal interactions with teachers and students in schools which are not included in the study, which contributed further in strengthening the quality of data.

The researcher observed whether boys and girls talk to one another during and after the class hours and also who dominates the physical space of classroom, conversations and discussions during class time and beyond the class hours. Verbal and non-verbal behaviour of the teachers were studied for example whom does the teacher call out more in the class and whether he/she moves around, makes contacts by proximity (to boys or girls) more in the classroom were also observed.

Studies reveal that in the early years of their education, girls are equal to or ahead of their male counterparts on standardised and psychological assessments. However upon graduation from high school, girls have often fallen behind their male counterparts. *In Failing at Fairness: How Our Schools Cheat Girls*, which has become a classic work in the field of gender and education, Sadkar and Sadkar (1994) stated that the self-esteem of elementary girls remained high even though they received less time, less help and fewer challenges from the teachers. However, the constant reinforcement for passivity results in a decline in their independence and self-esteem. Sadkar and Sadkar concluded, as victims of benign neglect, girls are penalised for doing what they should and lose ground as they go through school (Owens, 2003).

Research has shown that in many developing countries, the onset of puberty results in significant changes in school participation for girls (Bayene, 1989, Herz, 1991). Menarche, which is the onset of menstruation and the most dramatic sign of puberty in girls, affects socialisation by girls with family and community and may have a significant impact on their education (Chung, et. al. 2001). Once a girl has attained puberty she has immediately 'acquired' the capacity to reproduce. So her entire life changes – abruptly, her mobility restricted, she is scolded for jumping or running, she becomes periodically 'impure' and 'untouchable' and many other sex role stereotypes snatch away the few privileges she enjoyed as a child. Since the students included in the study are

of pre-puberty age group, it can be concluded that there is no conscious effort to 'protect', 'domesticate', or 'moral police' girls by their parents or teachers.

During interview most of the teachers denied instances of gender discrimination in the classroom. Most of them stated that they did not differentiate between boys and girls in the classroom. They treated both sexes equally and saw them all as students. This approach minimised the researcher's chances for further enquiry. Teachers need to be made aware of their gender-biased tendencies, and the biased messages they unintentionally impart to students every day. Unless teachers are made aware of the gender-role socialisation and of the methods and resources necessary to eliminate gender-bias in their classrooms, girls will continue to receive an inequitable education.

In the course of the observation the researcher found that both boys and girls talk equally loudly during class time in all the schools selected. Since the classroom is segregated, conversations and interactions often happened between same sex. Inter-gender interactions were minimal both during class time and after class hours. Change in space made no difference, same was inside the class-room and outside the classroom. Even the sharing for pencil and erasers occurred in the same sex group. In a classroom, when a boy didn't have a pencil, the teacher asked other boys to lend one, and when none of them had an extra to lend the teacher enquired the girls and got one for him. In another classroom when a boy was in need of an eraser, he asked other boys around him and when he was not able to get one, he asked the girl sitting in the other row, who had kept her eraser in the desk. These instances show that getting the help of the other sex is the 'last resort' and not the norm.

It is interesting to note that boys dominated the physical space of classroom and playground. As soon as the bell rang all the boys rushed out to the door and ran to the playground and started playing with a rubber ball. The play group was large. Many girls never even moved from the bench when the bell rang. Some of them just sat in the classroom. Some went out in small groups and played in the verandah with stones or simply ran near the classroom, not to the playground. It was also found during play many boys fell down, but resumed playing as if nothing had happened. It is very much visible that boys are active and aggressive during play time, reflecting socialisation patterns that demands aggressiveness from boys. On the other hand girls are socialised towards a feminine ideal. Girls are praised for being neat, quiet and calm, whereas boys are encouraged to be active. The behaviour of boys and girls in the school show the different socialisation models in their upbringing. Moreover, schools accept and also validate ideas about 'boys nature' (masculine identity) and 'girls nature' (feminine

identity), 'positioning' boys and girls in different social spaces. Nevertheless, the acceptance of male indiscipline as 'boy nature' and 'good behaviour' as 'girls nature' has been responsible for unequal schooling, social conditions and opportunities for both sexes, limiting their full achievements during their lives (Teixeira, 2008:388).

Equality in teaching challenges educators to treat all students equally and to recognise and accommodate different learning styles. Consequently, today's teachers must be sensitised about the damage gender inequity can cause not only to students but also to society as a whole. Qualified educators should be able to recognise and correct the patterns of gender inequity. Schools must strive to assist female, as well as male students by providing a broad and thorough education that is gender sensitive. While educators cannot magically erase all gender inequalities or resolve all of the problems created as traditional gender roles disintegrate, they can achieve significant results by making a conscious and concerted effort to not only avoid gender inequities in the classroom, but also by actively encouraging the reverse of such inequities (Davidson, 2002).

While discussing about institutional practices, it have to be emphasised that Pondicherry have many positive factors and indicators that are friendly towards girls' education such as presence of more women teachers, separate toilet facilities for girls, boundary walls for schools and travelling facilities. In Pondicherry 64.78 per cent of teachers are women. Pondicherry is one among the few states where the percentages of women teachers are above 50 per cent of the total strength of teachers. 88.58 per cent schools of Pondicherry have separate toilet facilities for girls, while the national average is 53.60. Perimeter walls have been found to increase girls' sense of safety and security. 84.25 per cent of schools in Pondicherry have boundary walls while the national average is 51.02. (Source: DISE, 2008-09 Flash Statistics NUEPA, 2010.). Transporting girls to school and back safely, especially where schools are far away from their homes, is a critical policy measure that has received scant attention. "Students Special Buses" of Pondicherry is one among the best practices in this regard. These statistics are encouraging, since the stage is already set for gender sensitive and qualified educators to recognise and correct the patterns of gender inequality through conscious efforts.

These are few suggestions that may be considered for a gender sensitive education.

Gender Sensitisation Training for Teachers

Emphasis must be placed on sensitising people in the education system to the importance of gender issues and on the fact that it is a long and painful process requiring not only learning of new perspectives but also the unlearning of old ones. Teachers

and administrators need to undergo gender sensitive courses in classroom behaviour and interaction with students. Teachers should empower students with critical thinking by considering their attitudes and school textbooks from multiple perspectives and alternative dimensions. For this purpose both female and male teachers have to be trained on these lines.

Eliminating Gender Bias from Textbook and Learning Materials

Studies reveal that reduction in the intensity of gender bias in textbooks would be considered as a useful indicator of gender equity in society, and in order to attain that, textbooks should present positive role models for both men and women which present men and women participating in a variety of roles and activities, including women in leadership and other positive roles with which they are not traditionally identified. Textbooks should portray fair sharing of domestic work among family members regardless of sex. Textbooks should depict realistic portrayal of life where women and men share the same responsibilities. Non-sexist textbook should depict professional and technical equity among men and women. Along with this it is imperative that while preparing gender sensitive material for school textbooks, inputs from gender experts and those who have struggled to bring women's voices and worldview into the academic mainstream to be included.

Impact Study of Gender Bias in Students

It is time to move beyond studies that describe gender bias in school textbooks and gender stereotypical attitude of students and teachers to research that evaluates the level and type of impact of such bias on girls and boys. It is also time to institutionalise the problem by addressing it by paid educators and women's studies professionals rather than activist volunteers and research scholars.

Promoting Common Sports and Physical Education in Schools for both Boys and Girls

Physical education, sports and games have a major role in developing not only sound health but also create a healthy spirit of competition and cooperation and qualities of endurance, hard work and sporting spirit to win and lose with grace. Participation in games and other recreational activities as equals would go a long way in developing a positive self-image among girls. It may be pointed out that there are not any remarkable differences in physical abilities or competencies in children of both sexes. As far as possible, boys and girls should be made to participate in all games and physical exercises together.

A Common Curriculum including Gender, Sexuality, Human Rights and Life Skills Education

A common curriculum for topics that directly affect students' life including

gender, sexuality, human rights, and life skills education which uses participatory teaching approaches should be included from the primary school level itself. Such a curriculum which is region specific and cultural specific should empower both girls and boys with unique tools for making informed decisions across several areas of living such as career and vocational choices, marriage, health, nutrition safety and leadership.

Day Care Centre Attached to Schools
Day care community centres for children under six can relieve girls from looking after their siblings, thereby allowing them to go to school. Along with this, all children, girls and boys in the school can be given training in child care in the centre – so that the stereotyping that children must be cared for only by the females in the family, would go.

Providing Safe Transport Facilities for Students
Lack of safe transport facilities to school continues to be a deciding factor for girls' education. Transporting girls to school and back safely, especially where schools are far away from their homes, is a critical policy measure that has received scant attention. "Students Special Buses" of Pondicherry is one among the best practices in this regard. Smaller vehicles should also be arranged for children who live in interior residential areas where bus services are not available. Measures also should be taken to prevent bullying and sexual harassment in school buses.

Training in Self Defence for Girls
Boys and girls are often susceptible to psychological and physical violence in different ways and adolescents in particular can find themselves especially vulnerable to violations of their safety. Along with making sure that children are secure inside and outside schools, self defence taught from an early stage for all children particularly girls will build confidence in them.

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11

The Code of Professional Ethics for Teachers *

The All India Primary Teachers' Federation has developed The Code of Professional Ethics for Teachers.

The Code of Professional Ethics for Teachers

A. Teacher in Relation to Students
The teacher shall:
1. Respect the rights of all children to benefit from the provisions identified in the UN Convention of the Rights of the Child (1989) particularly those rights that apply to education;
2. Always strive to foster the intellectual, social and moral growth of his/ her students;
3. Treat all students with love and affection and be just and impartial to all irrespective of caste, creed, sex, status, religion, language and the place of birth;
4. Not divulge information of confidential nature pertaining to a student except to the parents of the students or to the one legitimately entitled to it;
5. Not exploit the privileged relationship between the teacher and his/ her students;
6. Respect moral and religious beliefs of his/ her students;
7. Take all possible steps to safeguard his/her students from sexual abuse or getting inflicted with HIV/ AIDS; and
8. Set a standard of dress and behaviour worthy of example for the students.

B. Teacher in Relation to Parents/ Guardians
The teacher shall:
1. Recognise the rights of parents to information about progress of their child;
2. Establish and maintain cordial relations with parents and seek their cooperation in improving

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* *Source:* All India Primary Teachers' Federation, 24th Biennial Conference.

learning outcomes of their ward and in improving functioning of the school; and

3. Refrain from doing anything which may undermine students' confidence in their parents or guardian.

C. Teacher in Relation to the Society and the Nation

The teacher shall:

1. Strive to understand the social problems and take part in activities which would be conducive to meet the challenges posed by the problems;
2. Refrain from taking part in activities having potential to spread feeling of hatred or enemity among different communities; religious and linguistic groups;
3. Be loyal to school, community, state and the nation;
4. Inculcate desirable human values among his/her students;
5. Foster national integration; and
6. Exhort his/her students to discharge their Fundamental Duties as enshrined in the Constitution.

D. Teacher in Relation to Profession and Colleagues

The teacher shall:

1. Win public trust and confidence by providing quality education to all the students;
2. Update his/her knowledge of the subject(s) and fine-tune his/her teaching competence on a continuing basis;

3. Develop a sense of professionalism;
4. Always transact the curriculum effectively after making thorough preparation for the lessons to be taught;
5. Avoid making derogatory statements about challenges especially in the presence of pupils, other teachers, officials or parents;
6. Cooperate with the head of the institution and colleagues in and outside the institution in both curricular and co-curricular activities;
7. Promote collegiality among colleagues by respecting their professional standing and opinions;
8. Safeguard and promote the interests and well being of colleagues;
9. Have favourable attitude towards the teaching profession;
10. Treat other members of the profession in the same manner as he/she himself/herself wishes to be treated; and
11. Refrain from lodging unsubstantiated allegations against his/ her colleagues.

E. Teacher in Relation to Management

The teacher shall:

1. Be knowledge about his/her legal and administrative rights and his/her responsibilities towards the management;
2. Carry out instructions from management personnel and has also the right to question instructions through clearly determined procedure and channel; and

3. Develop mutual respect and trust through his/her professional activities and outputs.

F. Teacher in Relation to Teacher Association

The teacher shall:

1. Become a member of the teacher association at the state/national/international level. He/she shall treat this as his/her professional responsibility;

2. Participate in the activities organised by the teacher association for his/her profession growth and for augmenting the strength of the association and its unity and solidarity;

3. Be constructive in his/her criticism of the activities of the association; and

4. Promote change within the teacher association for its development.

My Page

1. In the July-October, 2012 issue of *The Primary Teacher*, a teacher from SDMC, Pratibha Vidyalaya asked if it is all right to have one section with English as medium of instructions at primary stage.

   Dr Kirti Kapur, Associate Professor, Department of Education in Languages (DEL), NCERT replies:

   * Primary education is essentially language education. The medium of instruction at the level of primary school must be the mothertongue(s) of learners, building upon the rich experiential, linguistic, and cognitive resources that they bring to schools.
   * Where qualified teachers and adequate infrastructural facilities are available, English may be introduced from the primary level, but for the first couple of years it should focus largely on oral-aural skills, simple lexical items, or some day-to-day conversation.
   * Use of the language of children should not be forbidden in the English class, and the teaching should as far as possible be located in a text that would make sense to the child. If trained teachers are not available, English should be introduced at the post-primary stage and its quantum increased in such a way the learners should soon reach the levels of their classmates who started learning English early.
   * Every possible effort should be made to build bridges between the languages of home, peer group, and neighbourhood, on the one hand, and the languages of the school, on the other. Even in English-medium schools, mothertongues should be developed to function as media and to allow learners to switch from one medium to the other without a change of school.

2. **Marks as eligibility criteria for admission/scholarship tests**

   The Continuous and Comprehensive Evaluation (CCE) suggests that there should be no terminal or summative evaluation. CCE discourages awarding marks or grades and classifying students on the basis of marks. The CCE schemes developed by NCERT and also SCERT, Uttar Pradesh, do not recommend awarding marks or adding these to arrive at a 'terminal' score.

However, the eligibility criteria for appearing in admission test of Navodaya Vidyalaya is 60 per cent marks, at the end of Class V. Schools are required to certify that a student has achieved 60 per cent or more marks. How can schools certify percentage in case of CCE? Also the eligibility to apply for scholarship tests such as National Talent Search Examination has eligibility criteria in terms of marks.

There is need for dialogue between agencies conducting these tests and NCERT and SCERTs to reach a common understanding. Guidelines may be issued to schools and teachers.

— A Teacher
Government Primary school
Ghaziabad, U.P.

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 grassroot 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 even illustrations prepared by you, if you so desire, 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.

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विद्या S मृतमश्नुते

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NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING
Sri Aurobindo Marg, New Delhi – 110 016
(Division of Educational Research)

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Applications are invited for the appointment of NCERT Senior Research Associates in the field of school education and related disciplines. For conditions of eligibility, see 'Announcements' on NCERT website www.ncert.nic.in. The completed applications may be submitted to 'The Head, DER, NCERT, New Delhi - 110 016'. The applications would be considered twice a year (31 May and 30 November will be cut-off dates).

विद्या S मृतमश्नुते

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एन.सी.ई.आर.टी. सीनियर रिसर्च एसोसिएटशिप (पूल ऑफिसर) स्कीम

विद्यालय शिक्षा एवं संबंधित विषयों में एन.सी.ई.आर.टी. सीनियर रिसर्च एसोसिएट के पद के लिए भर्ती हेतु आवेदन आमंत्रित किये जाते हैं। पात्रता की योग्यता संबंधित जानकारी हेतु एन.सी.ई.आर.टी. की वेबसाईट www.ncert.nic.in पर देखें। पूर्ण आवेदन अध्यक्ष, शैक्षिक अनुसंधान प्रभाग, एन.सी.ई.आर.टी., नई दिल्ली - 110 016 को भेजे जा सकते हैं। आवेदनों पर वर्ष में दो बार विचार किया जाएगा (31 मई तथा 30 नवंबर अंतिम तिथियाँ होंगी)।

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