ISSN : 0976-1160

EDUSEARCH

(Bi-annual & Bi-lingual)

PEER GROUP REVIEWED

JOURNAL OF EDUCATIONAL RESEARCH

VOLUME - 7 NUMBER - 1 APRIL - 2016

RESEARCHERS ORGANIZATION BILASPUR CHHATTISGARH
(Regd.No. 13554/11)
website : www.researchorgbsp.org

EDUSEARCH

ISSN : 0976 - 1160

(Bi-annual & Bi-lingual)

PEER GROUP REVIEWED
JOURNAL OF EDUCATIONAL RESEARCH

Volume- 7 **Number - 1** **April 2016**

RESEARCHERS ORGANIZATION
BILASPUR (C.G.)
(Regd. No. 13554/11)

website-www.researchorgbsp.org
Flat - H/2, Vaishali Nagar, Ward-13, Bilaspur. (C.G.) Pin 495001

EDUSEARCH REGIONAL EXPERTS/COORDINATORS

ANDHRA PRADESH : ***Dr. Avvaru Ramakrishna*** : Professor, IASE, Osmania University Hyderabad. A.P. Mob. 9849036025
e-mail : avvaruramakrishna@gmail.com

ASSAM : ***Dr. Geetika Bagchi*** :Head & Associate Professor, Asssam University, Dorgakona, Silchar. Assam. 788011 Mob. 9435176394
e-mail : geetikabagchi31@gmail.com

DELHI : ***Dr. B. K. Panda*** Associate Prof, NUEPA, NCERT Campus, New Delhi. Mob. 9810698297. e-mail : panda_bk@hotmail.com

GUJARAT : ***Dr. Satish P. Pathak*** : Professor, CASE, M.S. University, Baroda. Vadodara. Gujarat Mob. 9925270529
e-mail : pathakspp_msu@yahoo.co.in

HARYANA : ***Dr. Raj Kumar Yadav:*** Principal, Rao Abhay Singh College of Education, Saharanwas, Rewari. Haryana Mob. 9896684901
e-mail : drrajkumaryadav@rediffmai.com

JAMMU-KASHMIR : ***Dr. Surinder Kumar Sharma*** : Ex. Research Officer, State Institute of Education, Jammu. (JK) Mob. 9419655969
e-mail surinder_ksharma@yahoo.com

JHARKHAND : ***Mrs. Vjiay Sharma:*** Ex. Reader, Loyola College of Education. TELCO, Jamshedpur. Mob. 9430381718. e-mail : vijshain@yahoo.com

KERALA : ***Dr. M.S. Geetha :*** Principal, Govt. College of Education Thalassery, Distt. Kunnur. Kerala Mob. 9496257892
e-mail : geethasomnath@yahoo.com

MADHYA PRADESH : ***Dr. Arun Prakash Pandey :*** Professor,Govt. College of Education, Ujjain. M.P. Mob. 9425380540
e-mail : amanilion@gmail.com

MAHARASHTRA : ***Dr. Suhas R. Patil :*** Principal, Govt. Secondary Training College, 3 Mahapalika Marg, Dhobi Talao, Mumbai-1 Mob. 982222857 email : srp_manu@yahoo.co.uk

RAJASTHAN : ***Dr. Vikas Modi:*** Asstt. Prof., Shah G. L Kabra Teachers' College, Near Geeta Bhawan, Jodhpur.Mob.9413742106
e-mail : vikasjodhpur1@gmail.com

Dr. Jitendra Kumar Lodha, Lect. Edu., Govt. P. G. College, Kalodera, DisttJaipur.Mo.9414401756,mail-drjitendrlodha@yahoo.com

UTTAR PRADESH : ***Dr. Alok Gadia***: Asstt. Prof. Faculty of Education BHU Kamachha, Varanasi.Mob. 9415992434
e-mail : alokleducator@gmail.com

UTTARAKHAND : ***Dr. Meena Manral:*** Asstt. Prof., Faculty of Education Kumaun University, Almora. Uttarakhand. Pin. 201005
Mob : 9412223924. e-mail : meena.manral@gmail.com

WEST BENGAL : ***Dr. Shyam Sunder Bairagya***: Reader in Education, University of Gour Banga, Distt. Malda. W.B. Mob. 9475271364.
e-mail : listenssb.ugb@gmail.com

ISSN : 0976 - 1160

EDUSEARCH

Volume - 7 Number - 1 April 2016

From Editor's Desk

Dear Friend,

Thanks to the NCTE, that has provided guidelines for the new B.Ed. and M.Ed. curriculum, which are set as landmark changes in the process of teacher preparation in India. All the universities have undergone the change process of their respective syllabuses in teacher education.

In terms of then Hon' Vice Chancellor of the Ahmedabad University, Prof.Narayan Bhai Desai, the present education system in India is doing two specific things in very artistic manner. The first is to develop a gap between the stronger and the weaker sections of the society and is in the continuous process of widening it. Secondly the teacher education courses were so designed as to develop the teachers in a manner that to become a vigilant soldiers in widening and maintaining the gaps between these sections. With this, we can notice schools ranging from centrally air conditioned to the roofless in the society.

As per the market and the size of the pocket of the parents facilities of education to their wards are being provided. Quality of the education is now a days concerned with the amount spent on this head. Hence the poor were getting poor quality of education and ultimately become unfit for employment and resulting to fall in poor section of the society again and again which was leading to widening of the gap between these sections.

The stakeholders of the education right from the curriculum designers, teachers and parents all come from the upper sections of

the society hence not bothered for the concerns of the weaker sections, which comprise larger part of our population.

With nearly doubled the time allotted for new teacher preparation curriculum which is at par with the teacher education curriculums of all the advance countries with respect to the duration at graduate and post graduate level and are now focused on the society and social aspects, we can have sensible teachers as output who may start doing things so as to minimize the gaps between both the sections of population in our country.

Now after going through the new teacher education curriculum for the first year, it is noticed that the trainee-teachers are under more pressure than that of the old course. In some institutions and universities, they are compelled to submit their written assignments/practicum in about 15 to 20 in number with varied titles. This type of the distraction has developed within the teacher educators because there is no proper orientation regarding the objectives of the new teacher education curriculum. Throughout the year the student teachers ware engaged in the various activities in day time and with written work in the night. They have not been provided with the time to understand what they are doing and why.

It is the season of new mangoes and pickles. By changing the teacher education curriculum, we have changed the pickle, now it the time to change the serving bowls and the spoons.

With love and regards.....

B. V. Ramana Rao

ISSN : 0976 - 1160

EDUSEARCH

(Bi-annual & Bi-lingual)

PEER GROUP REVIEWED

JOURNAL OF EDUCATIONAL RESEARCH

Volume - 7 Number- 1 April 2016

CONTENTS

About
RESEARCHERS ORGANIZATION, BILASPUR (C.G.)
(Regd. 13554/11)

It is an association of like minded people consisiting of research scholars, teachers, teacher educators and professors. It was formed with an aim to transform research into reality and mass applicability.

The prime objectives of this organization are -

- *To promote research in the area of school and higher education and to extend academic and technical support to the young researchers.*
- *To extend support in the implementation of the government policies in the area of education, social-welfare and environment.*
- *To provide a platform to the young writers for publication of their books.*
- *To publish research journals in various subjects.*
- *To develop and publish various research tools, scales of measurement in various subjects.*
- *To conduct research experiments in education and other subjects.*
- *To provide consultancy services to young researchers.*
- *To organize national and state level seminars, conferences, workshops etc.*
- *To conduct various projects in school and higher education fields in consultation with the apex bodies of the country.*

Dr. B.V. Ramana Rao
Secretary
Researchers Organization, Bilaspur (C.G.)

EDUSEARCH
ISSN: 0976-1160
Vol. 7, No.1, Apr. 2016

Diversified Teacher Training Courses : *Multiple Institutions and Varied Levels*

***Mona Sedwal** **

Key Words : Teacher Education, Right to Education, Teacher Eligibility Test

Abstract

Teacher education in India is imparted at various levels through a range of government and private educational institutions. A need is felt to highlight the importance of teacher education encompasses three significant developments over the last two decades namely, institutionalization, physical growth and diversification. Also, teacher training may be imparted either through regular mode or by distance mode. Both types of courses are different in terms of the nature of training but the students are assured of availing the teaching degree at the end of the course. This paper attempts to explore and focus the issues of the plurality of training institutions and training courses; the network of institutions offering teacher training programs at various levels without fully comprehending the requirement of trained teachers in the country; and the issues that need to be addressed related to teacher training.

Introduction

There is no uniform teacher education policy in our country as is the case in the school education due to education being the subject in the concurrent list. Therefore, imparting teacher training programmes have a vast canvas in India as it is not provided by one particular organisational body. With this as the backdrop in 1995 National Council for Teacher Education (NCTE) was established to provide the official recognition for teacher training programmes in India. Prior o it NCTE was an advisory body since 1973 for the Central and State Governments for all matters pertaining to teacher education. NCTE functioned through its Secretariat in the Department of Teacher Education at National Council of Educational Research and Training (NCERT). Since NCTE was an advisory body it was unable to maintain the standard of teacher education and mushrooming of the sub standard teacher education institutions due to lack of the regulatory power.

NCTE was visualised as a statutory body by the National Policy on Education (NPE) in 1986 to revamp the teacher education system in the country. Subsequently, NCTE was established by the government under an Act of Parliament in pursuance of the NCTE Act, 1993 which envisages that all teacher education programmes are of adequate standard and relevant to educational needs. NCTE focuses to achieve planned and coordinated development of teacher education system throughout the country by regulating norms and standards related to it.

Teacher education in India is imparted at various levels through a range of government and private educational institutions. Various levels denote the entry level of qualifications relevant to the courses prescribed by different institutes for elementary level. A need is felt to highlight the importance of meaningful and contextually relevant training programmes for teachers, keeping in view that teacher education encompasses three significant developments over the last two decades since nineties namely, institutionalization, physical growth and diversification at different levels of teacher education in specific areas of specialization. Also, teacher training may be imparted either through regular mode or by distance mode. Both types of courses are different in terms of the nature of training but the students are assured of availing the teaching degree at the end of the course.

Further the teacher training programmes are of two types namely, pre-service and in-service. The pre-service training of teachers is imparted at three levels, i.e., pre-primary teacher education, elementary teacher education and secondary teacher education. The in-service education for teachers at primary level has taken a different shape with the introduction of mass innovative teacher training programmes as a sequel to the 1986 National Policy on Education, as in 1987 a centrally sponsored scheme of *Restructuring and Reorganisation of Teacher Education* was established. It further gained momentum with systemic reforms through structural innovations by establishing District Institutes of Education and Training (DIETs) as the nodal institutions for improving the quality of elementary education in the district.

DIETs were mandated to transact pre-service and in-service training programmes for elementary school teachers. In certain small districts of the country there is a provision for establishing a District Resource Centre (DRC) as it does not require a full-fledged DIET. Till 2012 the Government of India has sanctioned 571 DIETs, 106 CTEs and 32 IASEs. Over the last twenty years, many of these institutions have played a pivotal role in providing pre-service and in-service training to teachers and teacher educators as an important quality input for school education in the country. Nonetheless, the implementation of the Scheme in achieving the basic objectives of Teacher Education has been uneven across States/UTs. There has been variation in quality of performance even within a state/UT. (GoI, 2011a)

During 1990s, under the District Primary Education Programme (DPEP), Block Resource Centre (BRCs) and Cluster Resource Centre (CRCs) have been set up across the country with the explicit mandate to provide in-service training to primary teachers. The DPEP used a cascade approach offering training at three levels: training of resource persons, training of key trainers and training of teachers. The instructional material has also been developed for different personnel involved in the in-service training of teachers in each DPEP district. These programmes were usually residential and of different durations,

spread over three to ten days and were usually conducted at BRCs.

This paper attempts to explore and focus on the following issues:

- The plurality of training institutions and training courses such as in terms of diploma and degree and the involvement of multiple institutions in the process of imparting teacher training at the pre service level.
- The network of institutions offering teacher training programs at various levels without fully comprehending the requirement of trained teachers in the country.
- The issues that need to be addressed related to teacher training.

Plurality of Teacher Training Institutions

As on 2012 there are SCERTs in 29 States and SIEs in Assam, Arunachal Pradesh, Jammu and Kashmir (2), Sikkim, Andaman and Nicobar Islands, Uttar Pradesh and Chandigarh. In pursuance of the recommendations of the NPE-1986 and for the implementation of programmes like DPEP and SSA, a network of training institutions like IASEs, CTEs, DIETs and BRCs/CRCs have been established. In 2012, 32 IASEs have been sanctioned.For elementary school teachers, the present structures of BRCs/ CRCs and DIETs are sufficient in number. However, they need to be strengthened in several ways like providing the learning resources, academic support from universities and other institutions of higher education, qualified resource persons, etc. The NCERT in its Report of August 2009 on *Comprehensive Evaluation of the Centrally Sponsored Scheme on Teacher Education* has underscored the need to restructure the existing BRCs and CRCs to revamp the present system of in-service training of untrained teachers. (MHRD, NCTE, 2012)

The plurality in teacher training institutions denotes to the courses that are related to teacher training that are imparted through various institutions namely, government, private and distance mode. The database is not available for all the sectors except for the government institutions. Though, according to the Justice Verma Committee Report around 90 per cent of pre-service teacher education intitutions are in the non-Government sector. Till March 2013,1116 government recognized institutions were providing the pre service training. Of these, 764 institutes offer D.Ed. course, 226 institutes offer B.Ed. course, 72 institutes offer M.Ed. course and 54institutes offer other courses related to teacher training. (Figures provided by NCTE, MHRD)

The different level in the courses leads to the major quality issues. For example D.Ed. and B. El. Ed. are offered at pre service training for teaching at the elementary level and the duration of the course varies from two to four years with the issue of diploma and degree certificates as well. After the completion of the courses all the interns become teachers for the elementary level. It also poses the issue of quality as well as quantity of students who qualify to be teachers at the elementary level.

In contrast to this in 2011 there were 5.23 lakh teacher posts vacant under state quota, with large inter-state variations. Uttar Pradesh had a vacancy of 3.15 lakh teachers, followed by West Bengal (1,49,470), Bihar (3,23,233), Orissa (37,901), Chhattisgarh (34,985) and Rajasthan (29,356). In the deployment of teachers there is large intra-state disparity, especially between rural and urban schools.Justice Verma Commission has pointed out that with the increasing pressures to recruit teachers that fulfill RTE norms of qualification; many States are instituting distance learning programmes to meet the demand for a large number of professionally qualified teachers. Evaluation studies indicated the poor

quality of training through the distance mode. In many cases the provisioning of distance education for teacher preparation is the only measure available, leading to the dilution of the need for quality initial teacher education and the dismantling or the existing structure of pre-service teacher education in some states. (GoI and NCTE, 2012)

The proliferation of self-financing institutions granted recognition by the NCTE for various teacher education courses has raised serious doubts about the teaching and training capacity available in these institutions and quality of courses transacted by them. While a large number of persons are provided degree/diploma in teacher education, it is not certain whether all or most of them have the attitude, ability and subject knowledge required to become a good teacher. The position of courses recognized by the NCTE on an all-India basis is presented in Table 1.

One of the major problems confronting the States with large teacher vacancy is the inadequate number of teacher education institutions (and their annual intake capacity) in respect of the annual demand for teachers. This is particularly true for States of Bihar, Jharkhand, Orissa and Chhattisgarh. The imbalance in respect of these states is demonstrated in Table 2.

In States of Assam, Bihar, Jharkhand and Orissa the problem is compounded by the inadequate availability of teacher educators, particularly in the. In view of

Table 1
NCTE Recognised Teacher Training Courses

Course	No. of Govt. Institutions	Approved Intake	No. of Private Institutions	Approved Intake	Total Intake (Govt. Pvt.)
Elementary (D.Ed.)	764	45,230	6,528	362,114	4,07,344
Secondary (B.Ed.)	226	25831	6622	7,68,318	1,7,94,149
M.Ed.	72	2660	837	24,176	26,836
Others	54	4296	959	63,176	67,472
Total	1116	78,017	14,946	12,17,784	12,95,801

Table 2:
Gap in Teacher Vacancy and Intake in Teacher Training Courses

State	Annual Intake for D.Ed.	Annual Intake for B.Ed.	Annual Intake for M.Ed.	Teacher Vacancy
Assam	1,320	4,370	85	4,992
Bihar	2,000	6,110	75	3,23,233
Jharkhand	1,460	5,550	25	98,424
Orissa	3,290	1,775	1,110	37,901
Uttar Pradesh	18,240	1,13,400	1,860	3,15,175
Chhattisgarh	2,070	9,880	400	34,985
West Bengal	4,230	13,747	125	1,49,470

Source:.GOI, Planning Commission,Working Groups / Steering Committees for the Twelfth Five Year Plan (2012-2017), HRD, Teacher Education.

the specific provision of Section 25 of the RTE Act, there is an urgent need to find plausible solution to teacher shortages in these States. In the short run, however, the high deficit states will have no option but to recruit a large percentage from amongst persons not having professional qualification. However, to ensure quality only persons who qualify the TET should be appointed and institutions are identified which can enable such persons to acquire the minimum qualification through distance mode. Care must also be taken that the distance mode course is of high quality and there is periodical monitoring of the progress of the training programme, both in respect of the institution imparting the programme and of the teachers undergoing the training.

Untrained Teachers

There has been substantial increase in the availability of teachers at elementary level in the past few years. The total number of teachers in Government schools increased from 6.7 million in 2011-12to 7.35 million in 2012-13. Yet there are a large number of untrained teachers from the North Eastern States whereas the uneven supply and demand of teachers is in the States of Assam, Bihar, Chhattisgarh, Jharkhand, Orissa, Utter Pradesh and West Bengal. As per current estimates, there are 5.48 lakh untrained teachers at the primary level and 2.25 lakh untrained teachers at the upper primary level, apart from a very high percentage of untrained teachers at the secondary and senior secondary level. Eight states Bihar, Jharkhand, Jammu & Kashmir, Orissa, West Bengal, Uttar Pradesh, Assam and Chattisgarh together account for 6.06 lakh untrained teachers at the elementary level.

Table 3 based on District Information System for Education (DISE)2013-2014 data reveals that concentration of untrained teachers is in the four States of Arunachal Pradesh (84.91), Madhya Pradesh (85.03), Tripura (86.14), Meghalaya (88.99). (DISE, 2014)

Another major development that has focused on the teachers has been the implementation of the Right of Children to Free and Compulsory Education (RTE) Act, 2009 that requires the recruitment of a large number of teachers across the country in a time bound manner. In spite of the extent of the task, it is desirable to ensure that quality requirement for recruitment of teachers is not diluted at any cost. One of the essential qualifications for a person to be eligible for appointment as a teacher is that he/ she should pass the Teacher Eligibility Test (TET) which will be conducted by the appropriate Government. The rationale for including the TET as a minimum qualification for a person to be eligible for appointment as a teacher is that (a) it would bring national standards and benchmark of teacher quality in the recruitment process; (b) induce teacher education institutions and students from these institutions to further improve their performance standards; (c) send a positive signal to all stakeholders that the Government lays special emphasis on teacher quality.

One of the biggest challenges confronting States is training of the large number of untrained teachers. Currently there are 6.70 lakh teachers in government schools who are untrained. Some States have insufficient capacities for pre-service teacher training and the problem may aggravate with recruitment against the vacant positions as well as requirement of additional teachers. It may not be possible in some districts/ States to train untrained teachers in the conventional face-to-face mode, without loss of teaching time in schools.

Issues Related to Teacher Training Institutes

The recent documents bring to the fore various issues pertaining to the suitability of pre-service programs vis-à-

Table3:
Total Untrained Teacher in Government Schools (Including Contract teachers)

Range	% distribution of professionally trained teachers (Regular)	% distribution of professionally trained teachers (Contractual)
0-25	Daman & Diu (9.57), Dadra & Nagar Haveli (8.15), Karnataka (3.74), Delhi (0), Maharashtra (0.86), Goa (1.67), Tamil Nadu (3.07), Chandigarh (0.98), Puducherry (0.39), Lakshadweep (1.14), Punjab (11.99), Haryana (1.06), Kerala (0.18), Rajasthan (9.49), Andaman & Nicobar Islands (1.45), Gujarat (0.51), Uttarakhand(15.66), Himachal Pradesh (5.38) , Andhra Pradesh (3.13), Odisha (20.93), Uttar Pradesh (22.36)	Daman & Diu (0), Dadra & Nagar Haveli (0), Delhi (0),Gujarat (0), Kerala (0.1), Lakshadweep (3.13),Puducherry (3.49), Chandigarh(4.11),Karnataka(5.68), Andaman & Nicobar Islands (6.07), Haryana (7.82), Maharashtra (8), Himachal Pradesh (9.8)), Andhra Pradesh (10.53), Tamil Nadu (11.1), Goa (11.84), Punjab (15.68), Rajasthan (17.92),Jharkhand (19.66)
25-50	Chhattisgarh (41), Jammu & Kashmir (47.63),Jharkhand (29.56), Madhya Pradesh (32.44)	Odisha (30.58), Manipur (35.01)
50-75	West Bengal (50.57) , Bihar (56.9), Arunachal Pradesh (70.98), Meghalaya (69.12), Assam (61.32), Manipur (62.21) ,Mizoram (56.25), Nagaland (70.2), Sikkim (54.04), Tripura (56.63)	Uttarakhand(51.34) , Jammu & Kashmir (54.52), Chhattisgarh (54.71), Bihar (58.03), Uttar Pradesh (60.71), Sikkim (64.19), Nagaland (71.84), Assam (76.52), Mizoram (78.95),West Bengal (80.02),Arunachal Pradesh (84.91), Madhya Pradesh (85.03),Tripura (86.14), Meghalaya (88.99).

Source: DISE 2013-14

vis in-service programs starting from the intermediate qualification to the specialized training of teaching a particular subject or a particular group of students. Often it has been pointed out that the curriculum of the pre service education is outdated and needs to be revised in the current contextual realities.

The quality aspect of the programme lies on the strength of DIETs, but the problems like large number of vacancies in the DIETs, absence of a separate cadre of teacher educator, lack of training facilities and adequate resources, out dated pre-service course materials etc., are critical areas that need to be addressed for urgently as is pointed out in the Twelfth Plan. For this there is a need for collaboration between the SCERTs and the States programmes for collectively addressing the issues related to teacher training.

There are numerous developments in the light of RTE that has addressed the issue of availability and quality of teachers. There is a need to recommend feasible methods for timely selection and deployment of teachers, to ensure conformity with the requirements laid down in the Schedule to the RTE Act within the timeframes stipulated under the RTE Act. Another momentous improvement has been the notification of teacher qualifications under section 23 of the RTE Act and the prescription of a Teacher Eligibility Test (TET) by the National Council for Teacher Education (NCTE) that became the systemic changes since the implementation of the RTE Act. (GoI, 2011a)

The Teacher Eligibility Test (TET) instituted in 2011 as an essential criterion for teacher recruitment over and above a professional degree in teacher education has clearly demonstrated that the bulk of candidates who take the TET (conducted centrally as well as State-wise) do not qualify to be recruited, despite having a professional degree in teaching.

This reflects that the candidates had the poor subject-knowledge which reflects on the poor quality of general education. It could be argued that the need for conducting TET may not have arisen if a fairly rigorous system of making admission to teacher education courses had been followed.

The language of instruction often hinders the participation of interns in the training programmes. To overcome this problem mother tongue based multilingual education (MLE) is a possible option for teachers as well as students. For education to become self enhancing, growth oriented and a positive experience, it is imperative that tribal children should not be forced to a situation where they don't understand what the teachers, books, school walls and the blackboards seek to communicate. In the conflict affected areas, the wardens and teachers need special training for providing psychological counseling to the affected children.

The RTE Act promises new stimulus to the education of CWSN, irrespective of the kind, category and degree of disability, for education in an enabling inclusive environment. Teacher Qualifications notified by NCTE under section 23 of the RTE Act recognise persons with Special Education (D.Ed and B.Ed Special Education) as teachers on par with other teachers and the deployment of such teachers in general schools for optimum utilization is a positive development. (GoI, 2012: 55)

There is a need to make appropriate revisions in Teacher Recruitment Rules to address the problem of excess teachers in urban schools and acute shortages in rural areas, particularly in remote and difficult to reach villages. There is a need to evolve a transparent system of transfers and redeployment of teachers which is both child centered and teacher friendly. Added to this teacher recruitment systems in the States need to be improved, especially in view of the RTE requirement of maintaining pupil teacher ratio in all schools. Teacher Qualifications as laid down by the NCTE under section 23 of the RTE Act, needs to be followed in all future recruitments to maintain the demand and supply ratio.

Role of BRC and CRC

Facilitating transition from traditional modes of classroom organization and teaching to a framework that is in conformity with the child centred provisions of the RTE would require considerable support and guidance to teachers and head teachers. The existing teacher and head teacher training programmes need to be revised as the head teachers would need training on school management in terms of RTE and norms and standards mandated for the school. These orientation and training programmes are proposed to be provided through structured in-service teacher training programmes at the BRC level, but also through peer interaction, seminars and symposiums organized at CRC, BRC and DIET levels that may focus on locally relevant programmes for orientation of head teachers, cluster coordinators and local supervisors. Leadership capabilities of head teachers, local level managers, teacher support professionals including CRC coordinators and school supervisors at DIETs and BRCs will need to be strengthened through training designs developed by SCERTs, SIEMATs and NGOs.

CRC were envisaged as centres of teacher empowerment - where teachers share their experiences, discuss their problems and learn from innovative practices of peers. In several states this forum has been effectively used for teacher interaction and peer learning. However, experience of CRC functioning has tended to be uneven, with many administrative responsibilities being entrusted to CRC coordinators, often to the detriment and neglect of their

Box . 1

Teacher Training Programs with a Difference: Exemplar from Rajasthan and Delhi

Rajasthan: *The Department of Education of the Banasthali Vidyapith has the distinction of venturing to try out a learner centric curricular programme of teacher education, which the students named "Anweshana" in cognizance of its main feature of self-exploration. Introducing a course for promoting computer based learning has become a necessary component of teacher education at present. The Vidyapith was among the earliest institutions to adopt the Computer Assisted Learning and Teaching (CALT) programme, which is yet another indication of the forward looking tendency of the institution. Over the past few years, there has been continuous effort by the faculty to meaningfully integrate the course into the B.Ed. curriculum. The initiative gives details on how the institutional effort to provide for meaningful incorporation of CALT into both pedagogic and other teacher relevant functions had improved the quality of the B.Ed. programme.*

Delhi: *At IGNOU "School and Workshop Based Practice" attempts to provide opportunity for trainees to interact and share their thoughts and experiences in group situations leading to collaborative reflective practice; apply innovative practices discussed in the theory in the school context and obtain feedback; have real experiences of various activities a teacher performs in the school and practice in simulated and real work situations; all these done with support and feedback from experienced teachers/ teacher educators. Considering the large number of untrained teachers distributed all over the country to be trained Open Distance Learning (ODL) mode seems to be the most logical alternative as it allows teachers to get professional training and academic qualifications in a relatively cost-effective way without being away from work for long durations. However, its potential to develop the required competencies in the teachers is often questioned.*

Quoted from NAAC (2007), An Anthology of 'Best Practices' in Teacher Education. pp. 20 and 111.

academic responsibilities. It is important that the dichotomy and overlap between the role of the CRC coordinator and the local supervisory staff is addressed in the Twelfth Plan. The focus of work of the CRCs should solely be on supporting teachers and improving the schools. They should be given no other tasks including data collection for DISE. The CRC should be developed as a Resource Centre with adequate physical and academic infrastructure such as library, facilities for developing supplementary learning material for dissemination to all schools within the jurisdiction of the CRC, teacher interaction rooms, etc.

Similarly, over the last decade Block Resource Centres (BRCs) have developed as an important forum for in-service teacher training. In the Twelfth Plan it is proposed to upgrade and strengthen BRCs to function as well equipped resource centres so that they become the hub for all interested teachers – public or private to contribute to effective provision of children's rights and entitlements.

Open and Distance Learning Mode

Training of untrained teachers can also be imparted through the distance mode to enable them to acquire professional qualifications. There is a proposal to offer 30 days Residential Induction training for newly recruited teachers and ten days Refresher Training for Head Teacher Training in the Twelfth Five Year Plan to ensure school functioning from the point of view of children's rights at BRC/DIET level.

Open and distance learning mechanisms must be extensively used to provide learning inputs to teachers at their work place. NIOS and State Open Schools could be could be effectively brought in to support such ventures.In the existing set up, most elementary school teachers remain totally unexposed to any higher learning environment. It is important that this is changed and provisions are made for attachment of

elementary teachers to well-established university departments and other higher education institutions that are actively associated with promoting elementary teacher education.

Lack of Resource Material

One of the biggest problems faced in conducting effective in-service education of teachers is the absence of good material for use by resource persons. Often, therefore, teachers only have the exposure to some thinking, and occasionally, some slide presentation to fall back on when they return to their work place. Thus there is a need to develop learning material for teachers in multiple languages. For continuous upgrading of knowledge and teaching skills it is imperative to conduct in-service training of teachers in Government, Local Body and aided schools, including teachers in Madarsas desirous of introducing modern subjects. It also enables the teacher to see pedagogical practices from the child's perspective. In-service training of teachers will also include training for conducting Special Training for out-of-school children. Annual in-service teacher training (including seminars, workshops, field visits) in residential/ non-residential mode for ten days at the BRC/DIET level are required for quality improvement.

The Cabinet Committee on Economic Affairs has approved modifications of the existing scheme for *Reorganization and Restructuring of Teacher Education* in order to meet the exceptional challenges for the Teacher Education system arising from the massive spatial and numerical expansion of schooling facilities at the elementary and secondary levels, the corresponding increase in the demand for teachers and to fulfill the statutory obligations of the Government with regard to teacher preparation and teacher training under the Right of Children to Free and Compulsory Education (RTE) Act, 2009. Modification of the scheme is also critical in the context of the need for training requirements of teachers at the secondary level under the *Rashtriya Madhyamik Shiksha Abhiyan*. The scheme will be implemented through State Governments/UTs, those who will submit their annual proposals for consideration and approval of the Teacher Education Approval Board (TEAB) constituted by the Department.The implementation of the scheme would help to address non-availability of teachers; enhance the effectiveness of teachers through better training and ICT support. It will improve the quality of Teacher Education through involvement of Institutes of Higher Education.

Teacher Education Courses

According to the NCTE definition of teacher educators is considered in terms of faculty deployed in teacher education institutions meant for admitting candidates and tuning them as qualified trained teachers at different stages of school education. The faculty is deployed for providing instructions and training to the student trainees. The trained teachers are considered as those who undergo a specified duration of the teacher education course as per NCTE norms. It regulates the standards and quality of teacher education institutions and supply of school teachers and teacher educators. This is a continuous exercise and NCTE has put in place a robust Management Information System (MIS) for the required data and information regarding existing number of teacher education institutions across the States/ Union Territories, except for Jammu & Kashmir which is not governed by the NCTE Act. At present there are four levels of teacher education courses recognized and approved by NCTE as per NCTE norms.

- Certificate level courses viz. Certificate in Primary Education; and Certificate in Physical Education,

- Diploma level courses viz. Diploma in Elementary Education course; Diploma in Physical Education. Diploma in Early-Childhood Education; Diploma in Elementary Education (Open and Distance Mode); and Diploma in Arts Education (Visual Arts, Performing Arts),
- Degree level courses viz. Bachelor of Education; Bachelor of Education (Integrated four year B.El.Ed. course); Bachelor of Education (Open and Distance Mode); and Bachelor of Physical Education.
- Post- Graduate course viz. Master of Education (Face-to-Face Mode, Open and Distance Mode and Part Time), Master of Physical Education.

As mentioned above the teacher education courses are varied and are the bench marks while selecting a teacher for serving the school at a particular level. But the quality of teacher is under question at all the levels due to the plurality of the courses. A teacher might have done a teacher training course yet one requires a strong subject knowledge base and passion for teaching to be a good teacher not mere teacher. It may be useful to draw a roadmap for teaching profession wherein the teacher gets an opportunity is promoted parallel to the qualification acquired by her/him in due course of teaching profession.

Way Forward

The issue of plurality of teacher training in India needs to be addressed on the priority basis due to implementation of RTE Act since 2009. For the successful implementation of the RTE Act there is an urgent need to recruit the teachers on all the vacant positions across the nation. The RTE Act is not merely limited to the appointment of teachers but to also provide quality schools – throughadequate and child friendly infrastructure, curriculum and school practices. The Act mandates qualified teachers who are able to engage in providing education which supports the development of all children, especially children belonging to marginal and disadvantaged/under-privileged communities and children with special educational needs. Achieving the objectives of the RTE Act therefore requires urgent investment in developing ample good teachers.(GoI, 2011a)

Also, the teacher training is provided through different modes at different levels for which NCTE has devised various methods to maintain the uniformity and the quality of teacher education.For example TET is one such method through which there will be uniformity in recruiting the teachers across the nation as well as quality assurance of teachers. For maintaining quality of teacher education it is imperative to involve the decentralized structures effectively in the teacher training institutes. DIETs may be made responsible for all the pre-service, in-service teacher training programmes, functioning of academic resource persons at the block and cluster levels and quality interventions.The district level advisory body may be headed by District Collector/ CEO, Zilla Parishad and have representation of the elected members of parliament and legislated assembly, representatives of local authorities and the district officials of different departments. (GoI, 2011b) Such mechanisms would help in curbing the plurality of teacher training institutes and achieving uniformity across the nation.

Similarly at the Block level periodic inspection/supervision of schools to observe the infrastructure and facilities and the administrative aspects is vital. In addition, a suitable system of academic and curricular support may be developed to serve the purpose of continuing professional up-gradation of teachers and to see that school syllabi and learner

evaluation are operationalized as expected. The structures at State, District and Block are recommended to have a strong administrative and academic set up for the effective changes.

REFERENCES

GoI. (1986): *National Policy on Education, 1986*,New Delhi: Ministry of Human Resource Development (MHRD).

GoI. (2000): Education for All (EFA) *National Plan of Action India, 1999-2000*. New Delhi: MHRD.

GoI. (2009): *Right of Children to Free and Compulsory Education Act, 2009*. The Gazette of India, August 27, 2009, New Delhi.

GoI. (2009a): *SSA-RTE Report*, MHRD: New Delhi.

GoI. (2009b) *Selected Educational Statistics, (Abstract), 2006-2007, as on 30th September 2006.* Department of Education, Planning, Monitoring and Statistics Division, New Delhi: Ministry of Human Resource Development.

GoI (2011), *Report of the Working Group on Teacher Education for the 12th Five Year Plan*. Department of School Education and Literacy, Ministry of Human Resource Development, New Delhi.

GoI (2011a), *Working Group Report on Elementary Education and Literacy 12th Five Year Plan 2012-2017*. Department of School Education and Literacy, Ministry of Human Resource Development, New Delhi.

GoI. (2012) *Twelfth Five Year Plan 2012-2017.* Planning Commission, New Delhi.

GoI (2012a) *Vision of Teahcer Education in India Quality and Regulatory Perspective. MHRD &* NCTE.

NAAC (2007), *An Anthology of 'Best Practices' in Teacher Education.* In collaboration with Commonwealth of Learning, Vancouver, Canada. Bangalore, India.

NCERT (2006): *Gender and Education*, Position Paper, New Delhi: NCERT.

NCERT (2009), *Comprehensive Evaluation of Centrally Sponsored Scheme on Restructuring and Reorganization of Teacher Education A Report*. New Delhi.

NCTE (2009) *Demand and Supply of Teachers*, New Delhi: NCTE.

NCTE. (2009a) *National Curriculum for Teacher Education (NCFTE): Towards a Humane and Professional Teacher*, New Delhi: NCTE.

NCTE (2011) *Model Syllabi for Elementary Teacher Education (D. El. Ed)*, NCTE: New Delhi.

NCTE (2012), *Demand and Supply Estimates of Intake Capacity of Teacher Education Courses across the States and Union Territories (2009-10 – 2016-17).*

NUEPA (2012) *DISE Flash Statistics, 2010-2011* (Provisional), New Delhi: NUEPA.

Article Received on	**05.03.2016**	**Reviewed on**	**12.03.2016**
Observations reflected on	**25.03.2016**	**Modified on**	**25.03.2016**

*** *Mona Sedwal*** : **Asstt. Professor, Dept. of Training and Capacity Building, NUEPA, Sri Aurobindo Marg, New Delhi.**
Email : monased@gmail.com

EDUSEARCH
ISSN: 0976-1160
Vol. 7, No.1, Apr. 2016

Kasturba Gandhi Balika Vidyalaya Scheme: *A Promising Initiative for Reaching the Out of School Girls in Educationally Backward Blocks*

Prof. Gouri Shrivastava *

Key Words : Marginalized, Enrolment, Perceptions, Low Socio-Economic Background

Abstract

The Government of India is committed for bringing girls from the marginalized groups to the center stage of education. In this context a promising formal initiative of providing out of schools girls a second chance to revisit and complete elementary schooling stage is the Kasturba Gandhi Balika Vidyalaya Scheme. This scheme has been in operation since 2004 and has now become an integral part of Sarva Siksha Abhiyan (SSA). A study was undertaken in three states of India i.e. Andhra Pradesh, Bihar and Gujarat to examine the strategies adopted for enrolling girls in KGBV. The purpose of the study was to know its reach and relevance to the most marginalized section of society. In this very context the perceptions of different stakeholders in the state of Bihar in KGBV visited is mentioned in the present paper.

Introduction of the Scheme

The Kasturba Gandhi Balika Vidyalaya Scheme has been designed for out of school girls in the age group of 10+ and above. It began in 2004 and in 2007 has become an integral part of SSA. The scheme provides elementary stage schooling to girls belonging to hard to reach groups i.e. SC, ST, OBC and those belonging to minority communities. The scheme is being implemented in Educationally Backward Blocks (EBBs) of the country where the female rural literacy is below the national average and gender gap in literacy is above the national average. Further, within these blocks priority has been given to areas with concentration of tribal population, with low female literacy and/or a large number of girls out of school; concentration of SC, OBC and Minority populations, with low female literacy and /or a large number of girls out of school; areas with low female literacy and areas with a large number of small scattered habitations that do not qualify for a school.

The criteria of eligible blocks was revised in 2008 and it also included EBBs with rural female literacy below 30% and towns/cities having minority concentration (as per the list identified by Ministry of Minority Affairs) with female literacy below the national average (53.67%: Census 2001). In 2010-11, KGBV has been extended to all EBBs. The total number of KGBVs sanctioned up to 2012-13 was 3609. About 3528 are operational. Around 3.66 lakh girls are enrolled. A minimum reservation of 75% seats is for those girls belonging to SC, ST, OBC and from the Minority community. 25% seats are reserved for girls from below poverty line. In recently conducted field study the criteria of enrolling girls has expanded to cover girls from special needs, single parents and orphans. The scheme has been implemented across different states and UTs of India by SSA, Mahila Samakhya and Non-Governmental Organizations.

The Report of the National Evaluation of the scheme (2007 and 2013) and research studies conducted by the Department of Gender Studies, NCERT (2010-11, 2012-13, 2013-14) have all highlighted that besides giving girls academic support, the scheme trains girls in local craft, music and dance. In addition, skills like sewing, stitching, knitting, cooking and beauty parlor techniques are taught. In a few KGBVs, girls are imparted skills related to repair of home appliances, cycle and electrical gadgets. Computers are provided to all KGBVs but the usage is limited to typing and making the girls familiar with some software like Coral Draw. Thus, enriched curriculum in KGBV emphasizes on training girls more in stereotypical skills, some of which are extensions of household activities. In discussions with stakeholders of the scheme, it was revealed that provision of such skills is motivational and has an inbuilt pull mechanism. Focusing stereotypical skills had helped in gaining confidence of parents in educating their daughters. However, recommendations of the National Evaluation and Studies on the scheme have highlighted that more focus should be given to unconventional courses for breaking the umbilical cord of stereotype. This will enable girls to have more options in connecting with their livelihood and expose them to new and emerging professions. This aspect was also stressed at the National Consultation Meet organized by the Department of Women's Studies, NCERT in 2008. One of the recommendations of the consultation was that along with existing skills imparted to girls, there could be an additional component of training girls in entrepreneurship and marketing. Many KGBVs located through out the country have also succeeded in training girls in menstrual management and health related concerns. This focus would go a long way in the overall development of girls.

All provisions in KGBVs have stimulated greater demand for enrolment of marginalized girls in Educationally Backward Blocks (EBBs) and in all catchment areas of their locations. There is now a growing and persistent demand for up scaling the scheme to cover the entire schooling cycle of girls as highlighted in research studies and reports. In fact, an interesting trend has emerged. Presently, there is more demand than supply. Community members in nearly all the states have expressed their desire to have more KGBVs in their blocks. According to them, it would help in covering larger number of drop-outs and never enrolled girls of their region. Stake holders and beneficiaries of the scheme have mentioned at different forums that there is a need to strengthen upward mobility of girls to secondary and higher secondary stages. This would make the scheme holistic in nature and would in future help

in transforming Educationally Backward Blocks (EBBs) into forward looking blocks' especially in the context of education and empowerment of girls.

In the present paper, an attempt has been made to examine the strategies of enrolling girls in the scheme in the state of Bihar. In this context field visits were undertaken in two KGBVs located in EBB's of the state managed by SSA and Mahila Samkhya. In-depth discussions were held with all stakeholders including the beneficiaries. Interview schedules were canvassed to state officials, teachers, wardens to know their perceptions about the implementation of the scheme, enrollment procedures and bottlenecks if any, in overall management of the scheme.

The Present Study

The study is located in the state of Bihar. Field visits were organized by state officials. The KGBVs visited in the state was Akbarpur, located in Nawada district and Bajpatti in Sitamarhi district in 2013-14. During the field visits discussions were held with wardens, teachers, parents and girls to ascertain methodologies adopted for enrolling girls. In addition, interview schedules were canvassed to teachers, community members and girls.

Perception of State Project Director (SPD) On Strategies for Enrolling Girls in KGBV

The state project director stated that in Bihar all KGBVs are of Model-III. The procedure adopted for disseminating information of KGBV is through local newspaper, teachers, Cluster Resource Coordinator (CRC) and by Block Resource Person (BRP). Girls in KGBV are enrolled in the months of April and May. He added that the age of the girls entering KGBV is 10+. Girls generally come from marginalized sections of society. They are mainly from SC, OBC, BPL and Muslim community. Presently, girls with disabilities from different castes and classes also find place in KGBV. Most of the girls in KGBV come from remote rural areas located in educationally backward blocks. There is no formal assessment prescribed by the state for enrolling girls. Girls are enrolled in all Classes as per vacancy. The process of bridging girls depends upon learning levels and once the learning level is identified the girls are bridged accordingly.

After enrolling in KGBV a few girls dropped out. This phenomenon reflects that discontinuance of girls in education exists in this scheme also. To address this situation of double drop-out of girls, every attempt is made by the teachers to convince parents to motivate their daughters to continue their education. The main reason for dropping out of girls is due to their involvement family affairs and migration of parents in search of livelihood.

The officer informed that enrolments in KGBV can be improved if extensive campaigning, in the community in general and stake holders in particular, is regularly done.

Nawada District

In Nawada district KGBV located at Akbarpur was visited. At the time of the field visit the total enrolment was 98 girls but only 88 were present.

Discussions with Gender Co-ordinator

The gender co-coordinator mentioned that KGBV was a model school in the village. Knowledge about the scheme was disseminated to the community in several interactions. Teachers of KGBV made special efforts to go in groups to different villages to identify drop-out and never enrolled girls. Further, the teacher also informed parents about co-curricular activities and skills for self reliance and protection. She mentioned that now they did not face challenges related to enrolment of girls. At times there was more demand than supply. State textbooks were used for bridging girls to Class VI. The learning level of girls was

assessed orally as well as through a written test administered to all out of school girls seeking admission. She added that KGBVs scheme is being well received by all the stakeholders.

Perception of KGBV Teachers

Teachers of KGBV felt that since the scheme has existed for more than five years and now they were not facing the initial challenge of getting drop-out and never enrolled girls from hard to reach groups. Presently, none of the girls enrolled in KGBV had dropped out. Only a few months back, two girls had dropped out from Class VII because of migration of the family and sickness of elderly person in the household. The teachers also mentioned that girls had dropped out temporarily due to socio-cultural practices in the family. In such circumstances, every effort was made by teachers and pass-out girls to convince the parents to send their daughters to KGBV. They stated that besides temporary drop-outs, other challenges faced by them were regarding staffing positions in KGBV. In KGBV Akbarpur, non-availability of teachers in languages and in co-curricular activities was acutely felt. Parents also reported this matter several times to the concerned authorities and also mentioned that academic standards of their daughters were affected. The teachers felt that lack of availability of regular teachers eroded the confidence of the parents in KGBV.

The process of enrolling girls in KGBV began in the month of April and admissions took place in the month of June. Senior block level officers, KGBV teachers and sometimes the village Surpanches played a pro-active role in mobilizing parents for enrolling their daughters in the scheme. Local newspapers also carried in-depth information about vacant seats in different KGBVs of the State. It was also reported that senior pass-out girls from the KGBV have also become important agencies of mobilization. The warden cum teacher specially mentioned that for popularizing the scheme among the most marginalized sections, she along with other teachers conducted door to door surveys. In these surveys emphasis was placed on all provisions of the schemes as well as skills and co-curricular activities imparted to girls. Assurance was also given to community members and parents about the overall security provided to girls in KGBV. Community meetings were also an important forum for disseminating information about the scheme. Sometime forums like *Meena Manches* were also used to canvass.

The teachers were of the view that they should be provided in-service training in different subjects for teaching in a child friendly manner with gender sensitivity. They mentioned that they had made a written request to the State Government for in-service training. They added that the request also included provision of teachers in Hindi, Mathematics and Environmental Studies in all KGBVs of the state wherever vacancies existed. At the time of the field visit, there was no Accountant in KGBV. Accounts were settled by Block Resource Accountant. For security purposes, the staff of KGBV included one night Guard who was a male. Important contact numbers of senior officials including police station were painted on the walls of KGBV and recorded in registers maintained by the warden. These numbers were accessible to all girl boarders.

For bridging girls to Class VI level, the teachers used state textbooks. They also mentioned that many times they had to organize girls in groups according to their learning levels. Every effort was made by them to use participatory pedagogical methods for making girls understand different concepts and link it to their lived realities.

Teachers were of the view that the

scheme should be up-scaled to Higher Secondary Level so that girls complete their school education. In addition, they felt that only one KGBV was not sufficient in the block and more KGBVs should be opened. Focus should be on recruiting subject specific teachers to strengthen the academic aspect of the scheme. They also expressed their dissatisfaction with the present pay structure and felt that the government should increase their salaries.

Discussion with Parents

Parents of the girls in KGBV were from low socio-economic background. The professions that many of them perused for their survival needs were as daily wagers, cobblers and petty shopkeepers. During discussions they stated that, "We did not lead a good life as we were ignorant and very poor. We want our daughters to lead a better life than ours. KGBV not only helps our daughters in education but teaches them skills for life. Karate is taught for self-defence and girls, when they come to the village, impart the skill to other girls too. They learn music, sports and other activities which is good for their health. Sewing and tailoring will help them to be self-reliant, if they choose to take it up as a profession". They also stated that when their daughters came home, they would help in preventing domestic violence. They also prevented their fathers from taking alcohol and other drugs. All parents confidently mentioned that their daughters did not want to marry early and were very keen to continue their education and take up a profession for self-reliance. They revealed that they came to know about KGBV from the Block Officers. According to them, girls passing out of KGBV have very lately become important mobilizing agents. Local media also informs the villagers about the scheme, its details and provisions. KGBV teachers also visit their villages regularly to inform them about the scheme and its details.

Parents were very happy with the scheme. They opined that KGBVs should be up scaled to twelfth standard, so that girls complete their schooling cycle. They also felt that additional KGBVs should be opened in the blocks. Parents want more teachers to be recruited in KGBVs, as shortage of teachers is a major challenge their daughters face. Few parents also stated that sometime girls could not get personal attention and they faced difficulties in subjects like Maths and Languages. Parents wanted to educate their daughters in KGBV as it ensured better quality of life for their daughters.

Regarding selections procedure, parents stated that state books were given to girls to assess their learning levels. Transfer certificate was needed for drop-out girls. Parents added that no written test was held when their daughters joined KGBV. They were not clear about whether bridge courses were used by their daughters. Two parents mentioned that oral as well as written test was held for their daughters at the time of the admission.

Reasons for enrolling their daughters in KGBV:

- To educate her;
- For employment;
- To make her a good human being;
- It is her right;
- Educated daughters are the pillars for ensuring quality education to future generations in their families of origin and procreation;
- To make her a good citizen.

Focus Group Discussion with Girls

All girls expressed their contentment with the existing facilities in KGBV. They stated that the overall environment was very enabling and they got every opportunity to study and pursue their interests. However, non-availability of teachers affected them. Some of the girls reported difficulties they had in understanding concepts in science, mathematics and languages. Sometimes their seniors helped them but that was

not sufficient and in many cases they had difficulties in establishing linkages with earlier lessons taught. Experiments in science were very rarely conducted. Hands-on examples were occasionally mentioned. In limited cases parallels were drawn with real life experiences.

Girls enthusiastically mentioned their participation in different sports and athletic activities. Sports that they participated in were *Kabbadi, Kho-Kho*, and Badminton, Skipping, Long jump and Relay race. Some girls had participated in district and state level sports. All the girls were of the view that since KGBV had given them every, opportunity to grow academically and in co-curricular fields, the scheme should be upscale to higher secondary levels so that they can complete the schooling cycle. Further, they mentioned that the state should have more KGBVs of model-I and II types. The common professions that they wanted to pursue in future was teaching and nursing. Only two girls mentioned that they wanted to become police person and administrator.

In Akbarpur, girls studied in regular co-educational middle school that was located half a kilometer from the road. The headmaster of the school mentioned that girls and boys studied the same subjects but Classes were held separately for boys and girls. In lower Classes I to V girls was clubbed together in different subjects as teachers were not available. This was also true for boys. Further, the teachers mentioned that despite non availability of teachers they followed participatory pedagogical methods for teaching. Girls were very appreciative of the teaching and learning process followed and they made urgent request for appointment of additional teachers.

Girls in Akbarpur KGBV came from SC backgrounds. They belonged to Rajvanshi, Chamar, Passi, Dushad, Mushare and Dhobi communities. In addition to sports, the other activities that engaged them were Music, Dancing, Painting and Karate. The girls mentioned that they were taught Karate by an instructor but now the instructor is one amongst them. The trainer is their senior and she had mastered this art and had become a trainer for them as well as for other girls in her own villages.

All the girls mentioned that they were from low socio economic backgrounds. Most of their parents were small farmers, agricultural laborers, petty shopkeepers and migrant workers. Most of the girls were first generation school goers.

Despite, non-availability of teachers in different subjects, girls mentioned that they liked to study Math's, Science and Languages. They stated that they had difficulty in studying Sanskrit as there was no subject teacher. Most of the girls aspired to become teachers.

Sitamarhi District

The second district visited was Sitamarhi. In this district the KGBV visited was Bajpatti. At the time of the field visit 100 girls were present. Perceptions of different stakeholders on enrolling girls are mentioned below.

Perception of KGBV Teachers

Teachers in KGBV mentioned that the process of enrolment of girls began in the month of April. Girls were admitted in KGBV in the month of June. Several strategies were adopted for identifying drop-out and never enrolled girls. Door to door surveys were conducted for identifying out of school girls. In addition, the *Sangha* women canvassed about the scheme with regard to facilities and academic environment of KGBV. These women also identified girls with disabilities and motivated parents to enroll their daughters in KGBV. Local newspaper, intervention of Sarpanch members also helped in getting girls from the hard to reach groups in the state. At times teachers formed groups with pass out girls to go to different villages and canvassed about the scheme.

It was observed during the field visit that only one teacher which specialization in visual impairment had recently joined KGBV. The other teacher was an experienced teacher handling various forms of physical disabilities. She had got training from the Mahila Samakhya Programme and was fully aware about the need and requirements of KGBV girls. She was also trained in participatory pedagogical approaches. There were only two teachers in KGBV.

During the discussion the teachers mentioned that for improving quality education of the girl child they made every effort for concept clarification in subjects related to Science, Maths and Languages. They had developed materials with the help of resource persons in local language of the girls. Further, every care was taken to provide individual attention to slow learners. The activities that girls were exposed to in KGBV were stitching, tailoring, embroidery, Madhubani painting, music and dance. Girls were also trained in *Karate*. Sports facilities in KGBV included badminton, skipping and athletics. The teachers said that girls also took part in district and state level events. Some of the girls won trophies.

In the context of bridging girls to Class VI level different responses were received from the teachers. One of them mentioned that oral as well as written test was held. The newly recruited teacher was not clear about it. Bridging of out of school girls took place for a period of forty-five days. Bridging was done with the help of state textbooks. Bridge material was available in Maths and Languages in Hindi medium. Sometimes the learning level of girls was discussed with the community.

Discussion with Parents

Most of the parents expressed their satisfaction with the KGBV scheme. All of them agreed that the scheme should be up-scaled to higher secondary level. They also demanded more KGBVs in their blocks to cover nearly all out of school girls. They added that the KGBV scheme has now emerged as an elite and model school in their blocks. A lot of pressure and canvassing was done by parents in their villages to get their daughters admitted in the residential school. Parents informed that both oral and written exams were administered to their daughters before enrolling them. Only one parent mentioned that oral test was held. Parents felt that several strategies were adopted by the state to disseminate information about the scheme. Some of them were:

- Publication about the scheme in the local media;
- Door to door visit by officials and teachers;
- Discussion of the scheme during School Management Committee Meeting (SMCs);
- In-depth survey conducted by *Sangha* women about out of school girls;
- Proactive role of block education officer, wardens and teachers in disseminating information about the scheme.

Most of the girls enrolled were from SC, ST, OBC and very few were from the Muslim community.

Perceptions of Parents on Reasons for Enrolling their Daughters in KGBV

All parents mentioned the following reasons for enrolling their daughters in KGBV:

- To educate her ;
- To get a good job for her;
- For future employment;
- To make her a good human being;
- It is her right;
- Educated daughters are the pillars for ensuring quality education to future generations in their families of origin and procreation;

Group Discussion with Girls

During discussions girls said that they came to know about KGBV mainly from *Sangha Women*. Some of the passed out

girls from KGBV had also informed them about existing facilities and academic environment. Their parents came to know about KGBV from local advertisement and from the warden. Girls were not very clear about the selection procedure followed. They informed that a few of them had appeared for oral test and only one girl mentioned that she had given written test. Girls also said that in the last two years none of the girls had dropped out from KGBV. Some of their seniors had reflected that in 2013, two girls from very remote area viz. Bokhra and Bairgania blocks had discontinued education because of poverty and lack of interest. All the girls were very happy with the overall facilities of KGBV. They wanted that the scheme should be up-scaled to higher secondary level. Girls complained that non availability of teachers affected their understanding of subjects related to Science, Maths, Languages and Social sciences. At times they took help of the senior girls. All of them appreciated Karate training provided to them. Two girls mentioned that they wanted to become Karate trainers in future.

Most of them belong to Backward Caste; some of them were Schedule Caste and from Muslim community. Girls belonged to Mandal, Muslim, Thakur, Baitha Ram, Paswan and from Mushar communities. Girls who were interviewed mentioned that they were bridged for Class VI for a period of three months. During bridging state textbooks were used. All girls like to study English, Hindi and Mathematics. Nearly, all of them wanted to become teachers.

Girls mentioned that their seniors continued their education in Class IX in nearby high school and in their village school located at Sivapatti, Raipur and Bajpatti. During field visits it was gathered that their health card was made and every month health checkup was done on a regular basis. The Public Health Center (PHC) was located nearby.

Some Success Stories

Name : **Kanchan**
Community : SC (Rajvanshi)
Age : 13
Class : VIII

Kanchan is presently a student of Class VIII. Reminiscencing her journey to this residential school, she mentioned that she belongs to a very poor family. Her father is an agricultural laborer and her mother is a housewife. Despite their subsistence living, her parents were motivated to educate all their three children, two daughters and one son. She said that presently all her siblings are studying in the village school.

She had dropped out after Class V from the *Prathmik Vidyalaya*, Moti Nagar because of pressing household work. After a gap of six months she resumed her studies. Her parents have decided to help her continue her education up to the graduation stage. She aspires to become a teacher and teach in the village school. She wants to educate all children so that there is no drop-outs in her own village. The subjects that she likes most are Math's and Science. Her interest in this subject has been due to her teachers. They taught her with plenty of hands on examples. She mentioned that her parents came to know about KGBV from the warden and passout girls from her own village. Her parents were highly impressed and they decided to enroll her in this residential scheme. She added that after joining KGBV her whole life has changed. She does not worry about household chores and now gets enough time to do her work. In KGBV she gets a lot of help from her peers. Sometimes when the teachers are not available to help her understand difficult concepts, she takes help of senior girls. She wants to pursue her education up to the graduation level and become a school teacher. She felt that becoming a teacher was important to help educate other girls

in the village who could not get admission in institutions like KGBV. She would, as a teacher, inspire girls to study for ensuring better quality of life for themselves and their families.

Name	:	**Gudia Kumari**
Age	:	14
Class	:	VIII
Community:		OBC

Gudia Kumari was studying in Class V prior to joining KGBV. She studied at Rajpur Prathmik Vidyalaya. She belongs to the Yadav community. Her mother is uneducated and her father is a farmer. He ownes a very small piece of land and his earning is very meager. Despite, grinding poverty of her household, her parents wanted to educate her. They came to know about KGBV from the village *Sarpanch* who took initiative in enrolling her in the scheme. In KGBV, she found that all her needs are met. The food given is satisfactory and more than enough for her. Her health is monitored and she gets time for her studies. She was very appreciative of her teachers. She stated that they explained subjects in local language and it was easy for her to understand. According to her the other positive aspect of the scheme is peer learning and sharing. All teachers including the warden made her feel wanted. She never felt homesick. She wants to become a doctor.

Name	:	**Nibha Kumari**
Class	:	VIII
Age	:	14
Community:		OBC

Nibha Kumari is from village Mudipur. She was earlier studying in Class V in her village. She belongs to the Yadav Community. Her father is agricultural laborer and her mother is illiterate. Very often she was a temporary drop-out as her father had to migrate to nearby village in search of livelihood. At home she was burdened with household chores and care of siblings. Since she is orthopedically challenged, many times her mobility was restricted. Going to the village school was a big challenge for her. Her neighbors informed her parents about KGBV and they also read about the scheme in detail from the local newspaper. Her parents decided to enroll her in KGBV as it would help her in education and also make her pursue skills for becoming self reliant. After being enrolled in KGBV she wants to continue her education because of the encouraging attitude of teachers and peers. She never felt the stigma of disability and whenever she needed help it was always available even from multi-tasking persons. She is interested in becoming a music teacher. In the nearby school attached to the hostel she got the opportunity to practice music from the music teacher.

Name	:	**Chanchal**
Age	:	13
Class	:	Learning Level is of Class II
Community:		OBC

Chanchal is a blind student. She was earlier studying in her village school in Class V. She had dropped out because there was no facility of Braille and no attention was given to her with regard to the difficulties she experienced in academic subjects. She mentioned that the children would call her names and there was no motivation for her to continue her education. Her parents were uneducated and could not help her academically. Her parents wanted her to continue her education to ensure better quality of life. She said that they came to know about KGBV from teachers, local advertisements and the Block Development Officer. They were keen to enroll her in KGBV. She feels that she is very fortunate to get admission as in KGBV Roh, where there is facility for Brail. She used Brail to learn Hindi. Her teachers are very supportive and

encouraged her. She did not feel the stigma of being blind as nobody called her names. All the girls supported and helped her. However, she felt homesick and missed her parents. She likes the food and activities in KGBV. She wants to become a music teacher.

Name	:	**Dolly Kumari**
Age	:	12
Community:		Mushahar SC
Class	:	VI

Dolly is a blind and never-enrolled girl. Her father is an agricultural laborer and mother is uneducated. She joined KGBV after her father was convinced by the Sarpanch that facilities for children with disability existed in the KGBV. She is being taught by her teacher to use Braille for learning Hindi. She has just begun learning through Braille. She likes the food and the overall environment of KGBV. She feels she is in her own home. She wants to become a music teacher.

Name	:	**Jyoti Kumari**
Age	:	13
Community:		OBC
Class	:	VI

Jyoti is a blind and never-enrolled girl. Her parents are very poor and were unaware about the importance of education. Her father is an agricultural laborer and mother is illiterate. Her childhood memories were very sad as she stated that her parents and neighbors made her feel that she was a burden and a security risk. Her father abused her and mother made her feel that she was a liability for the family. Her aunt informed them about the KGBV and its facilities. It was her aunt who took the initiative of enrolling her in KGBV. At KGBV, she feels that her whole life had changed. The teachers and peers made her feel very wanted and encouraged her academically and in pursuing her cherished hobby of painting. Presently, she is learning Hindi with the help of Braille. She aspires to become a teacher.

Major Findings and Recommendations

- The scheme has been in existence for more than five years in the state. In most of the educationally backward blocks, parents and the community are aware about its details. Therefore, in-depth canvassing for the scheme was not required.
- Girls who have passed out of the scheme have now become agents of mobilization.
- The state has made special interventions for enrolling girls with disabilities.
- Multiple strategies like door-to-door campaign, frequent visits by teachers and wardens, state officials have played a very important role in mobilizing parents for enrolling their daughters in the scheme.
- Meetings were held with parents to familiarize them with the scheme.
- Local print and audio-video media was used for canvassing about the scheme.
- The percentage of drop-out girls from primary schooling stage are maximum in the KGBVs visited. Very few girls are never enrolled.
- The Mahila Samakhya managed KGBV has in-depth record of drop-out and never enrolled girls because of their strong community linkages.
- There is no documentation of strategies for enrolling girls in KGBV. Perceptions of teachers, parents and girls were mixed in this context. In focus group discussions with all stake holders it was reported that both written and oral tests were held for ascertaining the learning levels of girls to be admitted in Class VI.
- Bridging mechanism varied between KGBVs managed by SSA and MS. It varied from girl to girl. However the minimum period of bridging was between three to five months.
- State textbooks were used for bridging.
- Lack of teachers and trained instructors in different crafts existed in KGBVs that

were visited this phenomenon hindered the overall education and empowerment of girls.

- Skills imparted to girls in KGBVs were mainly stereotypical as it attempted to train girls in sewing and tailoring. The only unconventional skill imparted to girls was *Karate* .
- While there were success stories of girls transiting to secondary levels of education in KGBVs visited, there was no proper documentation of this aspect.
- Some girls did drop-out of KGBV after getting enrolled. In this regard every effort was made by teachers to visit their parents and convince them about continuing the education of their daughters. At times this methodology worked but in limited cases girls from migratory families did not return. Vacant seats were then filled up according to priority list.
- All parents demanded up scaling the scheme to secondary and senior secondary stages so that their daughters could complete schooling. In addition there was a demand of more KGBVs in Educationally Backward Blocks(EBBs).
- Parents demanded that Model I and II type of KGBVs need to be opened in the State, so that school and boarding facilities are in the same premises.
- In Bihar, the government has made special efforts to enroll girls with special needs and there are now 1,118 such girls in the KGBVs. In particular two KGBVs run by Mahila Samakhya have enrolled all eligible girls with special needs from the concerned blocks. Bihar has also maintained a register to track the girls who graduate from the KGBV.

Suggestions

- Guidelines for enrolling girls in the scheme can be formulated.
- Regular teachers need to be appointed in KGBV for addressing academic challenges.
- The enrich curriculum in KGBV need to include unconventional skills.
- Local and professional artisans could be employed for training girls in crafts.
- Regular training of teachers handling children with disability needs to be undertaken.
- Teaching aids for addressing children with disability need to be identified and accordingly supplied to all KGBVs across the state.
- A forum can be created for all agencies managing KGBVs for sharing their experiences and building on success initiatives of each other.
- An in-depth record of girls passing out of KGBV and transiting to higher education needs to be maintained.
- Convergence of the scheme with other departments in managing KGBVs can be maintained.
- Model I and II can be explored for admitting out of school girls.
- Qualities of infrastructure facilities in KGBV such as drinking water, fuel for cooking, running water need to be addressed.
- Salaries of cooks, helpers need to be increased keeping the cost of living index in mind.

REFERENCES

Balika Vidyalayas Managed by Different Agencies in Andhra Pradesh, Bihar and Gujarat: An Exploratory Study, Department of Gender Studies, NCERT, New Delhi.

GOI Twelfth Five Year Plan, 2012-2017, (2013), Planning Commission, Government of India, SAGE Publications Pvt. Ltd., New Delhi.

MHRD Report on the National Evaluation of Kasturba Gandhi Balika Vidyalaya Scheme, 2007, MHRD, New Delhi.

NCERT Muslim Concentrated Districts of Four States of India", Department of Women's Studies, NCERT, New Delhi.

NCERT Report of "National Consultation on Kasturba Gandhi Balika Vidyalaya: A Visionary Initiative" (2008), Department of Women's Studies, NCERT, New Delhi

Yadav Mona, Srivastava Gouri, (2012-13), "A Study on Implementation of KGBV Scheme in the Srivastava Gouri, (2013-14), Report on Strategies Adopted for Enrolling Girls in Kasturba Gandhi

Article Received on	**22.03.2016**	**Reviewed on**	**25.03.2016**
Observations reflected on	**28.03.2016**	**Modified on**	**30.03.2016**

*** *Prof. Gouri Shrivastava*: Professor, Dept. of Gender Studies, National Council for Educational Research and Training (NCERT), Sri Aurobindo Marg, New Delhi.**
Email: gourisrivastava7@gmail.com

EDUSEARCH
ISSN: 0976-1160
Vol. 7, No.1, Apr. 2016

Community University Partnerships in Higher Education

Dr. R. L. Madhavi *

Key Words : Community University, Sustainable Development

Abstract

The role of higher education in shaping the future of nation is evident. If we witness the growth of higher education in recent two decades, we can say that various upcoming needs are to be satisfied by establishing institutes of different nature and course of studies.

The complex nature of present day society is urging the system to change its simple nature into more specialized structure. Higher education in social context is about empowering and raising the quality of life where people can continue to develop their knowledge and skills.

Private initiatives so far are not met with the social goals of Indian education with proper care. In order to take care of these situations, public-private partnerships were thought of.

Introduction

The role of higher education in contributing to the knowledge development and skill practice of globalized world is significant. It is the place where new ideas emerge and knowledge is created to the needs of scientific, managerial and technological nature. Higher education, which is tertiary in character, is also leading to continuous and lifelong education of present day individual plays a necessary and an increasingly important role in human, social, and economic development. The role of higher education institutes in supporting the developmental needs of society is vital, but it is also complex, fluid and dynamic. Higher Education Institutes exhibit numerous different capabilities and scope, and can affect processes of development both directly and indirectly through teaching, research and service. These systems operate within different contexts in which they can play numerous roles and face various challenges. The nature of these roles and

challenges definitely vary with the context of establishment and working of the institute.

There are many challenges in providing adequate education in pursuit of these specific situations and goals, there are also promising improvements in higher education that increase the impact, quality and effectiveness of higher education's role in development and social change. Development is not a stage to be attained or a goal to aim for. But it is a constant process of improvement in which education, research, and service play prominent roles in creating positive changes in the self, the people around, in communities, and the institutions and structures that support the process. Higher education in this context is about empowering and raising the quality of life where people can continue to develop their knowledge and skills. Teaching, Learning, research and service at higher education are the pillars for knowledge generation and dissemination and are thus important contributors to forces of social change and nation development.

Higher Education - Role in Development and Social Change

Education is identified as a tool to develop necessary knowledge and skills to carry over the economic and development related processes of society leading to improvement in life, national development and social change. This aspect is more important for the developing and under developed countries that suffered much due to colonialization and exploitation in historical contexts. The concept of role of higher education for development and social change occupies an important role in this context and emerging post-colonial social changes and modernization ideas on how best to modernize and develop societies. The focus of discussion in this area is how best the public and private organizations can use the higher education system to train people in knowledge and skills necessary for the growth of society on all fronts. Higher education most of the times remained purely academic, developing theoretical knowledge and giving less emphasis on practical aspect training. It is most of the time limited to the boundaries of the universities and remained aloof in establishing a cordial relationship with the context for which it is developing human resource. The relevancy and access of the knowledge developed to the community is always under scanner.

In the 1980s, higher education was gradually considered less important in the quest for economic growth and social change. 'This decline was due to three trends. First, universities failed to produce the results that were expected of them in much of the developing world. Second, many HEIs were not concerned with local, regional, or national issues and problems. The content and style of education was often divorced from the reality that surrounded them and sometimes exacerbated inequalities. Lastly, due to a highly economic view of development and the resulting methods of measuring the impact of HEIs, higher education was considered to have a "low rate of return" and funding and attention were allocated to primary and secondary education (*Chapman* 2002, 5). This low point in the focus on the role of higher education in development facilitated the degradation of HEIs in many parts of the developing world. It also led to a decrease in studies on the subject.' (*Thomson*, 2008)

New problems being faced by the world in achieving development and social change has made the contexts think about incorporating new elements into the working arena of higher education system. 'For instance, the UN views higher education as integral to all aspects of development such as environmental awareness and sustainability, post-

conflict resolution, poverty alleviation, cultivating values such as human rights, health care issues, and cultural preservation or change. The UN sees that HEIs cultivate certain values and understanding of issues that facilitate both economic and social development. Furthermore, the scope of the effects of HEIs is being reconsidered. Society and HEIs are widely discussed as being mutually constitutive, that society and HEIs co-evolve (*Zaglul and Juma* 2006; *Bok* 1984).HEIs, but universities in particular, are considered to be the progenitors of social change through the generation and dissemination of knowledge and new ideas especially in the context of globalization (*Taylor* 2008). This suggests a reconceptualisation of the importance of HEIs in society, culture and development (*McLaughlin, T.* 2007).' (As cited in *Thomson*, 2008) Therefore, the idea of providing a proactive role to higher education in social development is emerged. Establishing a connection between the higher education system and community for which it is developing human resource is one important aspect here. A change in the role and working patterns is expected from higher education system looking into its new development oriented approach, which is nothing but the total commitment to sustainable human development for the survival of humanity as a core value of higher education.

Social Responsibility of Higher Education

Cristina Escrigas, Executive Director of the Global University Network for Innovation (GUNI), said that it is time to "review and reconsider the interchange of values between university and society; that is to say, we need to rethink the social relevance of universities". Humanity, she continues, "is now facing a time of major challenges, not to say serious and profound problems regarding coexistence and relations with the natural environment. Unresolved problems include social injustice, poverty and disparity of wealth, fraud and lack of democracy, armed conflicts, exhaustion of natural resources and more". (As cited in *Tandon*, 2011)

The progress in science and technology has brought considerable benefits for many in terms of greater well-being, prosperity and life expectancy, all the focused sections of society could not avail these benefits. Rapid introduction of changes, unequal growth, high speed technologization and consumerism have further enhanced the divide of prosperous and poor, social exclusion, inequality and injustice, cultural corrosion, illiteracy and environmental deterioration. With all these disparities and divides there is a wealth of knowledge available from each nation that is still unavailable to world. The world's indigenous people, their understandings and knowledges still not well known outside, if tapped, could help move world along a more healthy and sustainable path of development. Higher education can play a role in this endeavour by developing a partnership with these communities and people. 'HEIs can no longer continue to stand aloof and disconnected but, rather, must create opportunities and become spaces of encounter where students and communities of the 21st century can learn together to become more active, engaged citizens in the creation of knowledge for a more just and sustainable world. How HEIs can better tap into existing knowledge, encourage the co-creation of new knowledge through participatory processes of enquiry and investigation, and use the findings to challenge and find new solutions to social and environmental problems is the social responsibility aspect.'(As cited in *Tandon*, 2011)

All higher education institutions are expected to express a strategic commitment to genuine community

engagement, societal relevance or research and education and social responsibility as a core principle. 'In their present formulation, institutions of higher education are expected to serve three missions: teaching, research and service. The mission of "service" is seen independent of teaching (or education) and research (or knowledge). In operational terms, primacy is attached to the teaching and research functions of HEIs; "service" is undertaken afterwards. Many connotations of "service" tend to assume that knowledge and expertise available to HEIs will be transferred to communities and thus help them address their problems. No assumption is made that community engagement may sometimes actually contribute to improvements in HEIs, especially to their teaching and research functions.' (*Tandon*, 2011)

This engagement is expected to enhance the teaching learning and research leading to knowledge production, mobilization and dissemination for higher education systems and simultaneously the integration with larger societies is to be achieved without many problems. This engagement is with multiple directions of society that results in various dimensions of knowledge which is expected to result in reciprocity and mutuality in learning and education. By careful rethinking of the social responsibility aspects of higher education systems towards that path of becoming a part of the societal exploration for moving towards a more just, equitable and sustainable planet over the coming times, this can be achieved.

University and Community Partnerships – A necessity:

UNESCO has noted in the convening of a World Conference '*"Owing to the scope and pace of change, society has become increasingly knowledge-based so that higher learning and research now act as essential components of cultural, socio-economic and environmentally sustainable development of individuals, communities and nations."* To cater to the needs of this interacting world of today, it is essential that higher education system's learning and knowledge creation involve effective partnerships between academic and non-academic learning institutions and communities to create and apply learning and knowledge with stakeholders including governmental and non governmental bodies of all levels that are managing and creating sustainable development initiatives.

The reports of World Bank on achievement of Millennium Development Goals to eliminate world poverty have expressed a negative trend in the achievement of goals especially by developing countries. Violence and armed struggle, persistent killing, wounding and displacing large numbers of people in several regions of the world, the economic meltdown spreading into all parts of the world questioned the capacity of market strategies to reduce poverty, close the gap between the rich and the poor or even provide a stable economic base for trade and development. 'Knowledge must be mobilized and activated by all social and economic actors, in new and creative ways. In alliance with the communities in which they are based, and through the use of community-based research strategies, higher education institutions need to align and focus their considerable capacities on promoting innovative and effective government policies and civic action. Community-university research partnerships are emerging as an important strategy mobilizing just such research and action (Global Alliance on community-Engaged Research, 2008).' Accordingly some alliances at international level have been established to carry on the alliances at international levels to develop and disseminate knowledge worldwide. These alliances

include universities worldwide, research agencies and funding agencies at different levels to coordinate and fund researches in a large scale for social benefits of identified nature. Two examples of such alliances are described below.

The UNESCO Chair in Community Based Research and Social Responsibility in Higher Education grow out of and support the UNESCO global lead to play "a key role in assisting countries to build knowledge societies" The UNESCO Chair supports North-South-South and South-South partnerships that build on and enhance the emerging consensus in knowledge democracy. It strengthens recent collaboration between the Higher Education section in UNESCO, the Global University Network for Innovation (GUNI) and the Global Alliance on Community University Engagement (GACER). It co-creates new knowledge through partnerships among universities (academics), communities (civil society) and government (policy-makers) leading to new capacities; new solutions to pressing problems related to sustainability, social and economic disparities, cultural exclusion, mistrust and conflict; awareness among policy makers; enhanced scholarship of engagement; and modified pedagogy of community based research. (*Tandon*, 2011)

The Global Alliance for Community Engaged Research is a "network of networks" made up of the Living Knowledge Network, the Society for Participatory Research in Asia, Community-Campus Partnerships for Health(USA), CEBEM (Latin America), African Participatory Research Network, University Community Partnership-Social Action Network (multi-cultural community network), Canadian Alliance for Community based Research (Canada) and more. The main objective of the Alliance is to facilitate the sharing of knowledge and information across continents and countries to enable interaction and collaboration to further the application and impact of community-based research for a sustainable just future for the people of the world. (*Budd Hall*, 2009)

Community University Partnerships for Sustainable Development

Knowledge is expected to be generated by synthesizing local experiences with professional expertise. In the unison of such interactions the new knowledge produced is expected to be practical and theoretically relevant to the context and resourceful. The partnership facilitation structures existing between communities and higher education institutions evidences to enhance the capacities of civil societal organizations to organize knowledge in their contexts, and to play an equal role in co-constructing knowledge in society. For larger dissemination these structures and their innovative practices are to be systematically analyzed and synthesized.

One of the major challenges in the developing world is the absence of good information dissemination system about innovations, new practices and policies. Major hindrance is community based research is a complex and value based process. Individual and collective skills in community based research are normally acquired in an informal manner. It is important that specific and targeted interventions are made to strengthen and deepen capacities of individuals in undertaking such innovative research methodologies. Preparing a new generation of engaged scholars, within both the academic as well as civil society sectors, needs attention. Both formal and non-formal channels of learning need to be supported.

Relevance of higher education to social realities and taking owner ship for developments is the new demand. Societies are trying to respond in different

ways for these new demands. 'Some respond through service learning and student internships; some by co-production of knowledge where local communities act as partners; some others bring in the experiences of communities and practitioners in designing curricula and teaching new problem- and issue-centred courses. This social responsibility is expressed both inside and outside the institutions. Inside, it is expressed in the manner in which institutions are governed, the values and principles of citizenship that are integral to education, and respect for diversity and human rights as guiding beacons for conducting the core business of such educational institutions. Externally, the process of engagement with communities and practitioners – in civil society as well as government and the private sector – is premised on mutual respect, shared influence and openness to two-way learning. Practical manifestations of this take place in partnership projects, education based on lifelong learning and recognition of prior learning based on practical knowledge. Inquiry into the institutional, policy and leadership aspects of such approaches has lagged behind practice in a diversity of settings and contexts.' (*Tandon*, 2011)

In order to achieve such innovative research practice goals and owing up social responsibility the capacity of institutions of higher education internally and externally needs to be strengthened in an action-learning mode. Practical experiences and insights gained in these encounters need to be shared. Special attention to institutional policies, structures and leadership need to be given. According to *Tandon*, 2011, 'Primary activity in this regard will be to co-convene short dialogues of leaders of institutions of higher education in different cross-cutting contexts. The dialogues would have to be carried out in partnership with, and as part of, ongoing conferences and meetings of leaders, ministers and professionals of higher education. The main focus of policy development is at the national level, though opportunities for regional and global policies (like ASEAN, EU, African Union, etc) may also be pursued. Policy development will attempt to use research, knowledge mobilization and dialogues for encouraging national research councils, national regulatory bodies and national ministries to frame policies that support community based research and social responsibility of higher education in different African, Asian, Latin American, Caribbean and Middle-eastern countries.'

Categories of Community University Partnerships in Research

There is evidence of systemic investment by higher education institutions in extension and community engagement activities as institution-wide commitments to social responsibility and mutually beneficial partnerships with civil society. Different ideas are implemented of which two different trends are presented here. First trend is explaining about four categories of interaction as -

- First category is a targeted funding by Research Councils encouraging universities to engage in community partnerships
- Second category is the product of commitments by universities to enlarging the opportunities for "service learning" for students in communities
- A third category involves institution-wide commitments to community engagement as an explicit mission of universities across a range of research, learning and knowledge mobilization activities to advance their social responsibility mandate.
- A fourth category of community university engagement involves leadership by civil society networks and organizations to bring together university-based representatives with

community representatives to achieve social and sustainable development objectives. As cited in '*A Policy Brief to the World Conference on Higher Education, July 5-8, 2009*

The second type of categories is four broad categories of community university partnerships in research as-

1. Type one is individual faculty to community relationships that have been created without systematic institutional support.
2. Type two is specific centers or institutes that support partnerships in their fields of interest with communities relevant to that interest.
3. Type three is a systematic organizational structure operating on a cross-university basis to engage community partners in research of value to them and to the institution.
4. Type four is a multi-higher education institution and community partnership to engage in research at a regional, national or international level on an ongoing basis.

There has been growth and development in all of these areas of partnership activity, particularly in the purposeful development of cross-university forms of engagement with communities.(Source:http://socialeconomyhub.ca/sites/socialeconomyhub.ca /files/Hall-OCBR-CUR.pdf)

Trends in Community-University Partnerships in Research, Learning and Knowledge Mobilization

Community-University partnerships in aspects like, research, learning and knowledge mobilization are a growing trend in countries around the world, as nations and regions seek solutions to inter-related social, economic and environmental issues and challenges to their sustainability. In its report, New Paths to Social Development (2000), the World Bank concluded: "The development community now recognizes that it needs greater understanding of community institutions, networks, norms, and values to enable people to capture the benefits of development and build their capacity to help themselves."

'Amongst universities there has been a growing focus on curriculum, programs, and research and knowledge mobilization activity to apply the resources of faculty, students and researchers to the needs of communities and civil society active in applying knowledge to planning and action in society to manage and create change. Community partnerships help universities to define and scope the research questions and provide access to research participants and sources of local expertise, as well as additional funding and in-kind contributions. In turn, universities provide communities with access to wide-ranging and in-depth knowledge and national and international expertise that informs and addresses community challenges and opportunities in a meaningful way. As universities and communities work together on research projects, they strengthen their collective capacity to solve current and anticipated problems, while contributing both to community development and to the advancement of the disciplines concerned...Many communities see universities as key to the growth of the local/ regional economy, and are working to develop effective strategies to leverage universities' engagement in research and talent development to maintain or enhance quality of life (AUCC, 2008, p.90-91).' (Source: A Policy Brief to the World Conference on Higher Education, July 5-8, 2009) Following are some examples of community university partnerships given from the same source.

- In the 1970s in the Netherlands, a structure for linking academic research to communities needs was created called Science Shops (http://www.livingknowledge.org).
- In Tanzania, India, Latin America and

elsewhere, a new research approach called "participatory research", which recognized the knowledge creating capacities of community, organizations and social movements, was also gaining visibility (*Hall*, 1975).

- More recently there has been a wave of research and knowledge mobilization initiatives that build on the early work of the Science Shops and the Participatory Research practitioners and others. It is promoted and supported by a new set of networks and structures such as - Sciences Citoyennes in France (http://sciencescitoyennes.org); The Living Knowledge Network based in Germany (http://www. sciences hops.org); The Popular Education Network based in Scotland (Crowther, 1999); Community-Based Research Canada (http://uvic.ca/ocbr); Community -Campus Partnerships for Health in the United States, http:// depts.washington.edu/ ccph/; National CBRNetworking Initiative (http:// www.bonner.org/campus/cbr/ home.htm); The University-Community Partnership for Social Action Network, (http://www.igloo.org/ ucpsarnet).

  Additional networks and structures include the Society for Participatory Research in Asia (http:// www.pria.org); The Global University Network for Innovation in Barcelona (http://www.guni-rmies.net); The Sub-Saharan African Participatory Research Network in Senegal; The Developing Research on Citizenship network based at the University of Sussex (http:// www.drc-citizenship.org); Observatory PASCAL on Place Management, Community Engagement and Learning Regions (http://www.obs-pascal.com); The Australian University Community Engagement Association (Temple et al, 2005); Australian Universities Community Engagement Alliance (http://www.aucea.net.au); Academe Civil Society Network in SEAsia (ACSN); University Social Responsibility Alliance (USR) and there are many other emerging networks.
- A recent study "The Funding and Development of Community University Research Partnerships in Canada" identified a growing trend amongst Research Councils in that country to invest in community university research partnerships in health, social and economic development, ecological stewardship and other areas of multi-disciplinary research. The Community University Research Alliance program of the Social Science and Humanities Research Council of Canada is cited as an example of new funding arrangements to support these partnership models, now being applied to international research and development partnerships through the International Development Research Centre of Canada.

Programmes in India

Programmes planned under community university partnership in India are already mentioned in brief above. A detailed description is attempted here. All these programmes are related to community education aspects in innovative collaborations.

1. The *Jan Shikshan Santham* (JSS) is like a community knowledge centre similar to the *Ganokendra* in Bangladesh (UNESCO Handbook 2001). The Indian National Literacy Mission (in collaboration with PRIA) writes, "The scheme of Jan Shikshan Sansthan (JSS) is a unique scheme crafted by the Government of India. JSSs are institutes of People's Education focusing on the poor, the illiterates, the neoliterates, the under-privileged and the un-reached. The Jan Shikshan Sansthans are unique in that they do not provide just skill development, but link literacy with vocational skills and provide large doses of Life Enrichment Education (LEE) to the people. They do

not work in isolation but aim for convergence with other stakeholders in society. It is their endeavour to shape their beneficiaries into self reliant and self-assured employees and entrepreneurs." (http://www.nlm.nic.in/jss.htm)

2. Barefoot Colleges is a national, non-governmental grassroots scheme based on the idea that local solutions come from within the community itself. There are a few of these colleges dotted all over India. No degrees or titles are provided as the colleges are dedicated to learning, skills training, and research as solutions to the immediate problems of the poorer communities in which these colleges are based. There is also a distinct reciprocal teacher-student relationship where both teach and learn from each other. As such, it operates as a community-based knowledge centre, and incorporates alternative approaches that make very useful and pertinent contributions to community development. An increase in access to education of this kind allows people to be more involved in their own education.
3. The vocational and technical sector in India is vast, but generally fragmented as there are no adequate central policies that address the quality, accreditation and educational content of many of these institutions (*Agarwal* 2006). However, India has more grassroots development–oriented HEIs that address issues of poverty and development directly than China does. These institutions vary, like Indian universities, in style, education, quality and impact on local regions, making it difficult to draw general conclusions. Little information is available on vocational and technical colleges beyond national statistics (*Mishra* 1993; World Bank – Human Development Unit 2002). Individual institutions, can be studied in the context of national environment.
4. The New Era Development Institute, with affiliation to the Bahai movement is just one example of institutions focused on human development and individual transformations. Other examples might include
5. Gandhigram Rural University, which served as a model for India's agricultural reforms and research initiatives.
6. University of Human Unity is an example of alternative, spiritual education for local and foreign people near the town of Aeroville.
7. Another HEI might include Shreemati Nathibai Thackersey Women's University.

These are just a few examples that attempt to question conventional educational approaches and objectives, and promote alternative discourses as to the function, purpose and impact of higher education. It seems that the Indian higher educational system is open to experimental educational projects in addressing the problems of poverty. This may have to do with a lack of or weak central regulations over the private sector and the role of private initiatives to fill in the gaps (*Kapur and Mehta* 2004). (As cited in *Thomson*, 2008)

Establishment of Community University Research Partnerships

The establishment of community university research partnerships consists of several stakeholders from community. Into this broad range of partnerships one can include government and government controlled bodies of research and funding as main providers of resources, non-governmental organizations working on the basis of service and civil society organizations with a specific focus of development along with universities. This networking is made possible as these stakeholders serve unique objectives and needs in any society that overlap and synchronize in the field of community university

partnerships to achieve common objectives.

A report on the Funding and Development of Community University Research Partnerships in Canada explained the nature and effectiveness of this establishment as, 'research Funding Agencies are investing in knowledge creation and mobilization to advance the application of social, health and natural sciences to societal priorities. Government departments are creating partnerships with both community and higher education sectors to advance policy and program development to inform public policy and its application to contemporary social, health, economic and environmental challenges.

Government supported agencies are leveraging relationships with higher education and civil society to achieve distinct mandates that require new knowledge and its mobilization in the public interest. Civil society organizations and philanthropic foundations are using research to generate both knowledge for practice by their practitioners in social, economic and environmental activities, and create opportunities for co-producing policy with government and other stakeholders that is evidence-based and builds on the experience of communities and their organizations to create and manage change.

"There is an important overlap between these distinct interests in the use of community university partnerships to combine the "on-the-ground" role and knowledge of community practitioners and their organizations with the resources and capacity of higher education institutions to create and mobilize knowledge in both specific sectors and disciplines, and across disciplines. In the context of complex inter-related challenges that involve social, economic and environmental considerations in desired outcomes for Canadian society such as poverty reduction, social innovation, health promotion and environmental sustainability, it is not surprising that governments, research councils, public agencies, universities and civil society organizations are coming together to strengthen their relationships and opportunities for partnerships.' (as cited in http://socialeconomyhub.ca/sites / socialeconomyhub.ca /files/Hall-OCBR-CUR.pdf).

Stakeholders' Role in Sustaining and Enhancing Community University Research Partnerships

These establishments can further be strengthened by channelizing the roles and responsibilities of stakeholders involved in alliance formations. In addition, sharing of results emerged from previous researches, supporting national networking through community based research programmes, providing constant funding as per needs, creating a pool of funds for research across stakeholders contexts, adjusting rules and regulations for equitable investment in community research, policy framing involving other stakeholders of same nature from international contexts, encouraging community university partnerships through providing structured investments, expanding inclusion of non-academic and community research experts on peer-review panels, recognizing the importance of supporting the future research partnerships with consideration of perspectives of future needs of all kinds, expanding innovations in the system of recognition and incentives in higher education institutions, linking up community service learning, community research partnerships, socially responsible community investment and procurement and other forms of civic engagement are to be more examined, channelizing the role of public bodies and ministries to encourage community based research by

universities, focus on aboriginal and indigenous communities to generate knowledge for action by government and civic society, and networking of civic bodies, NGOs and universities to provide resources on a sharing basis to achieve goals of such partnerships further help in sustaining and enhancing such vast level of engagements towards fruitful directions.

Benefits of Community Engaged Research

According to Global Alliance on Community Engaged Research, 2009, collaboration and research between community and higher education institutions yielded some beneficial outcomes at national and international levels. The report further added,

- Knowledge being co-produced and applied to real challenges to human development and sustainability is offering pathways and solutions that would not otherwise exist. Communities and their social and economic development actors are directly benefiting from their engagement in research and learning partnerships, obtaining access to participatory action research and learning opportunities that build their capacity to manage and create their own evidence-based strategies for sustainable development.
- Knowledge mobilization from research partnerships are being applied to real-time policy creation by governments across the globe who need multi-disciplinary evidence-based strategies for public policy development that includes scientific rigor and the knowledge and engagement of civil society actors (their citizens) in solutions to sustainable development.
- Higher education institutions are benefiting from increased learning and engagement of their students and faculty in real-life learning and knowledge creation opportunities. They are also benefiting from increased support from the public and stakeholders from demonstrating their commitment to social responsibility.
- Public agencies and research councils are benefitting from multiple returns on their investment in research that informs policy, practice and learning across a range of relevant stakeholders, and builds, through student, faculty and community practitioner engagement, and a new generation of informed stakeholders.
- Civil society organizations are benefiting from enhanced resource partnerships that inform the public good they are working to achieve while strengthening the scientific rigour they need to demonstrate and use evidence of solutions to the public issues they are working on.

Emerging Issues

Even though knowledge generation and mobilization through these partnerships is evident, the potentiality of this system to address to the global problems is still questionable due to its current fragmented, less recognized and less systematized nature.

A wide-ranging global analysis of the challenges and opportunities hamper the gap filling between communities and universities in human and social development. For developing countries, and for the richer countries the challenges for community engagement strategies is to systematically incorporate capacity building of community participants and communities to be part of networked society.

There is now a focused concern in developing university education and research towards specific economic and social objectives than simply increasing the general education of the population and product more research output.

To address these problems, international efforts already started in the formation of UNESCO-chair and global

alliance on community engaged research, which have to be strengthened and more alliances need to be framed to bring in success for such partnerships.

Suggestions for Enhancement

The global alliance on community engaged research opined that to improve the partnerships catering to developmental needs further 'there is also a need to engage Member States in policy development on higher education reformation to scale up successful forms of engagement with community that produce relevant outcomes for social, economic and environmental conditions in their countries. Community and civil society engagement in higher education as a policy focus could unleash multiple returns in sustainable development, but only if higher education policy by nation states provides the flexibility and incentives for that engagement to take place. Member states also have a huge opportunity to benefit from community university partnerships in research and knowledge mobilization for sustainable development if they focus their own investment in research on community university partnership models through their external funding mechanisms and their respective research funding councils.

Higher Education stakeholders can benefit from collaboration and learning on how emerging models of partnership with community produce enhanced outcomes for their institutions, faculties and students. In particular the extension learning, service learning, applied research functions of higher education institutions are developing models of partnership that could be further enhanced. University-wide social responsibility and civic engagement structures are an emerging trend that appears to be producing results that benefit the institutions themselves as well as communities, but on which little dialogue, support, or research has taken place. Incentives for faculty and student involvement in community engagement are lacking, and many traditional academic structures within higher education systems (e.g. recognition, tenure, advancement) are barriers to such engagement. In many regions of the world, specialized NGOs are providing a key role in updating of graduates and professionals after they finish training, to meet the challenges of practice in their real-time situations through upgrading and knowledge transfer - a role that universities rarely play but that is vital to advancing knowledge transfer for sustainable development in practice. Higher education institutions and their associations could benefit from dialogue and collaboration on models of community and civic engagement and the institutional structures and policies that strengthen such partnerships.

Civil society stakeholders have an immense knowledge and expertise in planning and action for sustainable development. Networks and organizations at the local, regional, national, continental and global level have contributed major initiatives to create and mobilize knowledge for sustainable development. They also have created space for indigenous and community wisdom and organization as the infrastructure for sustainable development that respects local and traditional cultures – a prerequisite in our experience for sustainable development. However, they are under resourced and fragmented, and lack capacity to conduct evidence-based research and planning in many settings. There is a need to network and harness the knowledge of civil society stakeholders on how partnerships with higher education can be designed to support their efforts and needs, particularly in the context of democratic governance and engagement that rely on grassroots capacity of people and

communities to create and manage change.'

Conclusion

A lot need to be done to sustain development of world in this critical juncture of environmental and economic problems. The trend towards establishing partnerships among civil society and higher education institutions and networks to co-create knowledge, mobilize it to inform practice and policy, and enhance the social, economic and environmental conditions of people, communities, nations and the world is increasing. But these efforts are fragmented and not systematically organized world over. The international alliances so far established are not sufficient to address the social, economic and environmental problems of globe to survive life. Many such endeavors are needed to improve the partnerships for broader dissemination and reaping benefits.

REFERENCES

Andrew Thomson, 2008, Exploring the Relationship between Higher Education and Development: A Review and Report, http://www. ghfp.org/Portals/0/ documents/ Thomson_HEI_Role_Dev.pdf, 31.3.13

Budd Hall, 2009, The World We Want: Creating a New Architecture of Knowledge, http:// talloiresnetwork.tufts.edu/wp-content/uploads/ The World We Want Creating A new Architecture of the world we want, A policy brief to the world conference on higher education, July, 2009, Global Alliance on Community Engaged Research, June, 209, http://web.uvic.ca/ ~ccharlie/Higher%20Education, %20Community%20Engagement %20and%20the%20World%20We%20Want.pdf, 31.3.13

Rajesh Tandon and Budd Hall, 2012, UNESCO Chair on Community Based Research & Social Responsibility in Higher Education : A Framework for Action 2012–2016 http:// www.livingknowledge.org/livingknowledge/wp-ontent/uploads/2012/09/UNESCO-Chair-on-Framework-for-action.pdf, 31st march, 13.

The Funding And Development Of Community University Research Partnerships In Canada, Evidence-Based Investment In Knowledge, Engaged Scholarship, Innovation And Action For Canada's Future http:// socialeconomyhub.ca/sites /socialeconomyhub.ca /files/Hall-OCBR-CUR.pdf, 31.3.13

Article Received on	**01.04.2016**	**Reviewed on**	**02.04.2016**
Observations reflected on	**03.04.2016**	**Modified on**	**07.04.2016**

*** *Dr. R. L. Madhavi*** : **Asstt. Professor, Dept. of Education (CASE), Faculty of Education and Psychology, The Maharaja Sayajirao University of Baroda, Vadodara, Gujarat. Pin 390002**
e-mail : *rlmadhavi@yahoo.com*

EDUSEARCH
ISSN: 0976-1160
Vol. 7, No.1, Apr. 2016

Awareness about Health and Hygiene among Secondary School Students of Chitoor District

C. Pedda Peeraiah * & M. Rajendra Nath Babu *

Key Words : Health & Hygiene, Secondary School Students

Abstract

Good health is based upon knowledge of valid health principles and the willingness to put this knowledge to work in daily living. Health is not a condition of matter but of mind. Health is man's normal condition, his birth right; it is the result of living in accordance with the natural laws pertaining to the body, mind and environment. The main objective of the present study is to know the Awareness of Secondary School Students on Health and Hygiene in Chittoor District. For the purpose of the study a sample consisted of 240 Secondary School students in Chittoor District was selected by using the Simple Random sampling technique. Mean, SD, t-test were used to analyze the data. From the result, it was found that there is a significant difference between Boys and Girl students with regard to their health and hygiene awareness of secondary school students.

Introduction

Perfect health is an important requisite for an individual or a family Health is wealth. Optimum health is the highest level of health attainable by an individual. Positive health means striving for preservations and improvements of health. Negative health means scientific efforts for prevention and cure of diseases. The important factors for cultivation of health are: environment conducive for healthful living, balanced diet, adequate physical activity and rest as per individual needs. Pro-motive, preventive, therapeutic and welfare services, suitable occupation with job satisfaction, and proper use of leisure and wholesome mental attitude to life. World Health Organization (WHO) defined health in its broader sense in 1946 as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity."

According to the World Health Organization (WHO) the main determinants of health include the social and

economic environment, the physical environment, and the person's individual characteristics and behaviours. Health promotion is an important objective of the developing countries. Health can be determined by per capita income, nutrition, housing, sanitation, safe drinking water, social infrastructure, health and medical care services provided by government, geographic climate, employment status, and poverty. Health can be preserved by maintaining hygiene.

Good health is based upon knowledge of valid health principles and the willingness to put this knowledge to work in daily living. Health is not a condition of matter but of mind. Health is man's normal condition, his birth right; it is the result of living in accordance with the natural laws pertaining to the body, mind and environment. These laws relate to fresh air and sunlight, balanced diet, regular exercise, rest, relaxation and sleep, cleanliness, internal and good patterns of living. Modern medical science is often accused for its preoccupation with the study of disease and neglect of the study of health. It has encouraged the people to rely on drugs and tonics for the maintenance of health and hygiene than teach them the rational way to be healthy.

The word hygiene refers to the practice of keeping oneself and one's surrounding clean, especially in order to prevent illness or the spread of disease. So, hygiene refers to behaviours and practices that are used to break the chain of infection transmission in the home and community. Good hygiene and sanitation practices are closely linked and often difficult to distinguish. Therefore it is important to mention that in this booklet the word sanitation refers to the individual management of human excreta and that sanitation in this sense is included in the concept of hygiene as defined above. The concept of hygiene can be subdivided into different categories such as personal, water, food and environmental hygiene, and is not limited to the prevention of water related diseases alone. However, because this booklet is part of a SMART Solutions Series on WASH, we will focus largely on hygienic practices that aim to prevent water borne diseases

According to Mosby's Dental Dictionary: hygiene is the science of health and its preservation school is an important channel to promote healthy lifestyles not only to students but also to their families and communities school hygiene or school hygiene education is a healthcare science, a form of the wider school health education. School hygiene is a study of school environment influence; it explores affection of schooling to mental and physical health of students.

The provision of safe water and sanitation is one of the keys to break the cycle of poverty. Access to safe drinking water and basic sanitation has therefore been included as a target in the Millennium Development Goals (MDGs). However, the risk is that if too much emphasis is given to the technical solutions to increase the number of people gaining access to water and sanitation, while the importance of hygiene in water and sanitation programmes is overlooked. Promoting hygiene not only contributes to improved health outcomes but is a crucial factor in the sustainability of water and sanitation programmes. If health is the machinery of life, cleanliness is its tools and spare parts -As 'ad *Khalil Dagher* Unhygienic behaviour has a tremendous impact on human health and development. Diarrhoeal diseases and pneumonia together for example, are responsible for approximately 40 per cent (3.4millionchildren) of all under five deaths around the world each year (UNICEF/WHO, 2009). A substantial part of this can be prevented with safe

hygiene practices.

Hygiene is taking care of the external body. Keeping clean and brushing teeth and stuff. Health is hopefully the result of good hygiene. The science that deals with the promotion and preservation of health also called "hygienic".

Health includes body system diseases and disease prevention, emotional and mental health, personal safety instruction in manners and appropriate social interaction, instruction in the effects of cigarette, drugs, and alcohol on the human body systems and on society; instruction in sexual reproduction, sexually transmitted diseases, Aids and HIV; the study of families and community, hospitals, long term care facilities, occupations, and opportunities, life stages, etc.

Hygiene includes dental health, care of skin, hair, and nails; cleanliness for disease prevention and control, proper care of eyes and ears, washing your hands etc. Health is the condition of being sound physically, in mind, or spirit. It is the freedom from disease or pain and a state of well-being.

More than half of all illness and deaths among young children are caused by germs that get into their mouths through food or water or dirty hands. Many of these germs come from human and animal faces. Many illnesses, especially diarrhoea, can be prevented by good hygiene practices. Washing hands with soap and water or ash and water after defecating or handling children's faces, and before feeding children or touching food; and ensuring that animal faces are kept away from the house, paths, wells and children's play areas.

Everyone in the community needs to work together to build and use toilets and latrines, protect water sources, and safely dispose of waste water and garbage. It is important for governments to support communities by providing information on low-cost washroom and toilet facilities that all families can afford. In urban areas, government support is needed for low-cost sanitation and drainage systems, improved drinking water supply and garbage collection.

Need of the Present Study

Health is a major concern of all people. Health affects every phase of our living as individual and as community members. Health education rests on the premise that a scientific fact does not exert its fullest impact on health progress. Hygiene is taking care of the external body. Keeping clean and brushing teeth and stuff. Health is hopefully the result of good hygiene.

An analysis of the mortality and nutritional indicators from the pre-school, primary school, secondary and senior secondary levels shows that under nutrition and communicable diseases are the major health problems faced by majority of the children in this country. This task involves not only the taking of food but also better understanding of the relation of health and hygiene. More particularly in the case of school children. Unless they are healthy, they cannot be regular to the school. Many research studies found that ill-health is one of the major causes for students drop-out from schools. Majority of the students are suffering with anemia, malnutrition and ignorance. This can be prevented and corrected to a considerable extent, if the precautions are taken.

During the last two decades several national health programs like the reproductive and child health, HIV/AIDS education/ Adolescence education, Tuberculosis and mental health have been emphasized on health education and children are viewed as a potential target groups for preventives and primitive activities. In spite of these, the awareness among the students at school level on health and hygiene is very poor. Unless the students aware of the different aspects of health and hygiene. They

cannot follow the precautionary steps in day to day activities which intern leads to ill-health among the students. Therefore there is an urgent need to know the status of awareness among the school students on health and hygiene.

Systematic researches are therefore necessary to identify the awareness on health and hygiene among secondary school students so as to help not only the teacher but also the parents as well as extension educators to develop special awareness programs to improve the situation. Thus the present study is an attempt to find out the health and hygiene among secondary school students in Tirupati town so as to develop most suitable content.

Review of Related Literature:

Hart et al (2010), carried out a study with more than a hundred secondary school children (ages 13 to 15) in which issues such as parental food rules, children's perceptions of good and bad foods, links between diet and disease, and food grouping, were discussed. First, gender and social economic status made a difference to parental control and children's nutritional knowledge. Second, it seemed that cognitive development also played an important role in influencing children's conceptualization of food grouping and their understanding of the nutrients associated with different foods and the health implications. It was suggested that secondary school children may be most influenced by messages about healthy eating if these are appropriate to their cognitive level and, possibly, targeted separately at girls and boys.

Mohd Zulkarnain Sinor (2011), according to his study dental caries is a multi-factorial disease which can be prevented. Oral health education is part of the strategies in preventing dental caries, especially among preschool children. This study was conducted to evaluate the effectiveness and sustainability of cartoon animation as a medium in delivering oral health education. This is an intervention study involving 2 pre-schools which were selected randomly. One school received cartoon animation as a source of oral health education (intervention group) and for the other school; oral health education was given by dental nurses (control group). Oral hygiene knowledge, attitude and practice (KAP) score were assessed using guided questionnaires. Data was analysed using SPSS version 12 by SPSS Inc. USA. Result shows that there is a statistical difference ($p < 0.05$) in KAP level between the groups and also between times. From this study, it is concluded that cartoon animation as a medium was more effective and sustainable in delivering oral health education messages compared to traditional method

Kumar (2012) studied about Oral Health for Healthy life that there is lack in appropriate oral health education even among literates. This pilot study gives information regarding the present scenario prevailing in Chennai. Further investigations are required in large quantity for understand more accurately and employ in the public health education for the welfare of the people. The need of the hour is to educate and spread the education about dental care through dentist, media and outreach public health programme to make the individual and the society healthy

Lucy Ameze Gharoro (2013) assessed the menstrual hygiene practices and challenges of junior school students during menstrual periods, with its implication for Home economics education. The multistage method of sampling was used to select a sample of 500 post menarche junior secondary school students. A structured questionnaire was used for data collection. Frequency tables were generated. Percentages and mean values with standard deviation were calculated.

70.9% of the respondents reported some challenges during their menstrual periods. Abdominal pains and cramps were the major challenges. 11.7% feel depressed. 63.9% do nothing to relieve the discomfort, while 17.5% visit a doctor for treatment. 83.4% use sanitary pads. About half of the respondents have challenges with getting good sanitary facilities and sanitary pads. 13.8% have absented themselves from school/ examinations during menstruation as a result of severe menstrual pain [dysmenorrhoea]. 52.1% of the students change their sanitary pads twice daily; and majorities of 83.9% bath two or more times a day. Many of the students burn their sanitary material. A minority flush their sanitary pads in the toilets. Increase in public enlightens in the society and increases in the toilet facility in the schools were suggested as ways of improving menstrual hygiene practice.

Anju Ade, Ramesh Patil (2013) studied that Menarche is a significant milestone in the transitory developmental journey of an adolescent. Poor personal hygiene and defective menstrual management practices give rise to repeated reproductive tract infections (RTIs), which are otherwise preventable. Objectives: To access menstrual hygiene and practices of rural adolescent girls. 2 To find out menstrual disorders experienced by adolescent girls. 3 To impart them health education regarding menstrual hygiene and practices. Materials and Methods: A community-based cross-sectional study was conducted in RHTC, a field practice area under the administrative control of Department of Community Medicine Navodaya Medical College, Raichur, from August to September 2012. A structured questionnaire was utilized to collect data from the sampled population. Adolescents who attained menarche, aged between 13 to 16 years from 3 high-schools were interviewed. Altogether 10 questions relating to awareness about menstrual hygiene and practices were asked to each of them. The data was entered into excel spread and frequencies and proportions were calculated. Results: During our study, we found that they were not properly maintaining the menstrual hygiene.68.8% girls had knowledge about menstruation before they first experienced and mother was found to be the main source of information for 41(51.3%) girls. 28 (35%) girls used clothes and reused them.38 (47.5%) girls gave history of dysmenorrhoea and 13(16.3%) said they have irregular menstrual cycles. Knowledge was better but taking into account the health implications and prevailing sociocultural and economic factors, there is need for a continuous, school education programme. The girls should be educated about the process and significance of menstruation, use of proper pads and its proper disposal. There is a need for improving access to sanitary pads and advanced provision of it.

Abhishek Mehta, Gurkiran Kaur (2014) conducted a study that Oral health is fundamental to general health and wellbeing. Schools can provide a supportive environment for promoting oral health. School policies and education on health-related matters are imperative for the attainment of good oral health and control of related risk behaviours. This study was conducted to assess oral health–related knowledge, attitude, and practices among 12-year-old school children studying in rural areas of Panchkula, India. The ultimate goal was to implement an oral health–promotion program in this area. A total of 440 children (216 males and 224 females) from 12 schools were included in this study. All the participants were requested to complete a 13-question closed-ended questionnaire. The statistical significance of any difference between the two genders was determined using

the Chi-square test. Only 25% of the participants said that they cleaned their teeth more than once in a day. Thirty-two percent did not clean their teeth daily. Over the preceding 1 year, 45.5% of the children had had some problem with their teeth and/or gums, but only 35.9% visited the dentist. Among these children, 8.2% used tobacco in some form. Oral health–related knowledge of girls was significantly better than that of boys. Based upon the findings of the present study, the knowledge, attitude, and practices of the surveyed children with regard to oral health is poor. Hence, there is a need for regular oral health education of the children, as well as their parents and school teachers

Objectives of the Study

1. To study the influence of Gender on awareness of Health and Hygiene of secondary school students.
2. To study the influence of Management on awareness of Health and Hygiene of secondary school students.

Hypotheses of the Study

1. There would be no significant difference between Boys and Girl students with regard to their health and hygiene awareness of secondary school students.
2. There would be no significant difference between Government and Private school students with regard to their health and hygiene awareness of secondary school students.

Methodology:

Method: In the present study Descriptive Survey Method of investigation was employed by the investigators.

Sample: For the purpose of the study a sample consisted of 240 Secondary School students in Chittoor District was selected by using the Simple Random sampling technique.

Tool: The awareness of health and hygiene test was prepared by *Naga Bhushan Goud* (D U, 2008) was adopted for the present study. The awareness test covers the following dimensions.

1. Concept of health and hygiene
2. Causes of ill health
3. Precautions to be taken for health and hygiene.

Statistical Techniques Used:

For the present study to analyze the data, Mean, S.D and t-test were used by the investigators.

Analysis and Interpretation of the Data:

Hypothesis – 1:

The scores on health and hygiene awareness of secondary school students were summed up and the mean and standard deviation of the scores was calculated. The significance of the difference between the means was found by using 't' test. Mean and standard deviation of scores on health and hygiene awareness and 't'- value is provided in the table-1 below.

Table No-1:
Mean, Standard deviation and 't' value of awareness of boys and girls on health and hygiene.

Group	N	Mean	S.D	df	t-value
Boys	120	24.2	3.9	238	2.984
Girls	120	25.7	3.6		p<.01

The above table -1, shows that the mean score of health and hygiene for boys is 24.2, with a sd. of 3.9 and the mean score of girls is 25.7, with a sd. of 3.6.This implies girls have more awareness on health and hygiene. The calculated't' value 2.984 is more than table value of 2.56 at 0.01 level. Hence the formulated null hypothesis is rejected. Therefore, it can be said that gender shows significant influence on the awareness of students on health and hygiene.

Hypothesis-2:

The scores on health and hygiene awareness of secondary school students were summed up and the mean and standard deviation of the scores was calculated. The significance of the difference between the means was found by using 't' test. Mean and standard

deviation of scores on health and hygiene awareness and 't'- value is provided in the table-2 below.

Table No-2:
Mean, Standard deviation and't' value of govt. and private school students' awareness on health and hygiene.

Group	N	Mean	S.D	df	t-value
Govt	120	24.8	4.5	238	0.633
Private	120	25.1	3.1		NS

The above table-2, shows that the mean score of health and hygiene for government school students is 24.8 with a sd. of 4.5 and the mean score of private school students is 25.1 with a sd. of 3.1.This implies private school students have more awareness on health and hygiene. The calculated 't' value 0.633 is less than table value of 1.97 at 0.05 level. Hence the formulated null hypothesis is accepted. More over students of Private high school are posses with better awareness than Government high school students.

Findings of the Study:

The statistical treatment of the data reveals the following major findings of the study. They are

1. There is a significant difference between Boys and Girl students with regard to their health and hygiene awareness of secondary school students.
2. Girls' high school students are posses with better awareness than boys' high school students in their health and hygiene awareness.
3. There would be no significant difference between Government and Private school students with regard to their health and hygiene awareness of secondary school students
4. Private high school students are posses with better awareness than Government high school students in their health and hygiene awareness.

Educational Implications of the Study

This study will have far reaching implications not only for the students but also for the parents and teachers. Some of the important implications are listed below.

1. This study can serve as a guide for the educators, teachers and parents to be aware of the health and hygiene problems among students.
2. This study provides the parents and teachers, with better preparedness for combating health and hygiene problems among students.
3. The study indicates that to develop awareness among the students on health and hygiene, special awareness programs can be organized by government and non-governmental organization.
4. When the students have awareness to some extent the existing awareness can be further strengthened by means of teacher, parent associations.
5. Providing better conducive healthy environment for health of deficiency children should be strengthened among parents to tackle these students in their home.
6. The results of this study help to overcome the problems of bad health conditions among students.

Conclusion

Everyone in the community needs to work together to build and use toilets and latrines, protect water sources, and safely dispose of waste water and garbage. It is important for governments to support communities by providing information on low-cost latrines and toilet facilities that all families can afford. In urban areas, government support is needed for low-cost sanitation and drainage systems, improved drinking water supply and garbage collection. Girls' high school students are posses with better awareness than boys' high school students in their health and hygiene

awareness. Private high school students are posses with better awareness than Government high school students in their health and hygiene awareness.

REFERENCES

Abhishek Mehta, Gurkiran Kaur (2014), Potential role of melatonin in prevention and treatment of oral carcinoma", Indian Journal of Dentistry, 5(2), PP. 86-91.

Anderson, L, Vostanis, P., and Spencer, N. (2004) 'The health needs of children aged 6-12 in foster care.' Adoption and Fostering, autumn; 28(3): 31-40.

Anju Ade, Ramesh Patil (2013) Menstrual Hygiene and Practices of Rural Adolescent Girls of Raichur, International Journal of Biological & Medical Research, 4(2), PP. 3014- 3017.

Asha Nagwekar (1972) 'Educational needs of rural mothers of children under 5 years of age in selected nine aspects of child nutrition.' A thesis submitted to M.S.University, Baroda.

Blinkhorn, A. S., Wainwright-Stringer, Y. M., & Holloway, P. J. (2001). Dental health knowledge and attitudes of regularly attending mothers of high-risk pre-school children. International Dental Journal, 5,435–438.

Croll, J.K., Neumark-sztainer, D., story, M. (2001) 'Healthy eating; what does it mean to adolescents? JNuts Educ., Jul-Aug; 33(4): 193-198.

Fiske, J., Gelbier, S., & Watson, R. M. (1990). The benefit of dental care to an elderly population assessed using a socio dental measure of oral handicap. British Dental Journal, 168, 153–156.

Greeley, C. B., Goldstein, P. A., & Forrester, D. J. (1976). Oral manifestations in a group of blind students. ASDC Journal of Dentistry for Children, 43,39–41.

Gulhati, P.V. and Shanta Amar (1973) 'Attitudes and knowledge about smallpox immunization among mother's. Indian Journal of pediatrics, 40(38).

Hart, K.H., Bishop, J.A., Truby, H. (2002) 'An investigation into school children's knowledge and awareness of food and nutrition.' J Hum Nutr Diet., Apr; 15(2): 129-140.

Hawkins, R. J., Zanetti, D. L., Main, P. A., Otchere, D. F., Dwyer, J. J., Jokovic, A., & Locker, D. (2001). Tooth brushing competency among high-risk grade one students: An evaluation of two methods of dental health education. Journal of Public Health Dentistry, 61, 197–202.

Hays, M. and Emmons, L. (1973) 'Nutritional knowledge of mothers and children'. Journal of Nutrition Education, V: 5:134.

Healey, k. (2002) A good place to learn; what young people think makes schools healthy. London: King's fund.

Healey, k. (2002a) 'young people's priorities for a healthier London' Voluntary voice, sept; 167:11.

Hesketh, K., Waters, E. Green, J. Salmon, L., Williams.J (2005) 'Healthy eating activity and obesity prevention: a qualitative study of parent and child perceptions in Australia' Health Promotion International, 20(1): 19-26.

Kumar S, Konde S, Raj S, Agarwal M (2012),Effect of oral health education and fluoridated dentifrices on the oral health status of visually impaired

children, Contemporary Clinical Dentistry 3(4):398-401

Lebowitz, E. J. (1974). An introduction to dentistry for the blind. Dental Clinics of North America, 18, 651–669.

Ligh, R. Q. (1979). The visually handicapped patient in dental practice. Journal of Dentistry for theHandicapped, 4, 38–40.

Lindemann, R., Zaschel-Grob, D., Opp, S., Lewis, M.A., & Lewis, C. (2001). Oral health status of adultsfrom a California regional center for developmental disabilities. Special Care in Dentistry, 21, 9–14.

Lucy Ameze Gharoro(2013),Menstrual Hygiene Practices among Junior Secondary School Students in Benin City, Journal of Educational and Social Research Vol 3, No 8,PP.129-135.

Macgregor, I. D., Balding J., & Regis, D. (1996). Tooth brushing schedule, motivation and "lifestyle" behaviors in 7,700 young adolescents. Community Dental Health, 13, 232–237.

Madhavi and Hemalatha Rani (1979) 'A study on knowledge of health and hygiene of the people in the villages of chittoor district'. Dissertation submitted to S.V.University, Tirupati.

Mallatt, M. E., & Palenik, C. J. (1990). Conducting dental examinations for visually impaired children: Methods and results. Review, 22, 31–39.

McKinley, M.C. Lowis, C., Robson, P.J.Wallace, J.M., Morrissey, M., Moran, A., Livingstone, M.B. (2005) 'it's good to talk: children's views on food and nutrition'. Eur Jelin Nutr., Apr, 59(4): 545-55)

Meade, J.A., Lumley, M.A., and Casey. R.J. (2001) 'stress, emotional skill and illness in children: The importance of distinguishing between children's and parents' reports of illness. Journal of child psychology and psychiatry, vol.42, no.3 (mar): 405-412.

Mohd Zulkarnain Sinor (2011),Comparison between Conventional Health Promotion and Use of Cartoon Animation in Delivering Oral Health Education , International Journal of Humanities and Social Science Vol. 1 No. 3;,PP.169-174.

Monaghan, M. and Broad, B. (2003) Talking sense: Message from young people Facing social exclusion and their Health and well being, London: The children's society.

Moynihan, P. J. (2002). Dietary advice in dental practice. British Dental Journal, 193, 563–568.

Muthayya, B.C. (1972) 'Child welfare- existing conditions and parental attitude- A purposive study in Andhra Pradesh'. National Institute of Rural Development, Hyderabad, pp. 60-77.

Nagel, J. A. (1987). Dental awareness for mentally handicapped children. Dental Health, 26 (6), 8–11.

Neerajamma.T (1982) 'Health consciousness among illiterate adults'. Dissertation submitted in partial fulfillment of M.A.degree in Adult Education, S.V. University, Tirupati.

Nunn, J. H., Gordon, P. H., & Carmichael, C. L.(1993). Dental disease and current treatment needs in a group of physically handicapped children .Community Dental Health, 10, 389–396.

Obekika, (1997), Sexual activity and contraceptive knowledge and adolescents in Nigeria, International Family Planning perspective, 28.

Rajammal, P. Devadas (2001), Vol.11, No.1 Quarterly, January 2001, Chancellor,

Avinashilinhgam deemed University, Coimbatore- 641043. Tamilnadu, India.

Rushforth, H. (1999) Practitioner review; Communicating with hospitalized children: review and application pertaining to children's understanding of health and illness. Journal of child psychology and psychiatry, Vol. 40, No. 5 (Jul): 683-691.

Schembri, A., & Fiske, J. (2001). The implications of visual impairment in an elderly population in recognizing oral disease and maintaining oral health. Special Care in Dentistry, 21, 222–226.

School Health Education Unit (2005) Trends: young people and illegal drugs. Attitude to and experience of illegal drugs 1987- 2004. Exeter: Schools Health Education unit.

Shaw, C. (1998) Remember my messages: The experiences and views of 2000 children in public care in the UK London; who cares? Trust.

Taani, D. Q. (2002). Periodontal awareness and knowledge and pattern of dental attendance among adults in Jordan. International Dental Journal, 52, 94–98.

UNICEF (1998) The state of the world's children. Journal of Avinashitingam deemed university, Coimbatore-641043, Tamilnadu, India.

Vernon, S. et al (2003) children's experiences of school toilets present a risk to their physical and psychological health. Care, health and development, vol.29, no.1 (Jan) 47-53.

Vigild, M., Petersen, P. E., & Hadi, R. (1999). Oral health behaviour of 12-year-old children in Kuwait. International Journal of Paediatric Dentistry, 9, 23–29.

Vignarajah, S. (1997). A frequency survey of sugary foods and drink consumption in school children and adolescents in a West Indian island—Antigua. International Dental Journal, 47, 293–297.

Walsh, M. M. (1985). Effects of school-based dental health education on knowledge, attitudes and behavior of adolescents in San Francisco. Community Dentistry and Oral Epidemiology, 13, 143–147.

Webster's New World College Dictionary (2006), New Millennium- Fourth Edition Authorizes Reprint by Wiley India (p) Ltd., 4425/7, New Delhi-110002.

World health organization (1998) World health forum, An International Journal of Health and Development, 19, 3.

Article Received on	**26.04.2016**	**Reviewed on**	**28.04.2016**
Observations reflected on	**30.04.2016**	**Modified on**	**30.04.2016**

*** *C. Pedda Peeraiah*: Research Scholar, Dept. of Philosophy, S. V. Unicersity, Tirupati (Andhra Pradesh)**

**** *Dr.M. Rajendra Nath Babu* : Asstt. Professor, Dept. of Teacher Education, School of Humanities and Education, Nagaland University, Kohima (Nagaland)**

Email: mrajendranathbabu@gmail.com,

EDUSEARCH
ISSN: 0976-1160
Vol. 7, No.1, Apr. 2016

Parental Encouragement to Adolescents : An Analytical Survey

*Dr. C. M. Bindhu * & Sindhu C. M. ***

Key Words : Parental Encouragement, Adolescents

Abstract

Adolescence is the period of rapid change and adjustments that holds a greater significance in the social sphere. Social aspect of adolescence lies in one's relationship with parents and family. During this period they need proper support and encouragement from their parents to cope up with the intricacies of adolescence.They need many skills for the successful achievement of their goals in life. Encouragement and support of parents will always have a positive effect on them. Through the present study the investigators made an attempt to study the Parental Encouragement among Adolescents. Aggarwal Parental Encouragement Scale was the tool used for data collection. Survey method was adopted. The study concludes normal parental encouragement is received by both male and female students but also found that high parental encouragement is received by female than male students.

Introduction

Our family system is a significant factor in the holistic development of children. Family is the first institution to influence every individual and it gives the experiences of living. Due to the influence of western culture, urbanization and break down of joint family system into nuclear families, the healthy atmosphere of our families have been disturbed. Children are the mere sufferers of this changed system. Here, parents have to play a major role, as the greatest motivators and role models of children are their parents. They have a prime responsibility to play in allowing their children to explore wider social environment and to encourage the development of acceptable social skills. The support given by parents exerts significant influence on children's interests, aspirations, attitudes and achievement. The old authoritarian parents were outdated in this modern world. Parents are to become more authoritative and democratic, trusting but not permissive, helping but not

indulgent, friendly but firm, easy going but vigilant. Every successful individual after reaching his/her goal finds that their success is because of the help and support of their parents. Successful parents frequently use words of encouragement and supportive actions to show their children how to make improvements. Further the academic achievement of the students depends upon the encouragement support and interest shown by their parents towards their children.

Encouragement focuses on effort and sets up children for success. It makes children to evaluate themselves on their own merits. It builds up cognitive and perception ability in a child, which is a major concern in the upbringing of the child. Research confirms that students have an advantage in school when their parents encourage and support their school activities. People who get encouragement and motivation at the right time will achieve more. No matter how old our children are, our praise and encouragement will help them feel good about themselves. This boosts their self-esteem and confidence. Sometimes rewards can be useful too, especially if we want to encourage good behavior.

Adolescence is the period of human growth, between childhood and adulthood. It is a very crucial period of intense emotions in one's life. It is the period of rapid change and holds a greater significance in the social sphere. They need many skills in order to successfully achieve their goal of increased independence.

The amount of children spend in school during the first 18 years of their lives is small compared to the time spent with their parents. Research shows that fun family activities, open child communication, the encouragement to participate in extracurricular and community activities and a positive family environment will create a positive energy in children. Without parental support or encouragement most of our dreams are shattered. Parental encouragement is the back bone of individual's life. The stronger the back bone the healthier will be our generation. Parental Encouragement refers to the treatment originating from parents towards the child with a view to enhance the possibilities of future occurrences of good behavior and self confidence by care, concern, approval and guidance.

Parental encouragement is a significant and important predictor of achievement in students. It is the treatment provided by the parents to the child with a view to enhance the possibilities of future occurrences of good behavior by care, concern, approval and guidance. (*Kusum, Aggarwal*,2002).

The higher levels of student achievement are associated with greater parent encouragement. (*Sewell & Hauser*, 1980) Also, it suggests that parental encouragement is the primary mediator of the well established connection between family, social class and student academic performance. A number of research studies conducted in this area point out that parent related variables have resulted in the considerable improvement in the academic performance of students.

Through the present study the investigators made an attempt to study the parental encouragement among adolescents comprising both high school and higher secondary school students.

Objective of the Study

1. To study the extent of parental encouragement among high and higher secondary school students.

Research Question

1. What is the level of parental encouragement among high and higher secondary school students?

Sample and design:

The study is carried out in a representative sample of 100 high and

higher secondary school students from Malappuram and Kozhikode districts of Kerala. Survey method was adopted.

Description of the Tool:

Aggarwal Parental Encouragement Scale was the tool used for data collection. It consisted of 80 items with 5 alternative responses of each statement which shows the intensity of each statement as agree, most often, frequently, sometimes and never. Total sore in the test is 400.

Statistical Technique:

Percentage Analysis, Test of significance of difference between means.

Analysis & Discussion

Data and result of above mentioned objectives are given in tables shown below

a). Parental Encouragement among high and higher secondary school students.

Table 1

Parental Encouragement among high and higher secondary school students.

Sr.	Male	Female	Total	Parental Encouragement
1	6.7%	2.3%	4.5%	Extremely low
2	17.8%	4.5%	11.2%	Low
3	26.7%	27.3%	30.3%	Normal
4	8.9%	22.2%	23.6%	High
5	4.4%	11.1%	7.8%	Extremely High

Table value indicates that 6.7% of male students, 2.3% of female students and 4.5 % of total sample exhibit extremely low parental encouragement. 17.8% of male students, 4.5 % of female students and 11.2 % of total sample show low parental encouragement. 26.7% of male students, 27.3% of female students and 30.3 % of total sample show normal parental encouragement. 8.9% of male students, 22.2% of female students and 23.6 % of total sample show high parental encouragement.4.4% of male students, 11.1% of female students and 7.8% of total sample exhibit extremely high parental encouragement.

b). Parental encouragement among high and higher secondary school students based on gender and locality

Group difference was found by means of t-test is given in table-2.

Table 2

Data and result of test of significance of difference between means of parental encouragement among HigherSecondary School Students and College students

Category	N	Mean	Sd	df	t-test
Male	45	336.5	24.4	86	1.718
Female	43	345.6	25.1		NS
Rural	72	339.4	26.3	86	1.21
Urban	16	347.8	17.7		NS

From Table-2, the test of significant difference between means in parental encouragement between male students and female students is 1.718, which is not significant at 0.05 level of significance. An estimation of mean scores indicates parental encouragement of female students is slightly higher than that of their counterparts.

Also, it is evident that rural and urban school students do not differ significantly in parental encouragement as the obtained t value 1.21 is below 1.96, the required value of significance at 0.05 level. Mean score indicates urban school students have slight higher parental encouragement than rural school students.

Findings

- Normal parental encouragement is found similar in male and female students.
- Female students get higher parental encouragement than their counterparts.
- Parents of students from urban area gave slightly higher parental encouragement than to the students from rural area.

Conclusion

The study concludes normal parental encouragement is received by both male and female students but also found that high parental encouragement is received by female than male students. Male students also do need high parental encouragement and support from their

parents otherwise there are chances for them to indulge in other activities that are not encourageable. Parent Teacher Associations (PTA) has to play a significant role in making aware of parents that both boys and girls should receive equal support and care from parents. Keep a close watch on our children's activities and their interests. It will be helpful in understanding their behavior. Encourage discussions among them in the socio-cultural value based issues and be careful in advising them and give them space for their own judgment.

REFERENCES

Desforges, C. & Abouchaar, A.(2003). The impact of Parental Involvement, Parental Support and Family Education on Pupil Achievement and Adjustment: a Literature Review. Queen's Printers. Retrieved on 23-01-2016 from http://bgfl.org/bgfl/custom/files_uploaded/uploaded_resources/18617/Desforges.pdf

Ehrlich, M. I. (1981). Perception of primary Involvement. A study of Children's Judgement of the families involvement in their Education, American Sociological Review, 29 (2), 100-109.

Lata, K. (2012). Social adjustments of adolescents in relation to their family structure in Sangrur district of Punjab. *Edutrack.*

Lerner. R & Brennan A. L.(1998). The Parenting of Adolescents and Adolescents as Parents: A Developmental Contextual Perspective**.** Retrieved on 17-01-2016 from http://www.parenthood.library.wisc.edu/Lerner/Lerner.html

Mangal S, K. (2009). Growth and Development during adolescence. *Essentials of Educational Psychology.* PHI Lg Pvt Ltd., 148-149.

Mccoy, K.(2016) Parenting and Stress Management. Retrieved on 17-01-2016 from www.everydayhealth.com/family.../parenting-and-managing-stress.aspx

Ranu, S. K. & Bala, R.(2012). Risk taking behavior among adolescents in relation to Parental Encouragement. *Recent researches in Education and Psychology*, 17, 184-190.

Ward, D.S. Saunders, R.P. & Pate, R. L. (2007). Physical Activity Interventions in Children and Adolescents. Parents have role to play in encouraging healthy behaviors. Retrieved on 23-01-2016 from www.humankinetics.com/.../parents-have-role-to-play-in-encouraging-h...

Zolten, K. & Long, N.(2006). *Helping Children Cope with Stress.* Centre for Effective Parenting. Department of Pediatrics. University of Arkansas for Medical Sciences.

Article Received on	**06.02.2016**	**Reviewed on**	**21.02.2016**
Observations reflected on	**28.03.2016**	**Modified on**	**23.03.2016**

*** *Dr. C. M. Bindhu*** : **Associate Professor, School of Pedagogical Science, Kannur University, Kannur, Kerala. *drbindhucm@gmail.com***

**** *Sindhu C.M.*** : **Junior Research Fellow, Research Centre in Education, Farook Training College, Kozhikode, *sindhubinu23@gmail.com***

EDUSEARCH
ISSN: 0976-1160
Vol. 7, No.1, Apr. 2016

Social Competence among School Going Adolescents in relation to Gender, Locale and Type of Schools

*Dr. Prakash Chandra Jena**

Key Words : Social Competency, School Going Adolescents, Educational Maturity

Abstract

The purpose of the present research is to study social competence among going male and female adolescents studying in different govt. and private schools. It is a descriptive research and survey method has been used. All school going adolescents studying in different secondary schools of Hoshiarpur district of Punjab constitutes population for the present study. The investigation has selected 200 school going adolescents by using simple random technique. For collection of data the investigator has used Social Competence Scale by Prof. V.P. Sharma, Dr. (Mrs.) Kiran Shukla, Dr. (Mrs.) Prabha Shukla. The findings of the study revealed that there exists a significant difference invarious dimensions of social competence among school going male and female adolescents studying in rural and urban secondary schools.

Introduction

Social competence is a complex, multidimensional concept consisting of social, emotional,cognitive and behavioral skills, as well as motivational and expectancy sets needed for successful social adaptation. It also reflects having an ability to take another's perspective concerning a situation, learn from past experiences, and apply that learning to the change in social interactions (*Denzil*, 2007). Social competence as an attainment of relevant social goals in the specified social contexts using appropriate means and resulting in positive development outcome (*Ford*, 1982). Social intelligence plays a pivotal role in social interaction. It is very important to teach adolescents different social skills. Social skills help in overall development of adolescents and can help them while making friends, establishing rapport with teachers and getting along with everyone. Good social skills are critical to successful functioning in life (*Semrud*,2007). These skills enable us to know what to say, how to make good

choices and how to behave in diverse situations. The extent to which children and adolescents possesses good social skills, can influences their academic performance, behaviors, social and family relationship and involvement in extra curricular activities (*Kathryn*, 1991). The social skills are also linked to quality of school environment and safety. In all societies adolescence is a time of growing up, of moving from the immaturity of childhood into the maturity of the adulthood(*Rotheram*, 1987). It is characterized by rapid physiological changes and psychosocial maturation. As adolescents mature cognitively, their mental process becomes more analytical. They are now capable of abstract thinking, better articulation and of developing an independent ideology. It is very important on the part of the teacher to teach and develop good social skills among school going adolescents because social skills help in overall development of the personality and establishing rapport with teachers and getting along with everyone. Moreover, for getting socially and educationally mature,decide on the best response to a situation and enacting the chosen response.

Survey of related literatures

Bhatt and Aminabhavi (2011) conducted a study on home environment and psychosocial competence of adolescents. The objective of this study is to observe the significant impact on the psychosocial competence of adolescents. It is observed that most of the dimensions of psychosocial competence are significantly correlated with most of the dimensions of home environment.

Gordon (2012) conducted a study on key competence development in school education in Europe. The objective of this study is to develop the ability to study independently and improve knowledge as well as create motivation for lifelong learning and a purposeful carrier. This study observed that how the creative partnership program had affected student's well-being and degree to which creative approaches had become embedded in areas of curriculum other than those directly involving creative practitioner

Brain (2001) conducted a study on adolescents' social competence. The findings of the study suggest that the social identity of younger adolescents was still dependence on their recent experiences in a variety of relationships, whereas the parental relationship was the predictor for the older cohort.

Mehlon (2005) conducted a study on social competence and emotional behavior problem in 6-16years old Swedish school children. A comparison of teacher-rating and self-rating among adolescents. Social competence was investigated and were higher than teacher rating. The study concluded that an adolescent-optimistic bias or a teacher pessimistic bias.

Belle (2008) studied about gender differences in the relational health of youth participating in an social competence program and to explore the effect of previous participation in social competence program. The sample of the study was 153 middle schools who reported having recent and consecutive exposure to the program in elementary school.

The study shows a consistent pattern of evidence that sustained participation in social competence program during elementary school encourages the development of quality relation with peer friends, mentors and communities among boys as they start into their middle school years.

Objective of the study

- To explore the differences in various dimensions social competency among school going male and female adolescents studying in urban and rural government secondary schools.

Hypotheses

- There exists a significant difference in social competency among school going male and female adolescents studying in rural government secondary schools.
- There exists a significant difference in social competency among school going male and female adolescents studying in urban government secondary schools.
- There exists a significant difference in various dimensions of social competency among school going male and female adolescents studying in rural government secondary schools.
- There exists a significant difference in various dimensions of social competency among school going male and female adolescents studying in urban government secondary schools.

Methodology

The present study is descriptive in nature and survey method has been used.

The Sample

All school going adolescents studying in different secondary schools in Hoshiarpur district of Punjab constitutes the population for the present study. The investigator has selected 200 school going adolescents studying in class-X and the age group of the students ranged between 13 to 15 years taking into account 20 secondary schools as sample by using simple random sample technique.

Tool Used

In order to gather information social competence scale by *Prof. V.P. Sharma, Dr.Kiran Shukla, Dr.Prabha Shukla* was used.

Data Analysis

Result pertaining to difference in social competency of school going male and female adolescents studying in different rural government schools

To find out the difference in social competence of school going male and female adolescents studying in different rural government schools,t-test was applied and the result is presented in table no.1

Table 1

Result showing the difference in social competence of male and female rural adolescents

Gender	N	M	SD	SEd	t-ratio
Male	60	188.4	25.5	4.59	1.34
Female	60	194.5	24.8		NS

It is evident from the table 1 that the obtained t-value is 1.34 which is found to be insignificant.Therefore,it can be interpreted that there exists no significant difference in social competence of school going adolescents studying in rural government schools.

To find out the difference in social competence of school going male and female adolescents studying urban government schools, t-test was used and result is presented in table 2

Table 2

Result showing the difference in social competence of school going male and female urban adolescents

Gender	N	M	SD	SEd	t-ratio
Male	40	165.9	32.2	5.59	2.58
Female	40	151.5	14.6		

It is evident from the table no. 2 that the obtained t-value is 2.58 which is found to be insignificant. Therefore, there exists no significant difference in social competence of school going adolescents studying in urban government schools.

To find out the difference in various dimensions of social competency of school going male and female adolescents studying in rural government schools,t-test was applied and the result is presented in table 3.

The table no 3 shows that the obtained t-value in all dimensions of social competence is less than the table values. Therefore, it can be interpreted that there is no significance differences in various dimensions of social competency among school going adolescents studying in rural government secondary schools.

Table no. 3
Result showing the difference in social competency of school going males and females rural adolescents

Type of School	Dimensions of Social Competence	Gender	N	M	SD	SEd	t-ratio
Rural Secondary Schools	Social Sensitivity	Male	60	8.65	1.022	0.19	1.08
		Female	60	8.85	1.147		
	Social Maturity	Male	60	48.66	8.88	1.60	1.58
		Female	60	51.21	8.70		
	Social Skills	Male	60	16.15	2.32	0.39	0.12
		Female	60	16.10	2.04		
	Social Relation	Male	60	10.85	2.46	0.43	0.30
		Female	60	10.98	2.30		
	Social Commitments	Male	60	3.28	1.19	0.21	0.01
		Female	60	3.28	1.15		
	Social Appreciation Ability	Male	60	3.71	1.20	0.21	0.46
		Female	60	3.81	1.12		
	Social Emotional Integrity	Male	60	7.36	1.87	0.32	0.97
		Female	60	7.68	1.68		
	Social Involvement	Male	60	3.95	0.64	0.13	0.24
		Female	60	3.98	0.81		
	Social Respectability	Male	60	8.16	1.15	0.22	1.97
		Female	60	7.71	1.34		
	Social leadership	Male	60	11.36	2.04	0.38	1.04
		Female	60	11.76	2.16		
	Social Cooperation and Compliance	Male	60	3.88	0.90	0.16	0.68
		Female	60	4.00	0.95		
	Social Acceptability	Male	60	4.15	0.73	0.14	0.56
		Female	60	4.06	0.88		
	Social Tolerance	Male	60	20.61	5.16	0.92	2.02
		Female	60	22.48	4.93		
	Social Competition	Male	60	18.86	2.80	0.47	1.11
		Female	60	19.4	2.42		
	Social Authority	Male	60	4.30	0.69	0.13	0.25
		Female	60	4.26	0.73		
	Adult Resource Exploitability	Male	60	4.00	0.63	0.12	0.55
		Female	60	4.06	0.68		
	Social Participation	Male	60	3.11	1.31	0.24	2.52
		Female	60	3.73	1.36		
	Pro-social Attitude	Male	60	7.25	1.40	0.28	0.52
		Female	60	7.10	1.72		

(Table value at 0.05 and 0.01 level of significant is 1.98 and 2.62)

To find out the difference in various dimensions of social competency of school going male and female adolescents studying in different urban government secondary schools, t-value was applied and the result is presented in table no.4

It is evident from the table no 4 that the obtained t-value in the dimension of social leadership is 3.97 and in social authority is 2.93 respectively, which are found to be significant.

Table no 4
Result showing the difference in various dimensions of social competency of school going male and female urban adolescents

Type of School	Dimensions of social competence	Gender	N	M	SD	SEd	t-ratio
Urban Secondary Schools	Social Sensitivity	Male	40	7.95	1.75	0.38	2.51
		Female	40	6.97	1.71		
	Social Maturity	Male	40	43.35	9.20	1.68	1.96
		Female	40	40.05	5.35		
	Social Skills	Male	40	13.77	3.46	0.68	1.53
		Female	40	12.72	2.59		
	Social Relation	Male	40	9.30	2.68	0.52	1.97
		Female	40	8.27	1.90		
	Social Commitments	Male	40	2.85	1.14	0.25	0.60
		Female	40	2.70	1.09		
	Social Appreciation Ability	Male	40	2.40	1.35	0.27	0.92
		Female	40	2.65	1.05		
	Social Emotional Integrity	Male	40	6.325	2.16	0.42	1.60
		Female	40	5.65	1.54		
	Social Involvement	Male	40	3.05	1.31	0.26	0.18
		Female	40	3.00	1.03		
	Social Respectability	Male	40	6.30	2.26	0.42	0.29
		Female	40	6.42	1.43		
	Social leadership	Male	40	10.57	2.14	0.50	3.97
		Female	40	8.57	2.35		
	Social Cooperation and Compliance	Male	40	3.22	1.04	0.22	0.44
		Female	40	3.12	0.96		
	Social Acceptability	Male	40	3.05	1.06	0.23	0.52
		Female	40	2.92	1.07		
	Social Tolerance	Male	40	20.5	4.30	0.85	2.19
		Female	40	18.62	3.27		
	Social Competition	Male	40	16.00	3.72	0.68	1.72
		Female	40	14.82	2.14		
	Social Authority	Male	40	4.22	0.73	0.21	2.93
		Female	40	3.60	1.12		
	Adult Resource Exploitability	Male	40	3.32	1.14	0.21	1.39
		Female	40	3.02	0.73		
	Social Participation	Male	40	3.27	1.06	0.21	2.31
		Female	40	2.77	0.86		
	Pro-social Attitude	Male	40	6.47	2.36	0.48	1.84
		Female	40	5.575	1.97		

(Table value at 0.05 and 0.01 level of significant is 1.98 and 2.62)

Findings:

- There exists no significant difference in social competency of school going male and female adolescents studying in rural government schools.
- There exists no significant difference in social competency of school going male and female adolescents studying in urban government schools(Brain,2001 and Bhatt, 2011).

- There exists no significant difference for school going male and female rural adolescents in social sensitivity, social maturity, social skills, social relations, social commitment, social appreciation ability, socio emotional integrity, social involvement, social respectability, social leadership, social cooperation, social competition, social authority, adult resource exploitability, pro social attitude.
- There exists no significant difference in various dimensions of social competence among school going male and female adolescents studying in different urban government schools, except in the dimensions of social leadership and social authority respectively.

REFERENCES

Annnderson,S.andMessick,S.(1974).Social competence in young children. *Developmental Psychology*,1974,282-293.

DenzilSaldanha (2007).*Education of Adolescents For Development In India*, SirDarabjit Tata Trust, Mumbai.

Gresham, F. M . &Reschly, D. J. (1987). Dimensions of social competence: Method factors in the assessment of adaptive behavior, social skills, and peer acceptance *Journal of School Psychology*25, 367-381.

Gottman.J.&Rasmussen, B.(1975). Social intraction, social competence, *Child Development* 46, 709-718.

Hughes, J. N.& Hall, R. J. (1987). Proposed method for the assessment of children's social competence, *Professional School Psychology* 2(4), 247-260.

Kathryn, R. W. (1991). Social competence at school: relation between social responsibility and academic achievement, Review of *Educational Research* 6(1), 1-24.

Kennedy,J. H. (1988).Issues in the identification of socially incompetent children, *School Psychology Review* (712) 276-288.

Ladd,G. W. (1999). Peer relationship and social competence during early and middle childhood, *Annual Review of Psychology* 50 , 333-359.

Nagarajan, N. (2010). Adolescence and family life education.Shipra publications, New Delhi-110002.

RajpalKaur (2006).*Adolescent Psychology New Trends &Innovations,*F-159,Rajoury garden, New Delhi-110027

Rajamanickam, M. (2007). Behavioral problems in adolescent period.Authorspress publishers, Laxminagar, Delhi-110092.

Rotheram,M.J.(1987). Children's social and academic competence.*Journal and Educational Research,*80(4),206-211.N. (2010).

Rout, G. (2010). Adolescence education. APH Publishing corporation, New Delhi-110002.

Schneider,B.H,(1993). Children's social competence in context:the contributions of family,school and culture.NewYork:Pergamon Press.

Article Received on	**14.12.2015**	**Reviewed on**	**14.02.2016**
Observations reflected on	**21.02.2016**	**Modified on**	**28.03.2016**

*** *Dr. Prakash Chandra Jena* : Professor, School of Education, Lovely Professional University, Phagwara, Punjab.**
Email: drpcjena@gmail.com

EDUSEARCH
ISSN: 0976-1160
Vol. 7, No.1, Apr. 2016

Dr. Bibhuti Narayan Biswal*

Abstract

In this paper an attempt has been made to explore Science education in India and abroad and its development in India in particular. The major objectives were to study the correlation between science education and impact on growth of science in India. To know about the purpose of science education and its growth in India since four decades, to find out what factors that affect science education, to determine the strategy to promote science education, to explore the fact whether learning about science at school has been helpful or useful in our everyday life and pursuing higher sciences. For the present study the researcher has collected nine related research on Science Education efforts in India & abroad which is of paramount importance for the topic of search. They were taken for the meta analysis through purposive sampling technique.

Introduction

"Believe nothing, merely because you have been told to, or because it is traditional, or because you yourself have imagined it. Do not believe what your teacher tells you... merely out of respect for the teacher. But whenever after due examination and analysis you find conducive to the good, and benefit the welfare of all beings, that doctrine believe and cling to and take it as your goal." – *Buddha.*

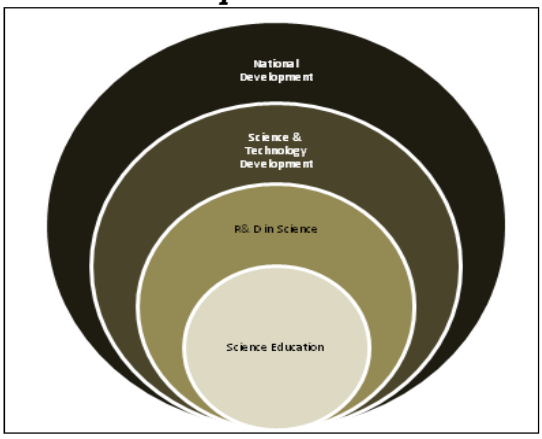
Scientific Policy Resolution (1958) reiterates the fact that Science has led to the growth and diffusion of culture to an extent never possible before. It has not only radically altered man's material environment, but, what is of still deeper significance, it has provided new tools of thought and has extended man's mental horizon. It has thus influenced even the basic values of life, and given to civilization a new vitality and a new dynamism. The organic link between science and human civilization can only be well understood through the system called Science education(**ScE**).Science

Education is a common theme that links all these activities of science like research, teaching, innovation in science, progress in science, knowledge creation etc. The main aim of science education is to lay emphasis on creating importance of having a critically large and competent scientific bent of workforce for the national development. This means that one needs to impart a modern and sensible science education across a wide cross-section of youth in order that they might reasonably develop themselves as scientists or scientifically inclined people of the next generation.

During the last fifty years, every aspect related to science education, whether it be student enrolment, number of educational institutions, and the number of teachers have recorded ten-fold growth. As science education is a continuum, it is necessary to consider its growth and its consequences right from the school level. Science education research is not conducted within one paradigm because there are too many fundamental differences about the nature of science education.

Nevertheless, Science Education Research may constitute issues like: Educational Technology, Curriculum, Learning Environments, Teacher Education, Assessment and Evaluation,

Figure 1Science Education & National Development



Equity, History and Philosophy of Science etc.

Research methods in science education draw on perspectives from philosophy, psychology, sociology, as well as history, anthropology and economics. In order to bring such coherency in science education & its philosophy-psychology, one must imagine that foundation is required for which efforts must be laid during schooling phase. It is in this contexts school science education needs to respond to a changed social context and to help prepare young people to contribute as citizens to shaping the world in which they will live" (*Jenkins*, 1999).

The widening gap between Science and Science Education

Science subjects are part of the overall educational provision in school as well as college/University level. Science (or science subjects) was included in the school curriculum to provide a background for students to better cope if they chose to study science subjects at university (*Fensham*, 2008). Science content acquisition cannot simply be called as Science Education because the latter encompasses holistic objective of education. Today Science and Science education is mostly misunderstood by academia and policy makers which has caused serious chaos and confusion in the system of education.

According to *William Haley*, Education would be much more effective if its purpose was to ensure that by the time they leave school every boy and girl should know how much they do not know, and be imbued with a lifelong desire to know it. Therefore it is the development of: cognitive abilities, personal attitudes, personal aptitudes (behaviour/skills), communication skills, social values, social skills and aspects of self-efficacy. These goals are not targeted at any subject discipline in particular, but are expectation to be gained from education as a whole.

Science Education (**ScE**) aims to develop a capacity to learn, to think scientifically and make sense of their world, to solve scientific problems though planning, collaborating and communicating thus preparing for lifelong learning and to develop aspirations to reach their true potential. Also it inculcates personal values attributes, perseverance, ingenuity, safe working for oneself and for others, and a willingness to participate. These important personal attributes preparing for potential life roles are often neglected in science teaching. Learning to work for the common good, rather than individual isolationism, teamwork in science activities and through participation in scientific discussions, reasoned socio-scientific decision-making and in striving for consensusare the distinguishing features of science education. **ScE** draws attention to the need to develop life skills, where abilities gained in science lessons can be building blocks for capabilities in life beyond school (*Holbrook*,2010).

Time has riped for all of us to bridge the gap between Science & Science Education. So we need to move away from a content-led teaching direction to one that focuses on the needs and motives of students for learning through science subjects. This can be expressed as society-focussed, socio-scientific issues led (*Zeidler & Keffer*, 2003) or education through science', where the science is the important vehicle for learning.

Revisiting our Science Education System to ensure Sustainability

Kofi Annan, the former secretary General of UN (2001) says, "Our biggest challenge in this century is to take an idea that seems abstract... Sustainable development... And turn it into really for all world's people". In other words Sustainable development is a process which enables all people to realize their quality of life in ways which protect and enhance the earth's life support system."

In succinct, we can say that Sustainable development is the systematic development eying the future which emphasizes harmony between

Nature ⟷ Man, Man ⟷ Man,
Man ⟷ Society , Limits ⟷ Aspirations,
Nature's Capacity ⟷ Human Needs,
Reality ⟷ Expectations ,
Science ⟷ Culture , Present ⟷ Future.

Science education can bring such coherence between present needs & future demands which cannot be ignored any more. Our country has several natural advantages for sustainable development in science education as well. A major one is the youthfulness of India's population which currently has a median age of 25 years. The number of Indians in the university-going age group (between the ages of 17 to 21) is currently about 9 crores (90 million), and will be 10 crores or more in 2025: the demographics will still be dominated by youth. Only 13% are enrolled in higher education today. There is therefore vast scope for expansion in all dimension of science education.

Rationale

1. India's *relative* position in the world of science has declined in the last twenty years. We produce more science than before, but several more ambitious countries like China and S. Korea have outpaced us.
2. During 2004-06, India has produced one research scientist for every 7100 people; China 1 in 1080, S. Korea 1 in 240, Sweden 1 in 163. In 2005-06, India produced about 1000 Ph.D's in engineering and technology, whereas the US and China were already producing about eight times as many in 2004-05. This shows the enormous magnitude of the problem. In areas such as computer science, the situation is serious, with only 25 or so Ph.D.'s being produced per year in India.
3. When compared with what other countries, notably China, have achieved

within a similar time period, the Indian contribution is singularly lacking in both quality and quantity.

4. There are fewer students choosing teaching as a first career and there also is a problem of aging teachers in the field of Science Education.
5. India Science Report 2005 reveals shocking picture of Indian science and Technological growth. At the class VI to VII level, 22% of the students said they would like to study pure science at higher levels of education. Yet, when it came to students in class XI and XII, just 13.4% wanted to study pure science at the graduate/postgraduate level.

For Learners:ScE has long been recognised that meaningful learning strategies are necessary if high quality learning outcomes are to be achieved. ScE promises that kind of learning environment most likely it will not encourage such learning strategies that hasnot been changed over the last twenty years.

For Teachers: ScE emphasises education cannot be developed in a vacuum. It needs a context and this context, inevitably in science lessons, involves science content and science conceptual learning. Thus teacher in Science Education must understand the said correlation.

For Teacher Educators: ScE Brings diversity of means of transaction of science to learners in order to make it life long process rather than cut paste approach.

For Curriculum Planners: Enables curriculum planners to look into alternative ways of learning like constructivism, deep concept approach, argumentation technique etc.

For Principals: ScE Provides plethora of opportunity to ensure learning rather than cramming of information and motivates for making constructive strategies to make learning a joyful process.

Objectives

- To study the correlation between science education and it's impact on growth of science in India.
- To know about the purpose of science education and its growth in India since four decade
- To find out what factors that affect science education ?
- To determine the strategy to promote science education.
- To explore the fact whether learning about science at school has been helpful or useful in our everyday life and pursuing higher sciences.

Review of Related Research :

Many researches have been done trying to assess the need and aim of ScE. This is going to be a challenge for researcher due to which he has selected nine researches pertaining to the topic.

Cobern, Wm. W. (1996) conducted a study" *Constructivism and Non-Western Science Education Research"***.** The author argued that science education research and curriculum development efforts in Nonwestern countries can benefit by adopting a constructivist view of science and science learning. The past efforts at transferring curricula from the West, and local development projects that result in curricula only marginally different from Western curricula, stem from an acultural view of science. These efforts also ground science learning in concepts of logical thinking rather than understanding. The resulting level of science learning, however, has not met expectations. Constructivism offers a very different view of science and science learning. It assumes that logical thinking is an inherently human quality regardless of culture, and instead focuses attention on the processes of interpretation that lead to understanding. Constructivism leads one to expect that students in different cultures will have somewhat different perspectives on science. Science education research

should inform curriculum projects that incorporate this point, thus making science curricula authentically sensitive to culture and authentically scientific. Japanese elementary science education based on the Japanese traditional love of nature is a good example.

Reinders Duit(1996) studied *"The constructivist view in science education – what it has to offer and what should not be expected from it"***.** There is certainly something fashionable about constructivism in science education now a days. It is further true that constructivism is by no means a consistent movement, there are many variants of this view in use. Further more, it appears that constructivism, for some science educators, in any case, has become the new ideology of science education that provides a cure for every problem of teaching and learning science. But without any doubt constructivism has become also a most valuable guideline for science education — for science teaching and learning as well as for research in these fields.

Wafia Masih (2012) examined " Efforts Towards Popularisation and Public Understanding of Science: A Literature Review of 30 publications". This article reviews different approaches taken by scholars and researchers in popularizing science for the common people. The review considers a wide spectrum of popularization methods for bringing Scientists, Industry, Government Organizations, R&D laboratories together for creating a scientific temper by encouraging science communication and popularizing the same, on a larger portfolio. Though work on science popularisation is being carried out world-wide, it is still found to be less than the total recorded research found in scholarly journals. Scientific discoveries outnumber popularising these discoveries in other words; more emphasis must be given to bring in trained science communicators in all scientific institutions and laboratories where work on scientific discoveries is taking place. The need to press on non scientific articles from scientific discoveries must be taken as a serious concern by the policy makers. The gap between scientific discovery and popularising that discovery should be reduced. Doing this, will encourage a revolutionary change not only in the mind sets of people but it will also benefit the economic policies, government politics, literacy ration, difference of opinion, political environment, inflation and much more besides creating a paradigm shift in corrosive factors like pollution, fuel, energy etc.

Gautam R Desiraju (2008) conducted a review study entitled *"Science Education and Research in India"* with an objective to identify the problems associated with science education (i.e research & teaching, Science and engineering, curiosity & courage), role of IITs, Central Universities, IISERs, State Universities, Research Institutes, Administration & bureaucracy, Non governmental Involvement etc. Major findings of the study reveals that:Many aspects of the Indian scientific development are extremely unsatisfactory, lacking in both quality and quantity. Although the outreach of teaching and research programmes has increased considerably, populist political themes are favoured and special institutions have been created where research is undertaken independent of the university system. This article reviews the present scene inscience education, and identifies the major problems and the challenges confronting the institutions involved in education and research. It suggests that the government should restrict itself to broad policy issues rather than be involved in day-to-day affairs and the university should be re-established as the primary agency for education and research.

Inderpal, A. K. Saini and Rajesh Luthra (2011) conducted a research on '*Demographic variations in basic science education in India: a case study of CSIR UGC national eligibility test*, whose abstract is as follows. This article explores the demographic variations in basic science education across the country on the basis of the CSIR–UGC national eligibility test (NET) held during the period 2002–2006. The states, representing different demographic zones, were ranked according to the number of qualifying students and the percentage selected. A simple scatter plot of selection versus enrolment shows that Delhi and West Bengal perform better than the norm, whereas Kerala and Tamil Nadu relatively underperform. The data envelopment analysis technique has been employed to further examine the relative efficiency of basic science education, in terms of the number of students qualifying NET in five subjects, viz. chemical sciences; earth, atmospheric, ocean and planetary sciences; life sciences; mathematical sciences, and physical sciences, across different states of the country. The position of a particular state on the efficiency frontier could serve as a measure of capacity building in these disciplines. These vast differences in efficiency scores across different states and union territories indicate the need for directed efforts to upgrade the overall standard of basic science education in the country. A transparent, accountable, discipline-specific quality assurance system would ensure the best educational outcome. Emergence of two states, viz. Delhi and HP, with contrasting demographic profiles, on the efficiency frontier may serve as a role model for other states to imitate.

Cakir Mustafa (2008) conducted a study on *"Constructivist Approaches to Learning in Science and Their Implications for Science Pedagogy: A Literature Review"*. This paper draws attention to the literature in the areas of learning, specifically, constructivism, conceptual change and cognitive development. It emphasizes the contribution of such research to our understanding of the learning process. This literature provides guidelines for teachers, at all levels, in their attempt to have their students achieve learning with understanding. Research about the constructive nature of students' learning processes, about students' mental models, and students' misconceptions have important implications for teachers who wish to model scientific reasoning in an effective fashion for their students. This paper aims to communicate this research to teachers, textbook authors, and college professors who involved in the preparation of science teachers. This paper is divided into two major parts. The first part concentrates on a critical review of the three most influential learning theories and constructivist view of learning and discusses the foundation upon which the constructivist theory of learning has been rooted. It seeks an answer to the question of "What are some guiding principles of constructivist thinking that we must keep in mind when we consider our role as science teachers?". The second part of this paper moves toward describing the nature of students' alternative conceptions, the ways of changing cognitive structure, and cognitive aspects of learning and teaching science.

Shashi, P (2010) undertook a study namely "*Characteristics of a Constructivist Classroom in the Context ofScience Education"* Major findings of the study are : constructivist classroom of science exhibits some marked features that are different from a traditional classroom. National Curriculum Framework-2005 emphasises on an environment in the

science classroom which is conducive for constructivist learning. The classroom environment is maintained in such a way that students actively participate in learning which involves inventing and constructing knowledge and new ideas. Teacher applies various approaches to teaching learning process in order to make her students inquisitive thinkers, whoquestion, reason, reflect, make association with prior learning, imagine and think. In the present paper some characteristics of a constructivist classroom in the context of science education like : learning environment, child centered instruction, learner centered assessment , learners previous knowledge & its role in constructivism are discussed.

Treagust David F. (2004) studied "International Trends in Science Education Research. The author has examined some of the unprecedented developments in science education research in the past three decades (1974-2004). The findings are : in the last 30 years, there has been a huge increase in international professional research activities, resulting in an increased output of publications in science education research from a wide rrange of nations, and an increased amount of professional development initiatives. At the classroom level throughout the past 30 years, there has been a constant call for more relevant science education and for greater inclusivity in science education. During this period, there has developed a great diversity of the types of research being conducted in science education. At one end of this spectrum are large-scale assessment programs (as is illustrated by the Trends in Mathematics and Science Studies (TIMSS) and the Program for International Student Assessment (PISA) studies which provide bothnational data and international comparisons). At the other end of this spectrum are small-scale studies of the work of science teachers in individual classrooms. To be able to conduct studies of this range, over the past three decades, there has been an increasing acceptance of alternative genres of science education research and an acknowledgment of their own strengths and weaknesses. Despite all the developments in science education curricula, assessment and research, thereis still need for a greater understanding of the relationships between policy and practice and a realistic expectation of what science education research can contribute to practice. This certainly should be a major part of the work of science educators in the next three decade.

Holbrook, J.(2010) investigated " Education through science as a motivational innovation for science education for all". According to him science was introduced into the school curriculum to enable students, who were entering university to study science related subjects, to gain some background knowledge before beginning studies at the university level. Unfortunately this view is still very prevalent among policy-makers and teachers today. And this is so, even though science subjects have become part of 'education for all' and, in most systems, science have become compulsory for primary school students. This paper considers the roles of science education as expressed in curriculum documents and in educational standards. It notes the often expressed target of science education as enhancing scientific literacy and puts forwards views on what is meant by this expression Also noted is the comment in the UNESCO booklet on the Eleven Emerging Issues in Science Education (Fensham, 2008, p.8 and 27) that the term 'scientific

literacy' should no longer be used. The papers argues that policy-makers and teachers should rethink their vision of science in the school curriculum and accept the view that the teaching of science subjects is part of the overall educational provision and must not be viewed in a different philosophical light from other subjects. If education is the target, then the philosophy for the teaching of science subjects must be, it is argued, 'education through science'. This view represents a paradigm shift in the purpose of school science education from the historical view. The new vision is put forward as an essential step if school science education is to play a meaningful role for the majority of students, especially girls, in 21st century education.

Sample and Population

For the present study the researcher has collected nine related research on Science Education efforts in India & abroad which is of paramount importance for the topic of search. They were taken for the meta analysis through purposive sampling technique. The researches on Science Education for school and college/ universities both in on line and off line are the population for the present study.

Methodology of the study:

Keeping in view of the importance of the topic due to its multifarious impact on today's S & T developments in India, the researcher has selected nine research studies so as to draw out the findings on various objectives that is being set.

Data analysis:

The researcher analysed the ninestudy purposively to find out suitable outcome for which the study is aiming at.

Major Findings

Nature of science: Factual memorisation and teacher-structured learning are the main transmission modes in science classrooms, the education provision becomes distorted and the nature of science is poorly addressed. A factual approach is very likely to see scientific information as the 'truth', lacking any degree of tentativeness and not appreciated as being the best understanding we currently have, but subject to change in the light of new evidence. Poor science teaching, over-emphasising scientific ideas as proven fact, is also in danger or portraying a false image of the manner in which science progresses *(Holbrook, 2010).*

Scientific Literacy: Though science popularisation is being carried out world-wide, it is still found to be less than the total recorded research found in scholarly journals. Scientific discoveries outnumber popularising these discoveries in other words; more emphasis must be given to bring in trained science communicators in all scientific institutions and laboratories where work on scientific discoveries is taking place (*Wafia*, 2012).

Equity and Urban/Rural Issues in Science: Universities like JNU & Delhi and few universities of West Bengal perform better in CSIR-UGC- NET than the norm, whereas Kerala and Tamil Nadu relatively underperform. These vast differences in efficiency scores across different states and union territories indicate wide disparity in quality of higher education dispensed to students which need for directed efforts to upgrade the overall standard of basic science education in the country. A transparent, accountable, discipline-specific quality assurance system would ensure the best educational outcome *(Inderpal, et.al.* 2011).

Science Education & Culture: Science education (Constructivism) leads one to expect that students in different cultures will have somewhat different perspectives on science.

Science education research should inform curriculum projects that incorporate this point, thus making science curricula authentically sensitive to culture and authentically scientific (*Cobern*,1996**).**

Constructivist views of learning/ teaching:

Constructivism, for some science educators, has become the new ideology of science education that provides a cure for every problem of teaching and learning science. But without any doubt constructivism has become also a most valuable guideline for science education — for science teaching and learning as well as for research in these fields (*Duit*,1996). Research about the constructive nature of students' learning processes, about students' mental models, and students' misconceptions have important implications for teachers who wish to model scientific reasoning in an effective fashion for their students (*Mustafa*, 2008).

Science Education Research in India:

Many aspects of the Indian scientific development are extremely unsatisfactory, lacking in both quality and quantity. Although the outreach of teaching and research programmes has increased considerably, populist political themes are favoured and special institutions have been created where research is undertaken independent of the university system (*Desiraju*,2008).

SER Worldwide:

In the last 30 years, there has been a huge increase in international professional research activities, resulting in an increased output of publications in science education research from a wider range of nations and an increased amount of professional development initiatives. At the classroom level throughout the past 30 years, there has been a constant call for more relevant science education and for greater inclusivity in science education (*Treagust*,2004).

Classroom Environment & Attitude :

The classroom environment in constructivist science class is maintained in such a way that students actively participate in learning which involves inventing and constructing knowledge and new ideas. Teacher applies various approaches to teaching learning process in order to make her students inquisitive thinkers, who question, reason, reflect, make association with prior learning, imagine and think (*Shashi,* 2010).

Discussion:

From the above findings it is apparent that Indian science Education development are extremely unsatisfactory, lacking in both quality and quantity. Further factual memorisation and teacher-structured learning distorts the understanding of nature of science. Scientific discoveries & popularising science must go hand in hand as the imbalance may cause catastrophe for science education. There is widespread disparity in quality of higher education dispensed to students which need for directed efforts to upgrade the overall standard of basic science education in the country to ensure equity issues. Science education research should be on a platform where in curriculum become sensitive to culture as culture nurtures the society. Teaching learning in ScE must be constructivism way wherein students actively participate in learning which involves inventing and constructing knowledge and new ideas. Also it provides a cure for every problem of teaching and learning science& it has become also a most valuable guideline for science education — for science teaching and learning as well as for research in these fields**.** In nutshell ScE must be having strong foundations like:

- *Personal Values Development through Science,*
- *Intellectual development through Science,*
- *Social Values development through Science,*

- *Science Communication Literacy,*
- *Science & Technology Literacy.*

The only way we can ensure that quality of Scientific output is increasing, more scientists, more patents, more PhDs etc in science education. The author suggests Quadrilateral model of Science education as illustrated in fig.2.

Conclusions

It is widely acknowledged that India is among the few nations that have demographic advantage, with a large number of young citizens. Thus, it is vital that our youth are provided the necessary training to enable them to compete globally. Despite all the developments in science education curricula, assessment and research, there is still need for a greater understanding of the relationships between policy and practice and a realistic expectation of what science education research can contribute to practice. Expansion of science popularization activity, reform in pedagogical process, integration of research with ScE need immediate overhaul. Commitment to reform is like any other change requires more than the decision to do so in order for it to happen. If education is the target, then the philosophy for the teaching of science subjects must be, it is argued, 'education through science'. Thus a paradigm shift in the purpose of school science education must be envisioned so as to reenergize, empower millions of students pursuing science in future thereby ensuring national development.

Recommendations:

Liberating Science from bureaucratic apathy*:*

One of the necessary conditions for progress in Science Education is the elimination of bureaucratic hurdle. This is required in the central government and even more so in the state government level.

Bringing up world class school:

The best school systems are not to be found in the countries which have done a great deal of research on education systems, nor in the ones who pay teachers the highest salaries, but to attract the best teachers to the profession. In South Korea, primary school teachers come from the top 5% of the graduating class in the 4-year undergraduate programmes undertaken in 12 selected universities. No more than the required number of teachers is taken every year. For instance in countries like South Korea, Finland and Singapore the teaching profession is competitive, difficult to get into, and prestigious. Teachers undergo special training programmes every year. Failing pupils get attention, through separate programmes designed specifically for them. India needs such kinds of schooling to develop its vast young human capital in 21st century.

Framework for world class science Education: We have to establish a proper faculty promotion policy. Keep out political interference. Welcome private investment and support from private wealth. Assemble a diverse student body balancing excellence and inclusion. Combine undergraduate teaching and world-class research.

Bring the best Mind: According to *James Conant* of Harvard University the basis of building great institution is to *"Get the best minds and leave them alone"*. Thus incentivize Science Education Research, Popularization programmes then only best minds will be attracted for such purpose.

Empower Communication Literacy

Communication literacy deals with critical understanding of various tools of available communication modes and the ability to use these has to be an important feature of today's knowledge society (*Kundu*, 2013).Only a communication literate citizenry can make optimal use of the available knowledge for sustainable

development. For India to be globally competitive in the twenty-first century, a critical factor would be our ability to harness our knowledge potential. With 550 million people below the age of 25, our human capital is our greatest asset. To best utilize this bourgeoning potential the country needs a knowledge oriented paradigm and focused capacity and quality building in the field of education (NKC,2008). More amount of Science Technology Literacy (STL) must be the priority area for better Science Education in our country.

Educational Implications

Implications for Science Pedagogy

The origins of Constructivism , deep concept approach lie in students' diverse personal experiences, which include observation, perception, culture, language, prior teachers' explanations, and prior instructional materials. Students hold tenaciously onto these alternative conceptions in the face of traditional formal instruction. Therefore our pedagogical process in **ScE** must integrate constructivism.

Implications for Teacher Education

Perhaps, teaching teachers instructional strategies that foster conceptual change is the most difficult of the tasks, largely because most of the cognitive research effort to date has focused on studying learning rather than instruction. Yip (1998) suggested that, teacher education programs should aim at equipping science teachers with the following knowledge and skills: What science educators have found out about students' misconceptions in science, Methods for diagnosing misconceptions held by students before and after instruction &Designing instructional strategies that tackle students' misconceptions which involves planning and structuring curriculum materials and learning activities using the constructivist approach that aims at promoting conceptual changes and development, such as the use of examples and analogies, cognitive conflicts, concept maps, demonstration sand student activities. Our Teacher training courses should provide learning experiences for teachers to refresh and consolidate their understanding on certain difficult concepts of the school curriculum.

REFERENCES

Cakir,Mustafa.(2008). Constructivist Approaches to Learning in Science and Their Implications for Science Pedagogy: A Literature Review, International Journal of Environmental & Science EducationVol. 3, No. 4.

Desiraju G.R., (2008). Economic & Political Weekly June 14. Janapath, Bapujee Bazar, Bhubaneshwar

Fensham, P. (2008). *Science education policy-making.* Paris: UNESCO.

GOI (2008). Towards a Knowledge Society; published by the National Knowledge Commission; 2008; Government of India.

Holbrook, J., (2010). Education through science as a motivational innovation for science education for all, Science Education International.Vol.21, No.2, 80-91.

Inderpal, A. K. Saini and Rajesh Luthra (2011). Current Science, vol. 101, no. 5.

Jenkins, E. (1999). School science, citizenship and the public understanding of science. International Journal of Science Education, 21, 703-710.

Kundu,V (2013). Promoting Communication literacy education for human development: An Indian entitlement, Science Communicator, January & June. Cochin University of Science and Technology.

Rao,C.N.R., (2010). India as a Global Leader in Science"(2010)Science Advisory Council to Prime Minister, Govt of India

Shashi, P.(2010). Characteristics of a Constructivist Classroom in the Context of Science Education. Journal of Indian Education Vol. XXXVI ,No. 1.

Shukla Rajesh,(2005). India Science Report , NACER, Govt of India.

.

Treagust David F. (2004) studied "International Trends in Science Education Research. Proceeding on International conference on Research Trends in Science, Technology and Mathematics Education (*Review talks delivered at epi STEME-1)by HBCSE at Goa.*

Yip D. Y. (1998). Identification of misconceptions in novice biology teachers and remedial strategies for improving biology learning. *International Journal of Science Education,* 20(4), 461-477.

Zeidler, D.L., & Keffer, M. (2003). The role of moral reasoning and the status of socio- scientific issues in science education: Philosophical, psychological and pedagogical considerations. In D.L Zeidler (ed). *The role of moral reasoning and discourse on socio-scientific issues in science education.* (Netherlands: Kluwer).

Article Received on	**04.02.2016**	**Reviewed on**	**21.02.2016**
Observations reflected on	**28.02.2016**	**Modified on**	**22.03.2016**

*** *Bibhuti Narayan Biswal*** : **Principal, Sri Satya Sai Vidya Niketan, Ganeshwad, Sisodra, Navsari. Gujarat.**
E- mail: bibhuti.nb@gmail.com

EDUSEARCH
ISSN: 0976-1160
Vol. 7, No.1, Apr. 2016

Teaching-Learning Science through NROER: An overview about Physics Content

Dr. Sanjay M. Ayade *

Key Words : National Repository of Open Educational Resources (NROER), Concept Map

Abstract

This research paper provides a glimpse to the NROER with special reference to the subject of Science with special emphasis on Physics content of Elementary and Secondary school level. MHRD (2012) declared the National Policy on Information and Communication Technology and set goals about creating an environment for collaboration, cooperation, sharing and promoting universal, equitable, open and free access to ICT. Central Institute of Educational Technology , National Council of Educational Research and Training and Department of School Education and Literacy has launched National Repository of Open Educational Resources (NROER), which is a digital repository of open educational resources offering resources for all school subjects and grades in multiple languages. The resources are available in the form of concept maps, videos, multimedia, interactive objects, audio clips, talking books, photographs, diagrams and charts, articles, lesson plans and textbook pages.

Introduction

Open Educational Resource (OER) is a new phenomenon which may be seen as a part of a larger trend towards openness in education including more well-known and established movements such as Open Source Software (OSS) and Open Access (OA). The most important aspects of openness are the free availability of resource over the Internet, and recurrence of as few restrictions as possible on the use of the resource by users. There should be no technical barriers (undisclosed source code), no price barriers (subscriptions, licensing fees, pay-per-view fees) and as few legal permission barriers as possible (copyright and licensing restrictions) for end-user. The end-users not only to use or read the resource but also to adapt it, build upon it and thereby reuse it, given that the original creator is attributed for her/his work.

The term Open Educational Resources first came to use in 2002 at a conference hosted by UNESCO. Participants at that forum defined OER as: "The open

provision of educational resources, enabled by information and communication technologies, for consultation, use and adaptation by community of users for non-commercial purposes." Open Educational Resources are digitised materials offered freely and openly for educators, students and self-learners to use and re-use for teaching, learning and research.

OER is said to include the learning content which have full courses, courseware, content modules, learning objects, collections and journals; tools which are software to support the development, use, re-use and delivery of learning content including searching and organization of content, content and learning management systems, content development tools, and on-line learning communities; and implementation resources comprising of intellectual property licenses to promote open publishing of materials, design principles of best practice, and localization of content.

National Repository of Open Educational Resources (NROER)

Keeping in line with the OER movement throughout the world, CIET, NCERT is involved in the development and management of the National Repository of Open Educational Resources (NROER)(Figure1). The National Repository is developed in collaboration with the Department of School Education and Literacy, Ministry of Human Resource Development, Govt. of India. Meta studio, the platform hosting the repository is an initiative of knowledge Labs, Homi Bhabha Centre for Science Education, Mumbai.

Fig. 1.
Interface of National Repository of Open Educational Resources (NROER)

NROER is a solution, developed to address the challenges faced by the education sector of our country. It intends to reach the unreached, include the excluded and extend education to all. It is a collaborative platform involving everyone who is interested in education. It offers resources for all school subjects and grades in multiple languages. It brings together all the digital resources for a school system such as educational videos, concept maps, audio clips, interactive objects, photographs, diagrams, charts, images, articles, learning objects, talking books, textbook pages and documents, any resource that can be served digitally. The major objectives for developing the national repository are:

- To make digital electronic content available for teachers and students.
- To enable the participation of the institutions/organizations, community in development and sharing of digital resources.
- To create mechanism to evaluate digital content.
- To provide platform for teachers and students to participate in online courses.

Licensing process on NROER

Open Educational Resources provide teaching learning fraternity with the quality study materials to facilitate the expansion of learning worldwide. By the use of open licensing the teachers and learners can be liberated from the concerns of the permissions and other conditions attached with the use of content or software. NROER uses

Creative Common license for promoting quality education. Creative Commons has six types of licensees. NCERT has taken the initiative of declaring that NROER carry the CC-BY-SA license instead of CC-BY-SA-NC which contains a more restrictive clause and was advocated by Wikimedia and other advocates of open educational resources. This decision by NCERT is in tune with UNESCO's Paris Declaration on Open Education Resources and will ensure that all the resources are freely accessible to all. To put it in the language of the Creative Commons-to reuse, revise, remix and redistribute.

NROER is based on concepts; the complete structure of it is knitted around the concepts which are extracted from the syllabus text of NCF 2005 of NCERT. The Repository is offering the content for all the levels of school education, starting from Elementary level and proceeding to Secondary and Senior Secondary Levels. In the subject of Science the NROER is starting with Elementary level to Secondary level, there are more than 554 concepts listed in the subject. All these concepts are linked with each other to constitute a concept map. The whole process of development of Science content on the NROER is discussed as under:

1. Identification of concepts

Concepts were identified by thorough study of the Textbooks for specific classes along with the syllabus document of NCF 2005 by in house faculty members and through workshop mode. The concepts were listed out and debated among the group of and the final list of concepts to be shown to public after uploading on NROER was finalised. In the meantime the concepts identified by the internal faculty was also standardised through the workshops by the group of teachers.

2. Concept mapping

As the NROER is based on concepts, it organizes its collections into an ever growing semantic map of concepts. Concept mapping is the essential part of process of development of the repository; therefore the institute is working towards this direction.

The concept map itself is a learning resource for teachers, providing an opportunity for critically assessing the curriculum and aiding the construction of their own unique learning themes for their classrooms. The digital resources are mapped to concepts. This enables access to a library from which teachers can choose appropriate resources. Each resource is tagged to related concepts making accessible for use. The resources can be downloaded, commented upon and are released for free use. The concept maps on NROER are prepared by groups of teachers along with CIET faculty members in workshop mode. The concept maps primarily were sketched on charts or sheets of paper by the group of teachers by making discussions on the different aspects on which the relationships between the concepts constitute in order to produce a complete semantic map. The specialty of concept maps on NROER is that there is inreverse relationship with every relationship among the concepts. The concept maps then were presented in front of the forum of teachers and subject experts for verification, after verification the uploading of concept maps was executed on NROER web site. If command ctrl + click is executed with any concept of the concept map the concept map expands, and on clicking to any concept of the concept map the designated page for the concept opens, which comprises the Concept Name with its definition(s), and other details like related concepts, resources and a comment box, this resultant feature of getting the page for a particular concept is same when we search or browse any concept on the NROER

Adding multiple resources with every concept after linking the concepts with

each other the individual concepts were mapped with available related resources like videos, audio clips, images, documents, etc. (Figure 2).

These resource scan be accessed by the users in various ways, they can view, download, use, reuse, revise, remix and redistribute these resources, but they have to take care of releasing the revised resource again on NROER under CC BY-SA license.

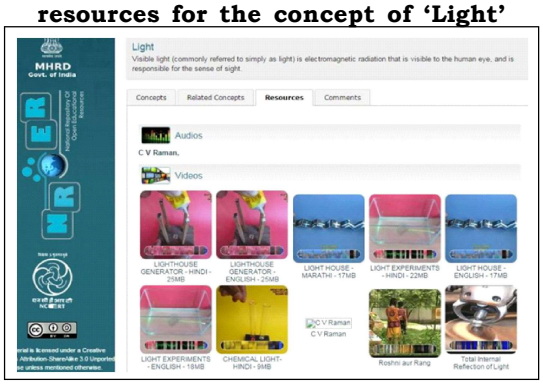
3. Tagging of concepts to allow multiple access with other related concepts and resources

On the NROER every concept is provided with certain tags, these tags are the nearest neighborhood terms or most appropriate related key term with the concept. By assigning tags the application of search option is enhanced as these key terms help in navigating through the related resources forthe concept because every related resource for the concept is also tagged with the same tags/key words.

Concept mapping as a tool for learning

NROER is completely based on concept mapping and on line accessibility of resource in such a form which bridges the gap between cognitive learning and application based learning. Concept maps are based primarily on the learning theories of cognitive psychologists, specifically *Ausubel's*

Fig. 2.
The page on NROER showing multiple resources for the concept of 'Light'



Assimilation theory. A concept map helps represent ideas in a way that model an individual's cognitive structure.

According to *David Ausubel*, "the most important single factor influencing learning is what the learner already knows"(*Novak*, 1998). Relationships between concepts are formed when two concepts overlap on some level. As learning progresses, this network of concepts and relationships becomes increasingly complex. *Ausubel* compares meaningful learning to rote learning, which refers to when a student simplymemorizes information without relating that information to previously learned knowledge. As a result, new information is easily forgotten and not readily applied to problem-solving situations because it was not connected with concepts already learned. However, meaningful learning requires more effort, as the learner must choose to relate new information to relevant knowledge that already exists in the learner's cognitive structure. This requires more effort initially, however after knowledge frameworks are developed, definitions and the meanings for concepts become easier to acquire. Further, concepts learned meaningfully are retained much longer, sometimes for a lifetime. Teachers can encourage creative thinking by using tools such as concept maps.

Educational Implications of NROER:

What people (teachers, students, etc.) can do on the Repository? The NROER provides multiple resources for every concept in order to make the teaching-learning process of the samemore effective. These resources are present in the form of videos, audio clips, interactive objects, images and documents. Anyone who accesses the repository can view, download, use, remix, revise, reuse and redistribute the selected resource, but the revised resource should be shared again on there positron for further

dissemination of the same, as all there sources are released under CC BY-SA license on the NROER. This process has a wide scope of frequent use of digitised content by the society, fulfilling the most importantobjective of NROER. In addition there are some more educational implications, listed as under:

(a) For Teachers and Educators

- Use in classrooms
- Use for self-development
- Participate in special interest groups
- Share their creations

(b) For Governments

- Help to develop digital resources
- Translate the resources
- Share resources on the Repository
- Help integrate into teaching learning
- Enrol teachers
- suggest NROER in curriculum
- Help organise activities around NROER

Conclusion

The open educational scenario worldwide and especially in India is gaining popularity with every passing day. National Repository of Open Educational Resources (NROER) is an enthusiastic project in this row. Resources housed on NROER are free to access, reuse, remix and redistribute by anybody, as they are released under the CC BY-SA licence. With NROER the NCERT is demonstrating one of the ways of going beyond the textbook. The Science content is one of the examples in this line. The dream of NROER will be realized when it becomes useful for each and every teacher, each and every child, across geographies, bridging the digital divide. This dream requires the contribution and critical participation of each one of us. Be a part of the movement. Join today.

REFERENCES

Barnes, J. (1954) Class and Committees in a Norwegian Is land Parish. Human Relations, 7: 39-58.

Dhanarajan, G. and Porter D. (2013) Open Educational Resources: An Asian Perspective. Common wealth of Learning and OER Asia, Vancouver.

Downes, S. (2007) Msg 1, Re: What Connectivism Is. Online Connectivism Conference: University of Manitoba. http://ltc.umanitoba.ca/moodle/mod/forum

National Knowledge Commission (2007) Report of the Working Group on Open Access and Open Educational Resource, :http://www. knowledge commission.gov.in/downloads/documents/wg_open_course.pdf.

Sahu, D.K. and Parmar, R. (2006) The position around theworld: Open Access in India. In Jacobs, N. (eds.) Open Access: Key Strategic, Technical and Economic Aspects, Chandos Publishing, Oxford. Pp. 26-32.

Sawant, S. (2009) Thesis Institutional repository initiatives in India: a status report. Unpublished doctoral thesis, SNDT Women's University, Mumbai.

Sawant, S.S (2009) The current scenario of open access journal initiatives in India. Collection Building, 28. Pp. 159- 163.

Article Received on	**16.04.2016**	**Reviewed on**	**18.04.2016**
Observations reflected on	**20.04.2016**	**Modified on**	**21.04.2016**

**** Dr. Sanjay M. Ayade*** **: Asstt. Professor, IASE, Bilaspur, (Chhattisgarh)**
Email: sanjayayade@rediffmail.com

EDUSEARCH
ISSN: 0976-1160
Vol. 7, No.1, Apr. 2016

Study on Mathematical Abilities of Students at Primary Level

*Priya Yadav**

Key Words : Temporal-Sequential and Spatial Ordering, Mathematical Communication

Abstract

Mathematics has become a subject based on performance. The Abacus based learning mathematics, enhances the level of learning and achievement among the students at primary level. It improves the intellectual capacity, scientific thinking, reasoning, memorization, visualization etc among the students. Students were taught some selected chapters in Mathematics by Abacus based learning. In the present study, the researcher randomly selected 100 students of class IV from a CBSE school. Post-test was administrated on students which are grouped in 50-50.

It is found that Abacus based learning mathematics enhances the learning level of students, some of its attributes help in other subjects learning also applicable for making the learning strong and qualitative.

Introduction

Education is a lifelong process; it starts with the birth of child in informal way. As he grows, he seek admission in play group, Pre-primary, primary, upper-primary, secondary, senior secondary, according to his age or mental level. As he enters in school, his formal education begins, where he has to learn the basic subjects like Hindi, English, Math's, these three are basic subjects with which a child begins his learning, rest are secondary subjects which may added in their curriculum sequentially.

Mathematics is a fundamental subject which starts from the early childhood. It contributes not only as a subject but also relates to life skill. It is also required to carry out day to day activities inside or outside the working place.

To the question what Mathematics is? many pupil have different answers like some say, Mathematics is learning how to subtract numbers from others, add numbers, divide numbers and multiply numbers, some say Mathematics is also

learning which numbers are odd and even as well as learning fractions and all your times-tables and some say Math is shapes, measurement, time and weight, pupil also viewed that Mathematics is a subject which you have to think about. Mathematics is numbers and reasoning. It is also about logic and thinking.

According to *George Polya*, Primary schools teach numbers and operations on numeracy in school mathematics, measurement of quantities, fractions, percentages and ratios etc which are important for numeracy.

The role that mathematics plays in student's life is mostly about thinking. Clarity of thought and pursuing assumptions to logical conclusions is the key to mathematics. There are many ways of thinking, and the kind of thinking one learns in mathematics is an ability to handle abstractions. Another importance of mathematics is what it offers is a way of doing things: to be able to solve mathematical problems, and more generally, to have the right attitude for problem solving and to be able to solve problems in a systematic manner. The main goal of mathematics education in schools is the mathematisation of the child's thinking.

Abacus

The abacus also called a counting frame is a calculating tool used for performing arithmetic processes. Today, abaci are often constructed as a bamboo frame with beads sliding on wires but originally they were beans or stones moved in grooves in sand or on tablets of wood, stone or metal. The user of an abacus is called an abacist. Abacus math is believed to be an excellent technique for optimal brain development during its "prime times" of growth, that is, the first 10 years of a life. However, please do not expect that abacus math is a short cut for children to learn math.

Although calculators and computers have replaced human brain in computing numbers, learning abacus is a must for every child because it is instrumental in developing whole brain and lifetime skills. Using abacus requires co-ordination of the main nerves of the human body such as sight, sound and finger movement which will induce growth of brain cells. The mind undergoes three main stages of development namely physical contact, logical explanation and visualization throughout the process and the abacus acts as a bridge that connects the three stages.

More than 80% of the world population is right-handed and right-handed people normally have more developed left brain with less developed right brain. While the creativity side of the right brain is more than a thousand times than that of the left brain. Learning abacus will stimulate the development of the right brain at an early age. The practice of abacus involves finger movements & also helps in blood circulation thereby enhancing the overall health of the individual.

Mathematical Tricks

The trick works because of the way multiplication and adding work with a lot of numbers. The way to see how it works depends on breaking the whole trick down into separate parts, one for the person, one for the hand, and one for the finger. If you look at each of these numbers separately and do the entire math that follows after you enter that number into the trick, you can see how the whole trick works.

Magic Math tricks

Magic Math tricks, also kown as Vedic maths technique, arouse the interest of young people. They are fun to perform and help students learn and practice various math skills. Magic tricks are lots of fun; kids love them and will keep coming back for more. As a parent or teacher, tricks are an excellent way to encourage the child to get more enjoyment out of math. Some of the amazing Math tricks names are-

- **The 6174 Trick *"New"*** : helps build *4-digit subtraction skills.*
- **Cool Prediction Trick:** write down a prediction that will match a set of numbers the volunteer randomly adds up!
- **Calculator Tricks:** A calculator is not just for serious math stuff, it can also be used to do some pretty cool math magic on your friends and family.
- **Calendar Trick:** Grab the calendar and come on back for a pretty cool math trick. This one is easy to learn but nobody is able to figure out how it's done!
- **Magic Square Sum Trick**: The magician will be able to instantly add up four numbers that have been covered up by the volunteer.
- **Pick Pocket Math:** Figure out how much change someone has in their pockets by working some simple math magic.
- **Birthday Math:** Here's a pretty cool birthday trick using math that will have them scratching their heads when you perform it. It's also good for practicing multiplication, addition, and subtraction of 3, 4, and 5 digit numbers.
- **Multiplication Tips and Tricks:** Check out some of these great tips, tricks, and short cuts that make multiplying a lot easier learn.
- **Math Dice Trick:** Throw 5 dice and announce to your audience that you can see through the dice and will add up the numbers on the boom of the dice.
- **Cool Mind Reading Math Trick:** Watch and learn how to perform this cool that will have your friends and family pretty amazed and wondering how you did it.
- **Number Tricks:** Kids enjoy them because they can amaze friends and family but they get to practice basic math skills while performing them!
- **Multiplication Shortcuts:** Help to multiply large numbers in. Save lots of time
- **Mental Math Tricks:** Kids Can Learn To Perform Lightning Fast Calculations no matter what level they are at...
- **Math Card Tricks:** Math card tricks are a learning tool for demonstrating and understanding different math concepts.
- **More Silly Tricks:** If you like eating chocolate you should get a kick out of the next trick.

Components related to mathematics learning-

Maths and Memory

Memory may have a significant impact on thinking with numbers. As *Dr. Mel Levine* points out, "Almost every kind of memory you can think of finds its way into math."

- *Factual memory* in math is the ability to recall math facts. These facts must be recalled accurately, with little mental effort.
- *Procedural memory* is used to recall how to do things — such as the steps to reduce a fraction or perform long division.
- *Active working memory* is the ability to remember what you're doing while you are doing it, so that once you've completed a step, you can use this information to move on to the next step.

In a way, active working memory allows children to hold together the parts of math problems in their heads.

Math and Attention

Attention abilities help children maintain a steady focus on the details of mathematics. Attention also plays an important role by allowing children to monitor their efforts; for instance, to slow down and pace themselves while doing math, if needed.

Temporal-Sequential Ordering and Spatial Ordering

While temporal-sequential ordering involves appreciating and producing information in a particular sequential order, spatial ordering involves appreciating and producing information

in an appropriate form. Each plays an important role in mathematical abilities. *Dr. Levine* points out that "Math is full of sequences." Sequencing ability allows children to put things, do things, or keep things in the right order. Recognizing symbols such as numbers and operation signs, being able to visualize — or form mental images — are aspects of spatial perception that are important to succeeding in math.

There are various mathematical abilities that can be developed by Abacus and Magic math tricks which students face while learning mathematics, as their level goes higher, the mathematics problems may go complex and difficult to solve. Problems on Trains, Time and Distance, Height and Distance, Time and Work, Simple Interest, Compound Interest, Profit and Loss, Partnership, Percentage, Problems on Ages, Calendar, Clock, Average, Area, Volume and Surface Area, Numbers, Problems on Numbers, Problems on H.C.F and L.C.M, Decimal Fraction, Simplification, Square Root and Cube Root , Ratio and Proportion, Odd Man Out and Series, True Discount, Boats and Streams etc.

Review of Related Literature

Nool, N.R. (2012); Effectiveness of an Improvised Abacus in Teaching Addition of Integers- This study was conducted to determine the effectiveness of an improvised abacus as remediation device in teaching addition of integers among prospective elementary teachers. This study specifically aimed to measure the effectiveness of the manipulative material in terms of corrected students' errors, level of improvement it caused and retention of skills in adding integers, and attitude toward mathematics.

Miller,. K.F. & Stigler, J.W. (2008); Meanings of Skill: Effects of Abacus Expertise on number representation- The current study was organized around 2 questions. The first concerns what relation there is between the features that organize performance of a skill and those that are salient in thinking about the domain over which skill operates. The second deals with how these relations change as a function of expertise. This study investigated these issues within the context of skill at abacus calculation. The question that motivates the study is the degree to which connections are made, with expertise, between the abacus and conceptual knowledge about numbers.

Lean, C.B. & Lan, O.S. (2005); Comparing mathematical problem solving ability of pupils who learn abacus mental arithmetic and pupils who do not learn abacus mental arithmetic.- The main objective of this study was to compare the mathematical problem solving ability between pupils who learn abacus-mental arithmetic and pupils who do not learn abacus mental arithmetic. The result of this study shows that the mathematical problem solving abilities among pupils who learn abacus-mental arithmetic is higher compared to pupils who do not learn abacus-mental arithmetic.

Significance of the study

Mathematics being a compulsory subject of study, access to quality mathematics education is every child's right. Mathematics education should be made affordable to every child, and at the same time, enjoyable. Mathematics education at the elementary stage should help children to prepare for the challenges they face further in coming life. In our vision, school mathematics takes place in a situation where:

Children learn to enjoy mathematics, Children learn important mathematics, Mathematics is a part of children's life experience which they talk about, Children pose and solve meaningful problems, Children use abstractions to perceive relationships and structure, Children understand the basic structure of mathematics and Teachers expect to engage every child in class.

On the other hand, mathematics education in our schools is beset with problems. It has been identified the following core areas of concern: A sense of fear and failure regarding mathematics among a majority of children, A curriculum that disappoints both a talented minority as well as the non-participating majority at the same time, Crude methods of assessment that encourage perception of mathematics as mechanical computation, and lack of teacher preparation and support in the teaching of mathematics. Systemic problems further aggravate the situation, in the sense that structures of social discrimination get reflected in mathematics education as well. Especially worth mentioning in this regard is the gender dimension, leading to a stereotype that boys are better at mathematics than girls.

The analysis of these problems lead us to recommend changing modes of assessment to examine students' mathematical abilities rather than procedural knowledge. The shift in focus it proposes from mathematical content to mathematical learning environments: formal problem solving, use of heuristics, estimation and approximation, optimisation, use of patterns, visualisation, representation, reasoning and proof, making connections, mathematical communication. Giving importance to these processes also helps in removing fear of mathematics from children's minds. Such learning environments invite participation, engage children, and offer a sense of success.

The vision of excellent mathematical education is based on the twin premises that all students can learn mathematics and that all students need to learn mathematics. It is therefore imperative that we offer mathematics education of the very highest quality to all children. The mathematical abilities can be developed among the students at early stages of learning as they have a good capacity of understanding, cognition and memorization. The Abacus and short tricks of mathematics work out very well in this regard, but short tricks of mathematics can be learnt at later stages also whereas Abacus learning shows much positive effects if learn in early stages.

Mathematical Tricks Explained: The student will also learn the math behind the magic! Using tricks is one of the best ways to spark student's interest in learning math. These short tricks are nothing but the concepts of mathematics to make it easier to learn and to use accordingly for speedy and accurate performance.

In this modern world, where so many techniques are developed and we have so many options available to do our mental work but still all these are machines, if one day they failed, then pupil has to depend on their own mental status. Thus, it is necessary to bring this in habit that do some of the mathematical exercise by using own mind and make the memory more sharp and strong.

Objectives of the study:-

- To determine and compare the mathematical ability developed by Abacus learning and Magic Math Tricks of primary level students at CBSE School.

Hypothesis of the study-

- There is no significance difference between mathematical ability developed by Abacus Learning and Magic Math Trick of Primary Level boys students.
- There is no significance difference between mathematical ability developed by Abacus Learning and Magic Math Trick of Primary Level girls students.

Research methodology-

The study is quasi-experimental in nature as only post-test is conducted on the students of class IV of primary level.

Sampling-

100 students of class IV were selected for the study and Random sampling is used to collect data.

Tool used-

Self Made test is used to judge mathematical ability for both the ways- Abacus learning and Magic Math Tricks.

Table1:

Means and S.D. of the post-test scores of boys learning through Abacus and through Magic math Tricks

Boys learning	N	Mean	S.D.	df	t
by Abacus	25	71.2	17.8	48	2.54
by Magic MathsTricks	25	71	15.8		NS

The Table 1 depicts the computed t value less than the tabulated value which is 2.69 at 0.01 level, as value of t is not significant at 0.01 level, hence this null hypothesis is accepted.

Table 2 depicts the computed t value less than the tabulated value which is 2.69 at 0.01 level, as value of t is not significant at 0.01 level, hence this null hypothesis is accepted.

Table2:

Means and S.D. of the post-test scores of Girls learning through Abacus and through Magic math Tricks

Girls learning	N	Mean	S.D.	df	t
By Abacus	25	70.4	18.18	48	2.11
By Magic Maths Tricks	25	70.9	17.68		NS

Findings

1. There is no significance difference between mathematical ability developed by Abacus Learning and Magic Math Trick of Primary Level boys students.
2. There is no significance difference between mathematical ability developed by Abacus Learning and Magic Math Trick of Primary Level girls students.

Conclusion

For children to succeed in mathematics, a number of brain functions need to work together. Children must be able to use memory to recall rules and formulas and recognize patterns; use language to understand vocabulary, instructions, and explain their thinking; and use sequential ordering to solve multi-step problems and use procedures. In addition, children must use spatial ordering to recognize symbols and deal with geometric forms. Higher-order cognition helps children to review alternative strategies while solving problems, to monitor their thinking, to assess the reasonableness of their answers, and to transfer and apply learned skills to new problems. Often, several of these brain functions need to operate simultaneously.

Competence in mathematics is increasingly important in many professions. And it's important to remember that this competence draws on more than just the ability to calculate answers efficiently. It also encompasses problem solving, communicating about mathematical concepts, reasoning and establishing proof, and representing information in different forms. Since abacus and mental math trick is a special type of education, parents should actively engage their kids in this activity.

Pattern recognition also is a key part of math. Children must identify broad themes and patterns in mathematics and transfer them within and across situations. Memory skills help children store concepts and skills and retrieve them for use in relevant applications.

We believe passionately that putting in place a strong and rigorous mathematical foundation in primary schools is the long-term solution to produce young people (and teachers) who are capable of using and applying their mathematical prowess with confidence and, in our view just as importantly, enjoying and appreciating mathematical thinking throughout their education.

REFERENCES

Harlen, W. (2009); 'The Quality of Learning Assessment Alternatives for Primary Education', in R. Alexander (ed.) Children, their World, their Education: final report and recommendations of the Cambridge Primary Review. London: Routledge.

Hodge, L. (2008) Student roles and mathematical competence in two contrasting elementary classes. Mathematics Education Research Journal, 20(1), 32-51.

Jamie I.D. (2005); Handbook of Mathematical cognition, Campbell, Psychology Press, New York and Hoves.

Jodie Hunter; Pupils' perspectives and attitudes towards learning mathematics following implementation of the Mathematics Enhancement Project, Research Report., CIMT, Faculty of Health, Education and Society, University of Plymouth.

Kyriacou, C. & Goulding, M. (2004); A systematic review of the impact of the daily mathematics lesson in enhancing pupil confidence and competence in early mathematics. London: EPPICentre, Social Science Research Unit, Institute of Education.

Melissa E. Libertus, Lisa Feigenson, Justin Halberda. (2011); Preschool acuity of the approximate number system correlates with school math ability. *Developmental Science*; DOI: 10.1111/j.1467-7687.2011.01080.x

http://www.cmaths.co.za/Index?id=f3d1e8a1-d61c-4c21-a3b6-91c05bc4a5f6.

http://www.pbs.org/wgbh/misunderstoodminds/mathbasics.html

Article Received on 08.04.2016 Reviewed on 11.04.2016
Observations reflected on 12.04.2016 Modified on 15.04.2016

*** *Priya Yadav*: Research Scholar, SSG Pareek College of Education, Jaipur University of Rajasthan. (Rajasthan)**
Email: Pri8001@gmail.com

EDUSEARCH
ISSN: 0976-1160
Vol. 7, No.1, Apr. 2016

Perceptions about Importance of Physical Education among Non Govt. Secondary School Teachers

Prof. R. Siva Prasadh*

Key Words : Healthy living, Physically active, Emotional and Cognitive development

Abstract

Physical education in the school system plays an important role in exposing children to regular physical activity and appropriate knowledge of healthy living. Being physically active, plays a vital role in ensuring health and well-being and there are large texts of research investigating the benefits of exercise.

Effective physical education teachers and physical education programs are essential in motivating students to be physically active. It provides students an opportunity to enhance their physical, social, emotional, and cognitive development. In India physical education is often a neglected part of education and many schools across the country do not realize the importance of having it as a part of the system. Physical education is undoubtedly very useful but unfortunately in India we are not having any effective programme of developing it either at schools or college levels.

Introduction

Education is a systematic process through which a child or an adult acquires knowledge, experience, skill and sound attitude. It makes an individual civilized, refined, cultured and educated. For a civilized and socialized society, education is the only means. According to *Mahatma Gandhi* "By education I mean an all-round drawing out of the best in man – body, mind and spirit." This has always been true. Modern life, with cities and the inventions which belittle time and space has only made it more apparent action upon it more pressing. No one can think with penetration upon the results of education who does not come at last to a fuller vision of the interdependence of men. To become a man is to become capable of living effectively with others.

Physical Education

Physical education has the responsibility of giving our children a positive, motivational, and educational experience to foster their physical, emotional, and mental development and train the child to take up any sort of task

with ease. This learning is possible only when the school provides proper physical education with a well trained teacher in the field and a sufficient playground for the purpose.

Physical education has the responsibility of giving our children a positive, motivational, and educational experience to foster their physical, emotional, and mental development.

The importance of physical activity was recognized by *Plato* when he said, "lack of activity destroys the good conditions of every human being while movement and methodical physical exercise save it and preserve it".

The impact of physical activity on health

Being physically active plays an essential role in ensuring health and well-being, and there is a large body of research investigating the benefits of exercise. Physical activity benefits many parts of the body – the heart, skeletal muscles, bones, blood (for example, cholesterol levels), the immune system and the nervous system – and can reduce many of the risk factors. These risk factors include:

- Reducing blood pressure
- Improving blood cholesterol levels
- Lowering body mass index

A common phrase used by the general public is that "a healthy body leads to a healthy mind." It is important that people strive for a healthy lifestyle to combat being overweight or obese.

There are many benefits physical education provides today's students and society. Within a school setting, a physical education program can serve society in many ways if implemented and utilized appropriately.

Effective physical education programs are essential in motivating students to be physically active. Motivating students to be physically active can be done in several ways. It has been found that obesity is one of the top three reasons why middle school student-athletes drop out of organized sports. One of the areas in which we can address this issue is in physical education class.

Physical educators have the ability to create an environment that can have both short-and long-term effects on students' perceptions and satisfaction with their personal physical abilities. Physical education teachers provide activity, instructional, and environmental choices for their students that promote the students' feelings of self-efficacy, social connectedness and acceptance.

Objectives of the study

- To study the role of physical education in child's development
- To study the impact of physical education in bringing out a balanced personality.
- To study the impact of physical education in academic achievement of the child.
- To study the regularity of the child.

Hypotheses of the study

- There will be no significant difference in opinions of male and female teachers towards physical education in a child's development.
- There will be no significant difference of opinion of teachers as per their designation towards need of physical education in private schools.
- There will be no significant difference of opinion of teachers as per their qualifications academic to that of professional towards need of physical education in private schools.
- Therewill be no significant difference of opinion of teachers as per their experience towards need of physical education in private schools.

Methodology

The investigator in the present study followed the survey method and it is proximal, time specific and contest in

nature. The sample consists of 75 secondary teachers in Visakhapatnam urban area. Perceptions of teachers towards need and importance of implementation of physical education tool was used in the study. It consisted of 30 statements.

Variables of Study

In the present study the following are the variables considered for teachers are

1. Gender : Male & Female
2. Designation : PRT, TGT & PGT
3. Qualifications :
   1) Academic : UG/PG
   2) Professional : D.Ed./B.Ed./M.Ed.
4. Experience : < 7 years/ > 7 years

Statistical techniques employed:

In order to analyze the data and interpret if the investigator calculated various statistical measures such as the mean, median, standard deviation, significance of t-values.

Analysis and Interpretation of Data

Hypothesis 1.

Table 1:

Mean, S.D. and 't' value of opinions of teachers towards physical education in a child's development.

Gender	N	Mean	S.D.	't' value
Male	21	48.85	6.42	0.788
Female	54	48.38	7.49	NS

The table gives us the information of that the mean score of opinion towards physical education of male and female teachers being 48.85 and 48.38 respectively. This shows that perception of the male and female teachers is almost alike. The 't' value stands at 0.788 is not significant. It agrees to the given hypothesis.

Hypothesis 2.

The table 2 gives us the information of the Teachers with respect to their designation wise that the mean score is 48.39 for the PRT's and 49.071 for the TGT/PGT's. The standard deviation scores are 7.163 for the PRT's and 7.44 for the TGT/PGT's.

Table-2:

Mean, S.D. and 't' value of opinions of teachers as per their designation towards need of physical education in private schools.

Designation	N	Mean	S.D.	't'value
PRT	61	48.39	7.16	0.763
TGT/PGT	24	49.07	7.44	NS

This shows that perception of boys and girls is about the same. The 't' value stands at 0.7630 is not significant. Hence, it agrees to the given hypotheses.

Hypothesis 3.

Table-3:

Mean, S.D. and 't' value of opinions of teachers as per their qualifications towards need of physical education in private schools.

Qualifi.	N	Mean	S.D.	't' value
U/G Teach.	47	49.1	7.22	0.343
P/G Teach.	28	47.5	7.09	NS

The table 3 gives us that the mean score of the opinion about physical education for the Under Graduate Teachers is 49.12 and for the Post Graduate Teachers is 47.5. The 't' value stands at 0.343 is not significant. Hence, it agrees to the given hypotheses that there is not significant. It agrees to the given hypothesis.

Hypothesis 4.

Table-4:

The mean, S.D. and 't' value of opinions of teachers as per their experience towards need of physical education in private schools.

Experience	N	Mean	S.D.	't' value
< 7 years	56	48.6	6.60	0.90
> 7 years	29	38	7.38	NS

The table gives us the details of the Teachers with respect to their experience. Here the mean score is 48.6 for the Below 7 years experienced teachers and 38 for the 7 & above years experienced Teachers. The values here reveal that experience matters to give the

perception. The 't' value stands at 0.90 is not significant. Hence, it agrees to the given hypothesis.

Results

On the basis of analysis the following conclusion have been drawn

- Most of the teachers feel the need of physical education in private schools.
- There is no significant difference in the perception with different qualification, experience and designation of the teachers in having physical education in private schools.

Conclusion:

It is apparent that teachers believe that Physical Education has a physically powerful effect. Teachers felt that Physical Education can help students with their cognitive learning through the use of teamwork or cooperative learning. The analysis of the data shows that this concept of teamwork through physical education is perceived by the participants to have a large impact on the success of learning. A school's role extends to encourage young people to continue participation in physical activity.

REFERENCES

Bailey R. (2006) Physical Education and Sport in Schools: A Review of Benefits and Outcomes. Journal of School Health 2006;76:397- 401.

Calfas, K. & Taylor, W. (1994). The effects of physical activity on psychological variables in adolescents. *Pediatric Exercise Science*, 6, 302-314.

Chen, A. & Ennis, C. (2004). Goals, interests, and learning in physical education. *Journal of Educational Research*, 97(6), 329-338.

Coe DP, Pivarnik JM, Womack CJ, Reeves MJ, Malina RM.(2006). Effect of physical education and activity levels on academic achievement in children. *Medicine and Science in Sports and Exercise*;38:1515-1519.

NCERT. (1988-1992). *Fifth Survey of Educational Research.*. Vol. 1, August.. New Delhi: New Delhi 1997.

Portman, P. A. (2003). Are physical education classes encouraging students to be physically active? Experiences of ninth graders in their last semester of required physical education. *Physical Educator*, 60(3). Retrieved November 10, 2010 from Academic Search Complete database.

Rikard, L. G. & Banville, D. (2006). *High school student attitudes about physical education. Sport, Education and Society*, 11(4), 385 – 400. Retrieved November 12, 2010 from Education Research Complete database.

Siedentop, D. (1994). *Sport education: quality PE through positive sport experiences.* Champaign, IL: Human Kinetics.

Article Received on	**24.03.2016**	**Reviewed on**	**25.03.2016**
Observations reflected on	**29.03.2016**	**Modified on**	**30.03.2016**

*** *Prof. R. Siva Prasadh*: Professor, Institute of Advanced Studies in Education (IASE), Andhra University, Visakhapatnam, (Andhra Pradesh)**

Email: sivaprasadh@yahoo.com

EDUSEARCH
ISSN: 0976-1160
Vol. 7, No.1, Apr. 2016

Students Perception about Physical Education

Dr. K. Jayaram *

Key Words : Healthy world, Physical development, Well trained teacher

Abstract

Our children are our most treasured gift. They are the key to future healthy world of living. When a child is taken into the ground then he/she acquires the real part of learning which is considered to be a wholesome task. Physical education helps in getting positive motivational, emotional, and mental development and train the child to take up any sort of task with ease. The purpose of this research study is know the students' view for better healthy living apart from classroom education. The study is conducted on a sample of 150 secondary students with the help of five point, 24 statement questionnaire in Visakhapatnam urban area. Mean, Median and t-tests were administered and the results say that students have positive perception towards physical education.

Introduction

Education is a systematic process through which a child or an adult acquires knowledge, experience, skill and sound attitude. It makes an individual civilized, refined, cultured and educated. For a civilized and socialized society, education is the only means. It's goal is to make an individual perfect. Every society gives importance to education because it is a panacea for all evils. It is the key to solve the various problems of life. Since time immemorial, education is estimated as the right road to progress and prosperity. Our children can gain this profit only when the education system is complete. Mere learning in the four walled classroom gives bookish knowledge alone.

Physical Education

Physical Education fosters personal and community wellness by empowering students to attain healthy, lifelong attitudes and behaviors through physical activity as part of the total educational experience.

Physical education has the responsibility of giving our children a positive, motivational, and educational experience to foster their physical, emotional, and mental development and train the child to take up any sort of task with ease. This learning is possible only when the school provides proper physical education with a well trained teacher in the field and a sufficient playground for the purpose.

Rationale of the study

The need for children and youth to engage in regular physical activity as a prerequisite for achieving optimum health has long been recognized. Regular physical activity results in mental and physical well-being. The best documented evidence indicates that:

- Active children have more positive attitudes toward physical activity, school and themselves, and academic performance improves significantly.
- Children who participate in regular positive physical activity programs, especially aerobic activities, have a more positive self-concept and develop high levels of self esteem. They exhibit better concentration, show improvements in discipline, and are less aggressive.
- Regular physical activity can alleviate stress as well as teach children how to recognize and prevent stress.
- Regular physical activity is positively related to muscle strength, size and endurance.
- Regular physical activity generally results in an increase in lean body mass and a decrease in body fat, without any significant change in body weight.
- Regular physical activity, started in childhood, can increase the peak bone mass of early adulthood, and delay the onset of osteoporosis (bone loss).
- Active and fit children have lower levels of triglycerides and higher HDL cholesterol to total cholesterol ratios than less active children.

The Importance of Physical Education in Schools

Physical education in India is often a neglected part of education and many schools across the country do not realize the importance of having physical education as a part of the system. There are many benefits that are available from physical education and there are a few schools that have managed to strike the balance between academics and physical fitness. To take care of this area in child's life government at different times has taken up different recommendations to improve the standards of development in the child through improvement of Physical Education.

Teachers opine that physical activity is the key vehicle for student learning, a principle that students should learn about healthy activities by doing them. In this way, not only will they discover the joy of movement but they will develop skills that will lead to a lifetime of healthy active living.

They will also come to understand how to apply the skills and principles they have learned to other things. The idea of teaching transferable skills and strategies is important to accommodate the growing number and range of activities available and accessible and where and when appropriate preserve traditional/cultural activities.

Objectives of the study

- To study the role of physical education in child's development
- To study the impact of physical education in academic achievement of the child.
- To understand the health status of the pupils
- To study the regularity of the child
- To study the regularity of the child.
- To compare the availability of physical education in private schools (rural & urban).

Hypotheses of the study

1. There is no significant difference of opinions of boys and girls towards need of physical education in a child's development.
2. There is no significant difference of opinion of students as per their level of class studying towards need of physical education in private schools.
3. There is no significant difference of opinion of students based on healthy habits of the child towards need of physical education in private schools.
4. There is no significant difference of opinion of students based on regularity of the child towards need of physical education in private schools.

Methodology

The present study is proximal, time specific and contest in nature. Data collection of the present investigation was made by survey method on a sample of 150 secondary students from Visakhapatnam Urban area. The tool used for the study was self-developed five point scale and consists of 24 statements. In order to analyze the data and interpret if the investigator calculated various statistical measures such as the mean, median, standard deviation, significance of t-values.

Variables of Study

In the present study the following are the variables considered for students are

1 Gender	:	Boys/Girls
2 Age	:	13yrs/14yrs
3 Locality	:	Rural/ Urban
4 Class	:	8th/9th
5 Health status	:	Physically fit/ Frequently sick
6 Regularity to school	:	Regular/Irregular

Analysis and Interpretation of Data

1. There is no significant difference of opinions of boys and girls towards need of physical education in a child's development.

Table 1

The table showing mean, S.D. and 't' value of opinions of Boys and Girls towards need of physical education in a child's development.

Gender	N	Mean	S.D.	df	't' value
Boys	72	28.01	6.81	148	0.00
Girls	78	24	7.21		NS

The table gives us the information of the students' gender wise that the mean score is 28.01 for boys and 24 for the girls. The standard deviation scores are 6.81 for the boys and 7.21 for the girls. This shows that perception of boys and girls is almost equal. The 't' value stands at 0.000604 is not significant.

Hence, it agrees to the given hypotheses that there is no significant difference of opinions of boys and girls towards need of physical education in a child's development at secondary level.

2. There is no significant difference of opinion of students as per their level of class studying towards need of physical education in private schools.

Table-2

The table showing mean, S.D. and 't' value of opinion of students as per their level of class studying towards need of physical education in private schools.

Class	N	Mean	S.D.	df	't' value
8th	66	25.7	6.7	148	0.73
9th	84	26.1	7.74		NS

The table gives us the details of the opinion of students with respect to their class wise. Here the mean score is 25.7 for the 8th class students and 26.1 for the 9th class students. The standard deviation scores are 6.70 for the 8th class students and 7.74 for the 8th class students. The scores being almost same reveal that students of both the class levels think level. The 't' value stands at 0.73 is not significant.

Hence, it agrees to the given hypotheses that there is no significant difference of opinion of teachers as per their level of class studying towards need of physical education in private schools at secondary level.

3. There is no significant difference of opinion of students based on health status of the child towards need of physical education in private schools.

Table-3

The statement showing mean, S.D. and 't' value of opinion of students based on health status of the child towards need of physical education in private schools.

Health status	N	Mean	sd	df	't'val.
Physically fit	139	25.8	7.4	148	0.26
Frequently sick	11	28	6		NS

The table gives us the particulars of the opinion of students with respect to their health status. Here the mean score is 25.8 for the physically fit students and 28 for the frequently sick students. The standard deviation scores are 7.4 for the physically fit students and 6 for the frequently sick students. The scores being alm ost same reveal that students who are frequently sick also feel the need of physical education and both the type of students think alike. The 't' value stands at 0.26 is not significant.

Hence, it agrees to the given hypotheses that there is no significant difference of opinion of students based on health status of the child towards need of physical education in private schools at secondary level.

4. There is no significant difference of opinion of students based on regularity of the child towards need of physical education in private schools.

The table 4 gives us the particulars of the opinion of students with respect to the regularity to school. Here the mean score is 25.8 for the regularly school attending students and 27.3 for the irregular students.

Table-4

The statement showing mean, S.D. and 't' value of opinion of students based on regularity of the child towards need of physical education in private schools.

Regularity	N	Mean	S.D.	df	't-value
Regular	140	25.8	7.5	148	0.35
Irregular	10	27.3	4.6		NS

The standard deviation scores are 7.5 for the regularly school attending students and 4.6 for the irregular students. The scores show a good difference those students who are irregular also opine the need of physical education and hence their values show the difference. The 't' value stands at 0.354 is not significant.

Hence, it agrees to the given hypotheses that there is no significant difference of opinion of students based on regularity of the child towards need of physical education in private schools at secondary level.

Results

On the basis of analysis the following conclusion have been drawn

- There is no significant difference in the perception students' class in which they are pursuing study towards having physical education in private schools at secondary level.
- There was no significant difference between the students who achieved various school and district level awards and are also healthy enough found the need and importance of physical education and at the same time the students with no awards and frequently sick also accepted the same.

Conclusion:

After extensive analysis of the data gathered throughout the study from questionnaires and checking survey it was instituted "How Physical Education emotionally impacts the students and how it makes them feel was described using the collected data."

Almost all children, at some level, value physical activity benefits of health, enjoyment, and social interaction. Thus, physical education programs should develop activities around the student, school, and classroom characteristics that strengthen the enjoyment of student engagement in physical education over time.

Physical activity is the key vehicle for student learning, a principle that students should learn about healthy activities by doing them. In this way, not only will they discover the joy of movement but they will develop skills that will lead to a lifetime of healthy active living.

They will also come to understand how to apply the skills and principles they have learned to other things. The idea of teaching transferable skills and strategies is important to accommodate the growing number and range of activities available and accessible and where and when appropriate preserve traditional/cultural activities.

Health and Physical Education programmes are most effective when students' learning, values and healthy habits are shared and supported by school staff, families and communities. They should be characterized by high quality teaching and relevant programmes' content, a healthy physical environment, a supportive social environment and community partnerships.

REFERENCES

Bailey R. (2006). Physical Education and Sport in Schools: A Review of Benefits and Outcomes. *Journal of School Health*. 7 (6).397- 401.

Calfas, K. & Taylor, W. (1994). The effects of physical activity on psychological variables in adolescents. *Pediatric Exercise Science*, 6, 302-314.

Chen, A. & Ennis, C. (2004). Goals, interests, and learning in physical education. *Journal of Educational Research*, 97(6), 329-338.

Coe DP, Pivarnik JM, Womack CJ, Reeves MJ, Malina RM.(2006). Effect of physical education and activity levels on academic achievement in children. *Medicine and Science in Sports and Exercise*;38:1515-1519.

NCERT. (1988-1992). *Fifth Survey of Educational Research.*. Vol. 1, August.. New Delhi: New Delhi 1997.

Portman, P. A. (2003). Are physical education classes encouraging students to be physically active? Experiences of ninth graders in their last semester of required physical education. *Physical Educator*, 60(3). Retrieved November 10, 2010 from Academic Search Complete database.

Rikard, L. G. & Banville, D. (2006). *High school student attitudes about physical education. Sport, Education and Society*, 11(4), 385 – 400. Retrieved November 12, 2010 from Education Research Complete database.

Siedentop, D. (1994). *Sport education: quality PE through positive sport experiences.* Champaign, IL: Human Kinetics.

Article Received on	**09.03.2016**	**Reviewed on**	**21.03.2016**
Observations reflected on	**28.03.2016**	**Modified on**	**26.03.2016**

*** *Dr. K. Jayaram*** : **Asstt .Professor in Education, School of Distance Education, Andhra University, Visakhapatnam (Andhra Pradesh)** ***Email: jayaram210@gmail.com***

EDUSEARCH
ISSN: 0976-1160
Vol. 7, No.1, Apr. 2016

Constructivist Models : 5E and 7E Models in Science Education

*Dr. R. S. Mani**

Key Words : Constructivism, 5 E model, 7 E model, Active Learning.

Abstract

Constructivism is a structure that provides facility of more interaction for the student and gain more in terms of the knowledge. The knowledge construction takes place from the side of the student that facilitates more interaction. Here the teacher is supposed to act as a facilitator.

In this paper an attempt is made to describe 5E and 7E model of constructivism. The constructivism facilitates more transfer and comprehension. The peer interaction increases and more activities are included to facilitate better concept formation. There is more facility for comparing and contrasting to observe uniformity and differences.

Introduction

An instructional model or learning cycle is a sequence of stages teachers may go through to help students develop a full understanding of a lesson concept. Teacher uses scaffolding and it enables a student to go beyond what he or she could do independently.

5 E- Learming Model

The 5 E learning cycle model requires instruction to include the following discrete elements: Engage Explore, Explain, Elaborate and Evaluate.Engage, Explore, Explain, Elaborate and Evaluate follow a sequence that maintains an order. However, there are situations that the elements in the model could overlap each other or show combined effect. For the purposes of understanding the 5 E model is presented as Engage, Explore, Explain, Elaborate and Evaluate.

1. Engage:

This is the first stage in which the teacher tries to understand the student and tries to motivate the student through some presentation of instructional material to the level of the student for

example, teacher is trying to present about the aerosols and their effect. In this stage, he may present a table of green house gases in percentage of its presence in air such as Carbon mono oxide, Carbon-di-oxide, Methane, and Chlorofluaro Carbon. Then, he will mention that ten most polluted cities are in India.

He will present the name of the cities and shows the aerosol as the air pollution. This motivates the student to study the aerosol and its effects on air.

2. Explore:

Teacher and students have developed some general outline of the aerosol pollution in air in India. However, the rate of pollution, area covered and extent of its intensity has to be discovered. They will discuss various methods of study of aerosols through experimentation.

The suggestions come up as follows: a) Balloon experiment) Using electronic precipitator) Collecting air sample from different places and analyzing for its components. They may discuss the recent micro satellite experiment conducted by ISRO and Chandrasekhar Saraswati University, Kanchi.d) Collect data from the PUC testing centres and analyze it for its pattern for example in Vadodara.They may find that Vadodara is one of the highly polluted city.e) Teacher along with some students could collect some air sample near the industry and using it for analyzing with the chromatographic techniques to identify the components. This reveals the presence of aerosols and to some extent the percentage of their presence in a given sample area. Estimate the coverage with the grid method. Teachers and student discuss and small groups are formed to explore with the available facilities. Students may contact the Environment control agency and collect the data. They may also contact government authorities to provide the data already collected by the instruments installed on the top of the buildings in cities and villages.

3. Explain:

On completing the data collection and analysis, teacher and students will discuss the results of the data for the extent of aerosol pollution. They may invite a scientist working on the topic to observe and guide in the analysis of the data and interpretation. The reasons for the aerosol pollution may be due to for example. increase in the number of automobiles in the cityii) increased consumption of petrol and diesel as compared to the natural gas(LPG).iii) Use of Nitrogen in place of the other fuels.iv) One tries to discuss the reason for the more percentage of Methane and Chlorofluro Carbon than the Carbon-mono oxide and Carbon-di-oxide.in air.v) One group of students make an estimate of the percentage of garbage collected by Vadodara Municipal Corporation through their records and discussion with the authority and garbage is burnt in air.vi) A small group students make a list of industries in and around Vadodara and make a table of the products produced by them and the data gathered from their chimneys for the functioning of the precipitators.vii) all the students will discuss about the concept of Carbon credit.viii) Students may make a list of the list of hospitals and clinics in the city and their method of disposal of medical waste. The discussion following the use of incinerator for the burning and other methods of safe disposal will reflect on the aerosol present in air.ix) A small group will computer simulate the data and image and estimate the extent of aerosol pollution in simulation method.x) The increase in the aerosol in air may be mainly attributed to the increased burning of fossil fuels.

Teacher and students on discussion find some of the reasons more valid and significantly contributing to the problem. On studying the data pattern and

analysis, students and teacher will be able to identify the causes for the aerosol pollution in the given area namely Vadodara.

4. Elaborate:

Differences between mean scores were in favour of the treatment group on both topic and achievement levels. Findings reveal that the use of inquiry based instruction to improve achievement. The 5 E learning cycle model requires instruction to include the following discrete elements: Engage, Explore, Explain, Elaborate and Evaluate.

Elaborate: In this stage teacher and student try to elaborate the concept being explored. In the previous stage, the teacher and students try to give an explanation.

The reason may be adequate or may not be but some of the points being presented needs some more clarity and it come through elaborate presentation. The field notes, experimental data nothings may not be able to explain in details. In the elaboration stage, the teacher presents the concepts in context and gives some comparison and try to enlist all the essential characteristics. While doing all these activities, he/she may take the help of students. Involvement of student is needed in almost every stage. In the example, being discussed the aerosols are of many kinds. He/She describes the aerosols and their extent of distribution in a given site.

He /She may quote and show the satellite map of the aerosol in a given region and discuss the factors that contribute to aerosol concentration. Some questions may be relevant for example, how aerosol is responsible for air pollution? How aerosol is related in with the clouds and cloud movement? Does it have any relation with rain? Does it contribute to acid rain? How do we prevent acid rain? How aerosol is responsible for global warming? These questions need an elaborate answer.

Teacher may explain the concept of carbon credit. What are the chemicals that could replace the Chlorofluoro carbon? Instead of going for combustion of waste in the open air is it possible to burn in an enclosed place safely and use the ashes for some productive purposes. There are multiple factors that contribute to the aerosol production and its concentration in a given area.

These factors could be elaborated for proper understanding. Students could ask questions for the teacher to answer and involve students in the discussion. Students could bring in more examples and different context? For example, aerosol concentration in summer (spring) and winter is the same? What measures are needed to increase the visibility of the persons riding the vehicles in the early morning or in the evening? These discussions motivate the student to further investigate the phenomenon and read about it or explore some websites. He/She may also give assignments to surf some websites related with the topic and rise some questions in the next class.

5.Evaluate:

Evaluation is a process that takes place continuously all through the investigation. The best evaluation is the self evaluation of the person to introspect and find the differences in the beginning of investigation and the end of it. However, teacher could give a small project and students could complete it in small groups. Teacher could give a paper pencil test and ask them to write in short and long form. Teacher may interview some students for finding their depth of understanding. Conduct discussion session to consolidate the characteristics of the concept. Try to involve every student in the discussion. An assignment may be to draw the aerosol on a drawing sheet giving the time, concentration and area. An observation report may be collected by the teacher to describe the characteristics of aerosol and its

interaction with dust particles in parts per million (pap).Making a list of industries that contribute to the more concentration of aerosols in Vadodara city.

A question may be while you fly from Vadodara airport by plane a thick cloud of white mash is observed. Does it affect the air plane? What happens to the suspended particles? Do they go up in the air or settle down on soil? Why a thin layer of mucus type structure is formed on the water stored in the tank? How do you explain water poisoning? Do you think Carbon-di-oxide or Carbon mono oxide will react with water? These questions to illustrate a few may make the student to think. Teacher may ask in one of the test to each to student to ask five questions on the paper and think about it.They could select one or two question and try to answer in order to understand the phenomenon.

The teacher would then see the questions raised and their quality and the type of answers provided by the students. The thinking attempted need to be rewarded. In this sense, no student will fail in the examination. Under the CCE activities such an science activity would make them think and it could be evaluated for including it in the final examination result of the student.

7 E- Learming Model

7 E Model has the following components. They are: Engage Elicits, Explore, Explain, Elaborates, Evaluate and Extend.

The five components in the 5E model remains the same with the 7E model except that two more components are added to the model.The two new components added are Elicits, and Extend. In the following paragraph the 7E model is presented in brief.

1.Engage:

This is the first stage that facilitates familiarization, motivation and finding the area of interest of students.Students are given a list of activities and they are asked to choose the activities and the small group to which one will belong to for study.The problem chosen may to study the quality of water in the different sources such as river, pond, well, tank and reservoir.

2. Elicits:

Teacher elicits from students the different characteristics of water from different sources and makes a table with the help of students. A question comes that would their be any difference between water in the running and the water that is stagnant with less circulation.

It may be observed that generally the running water has tendency to get purified for there are factors such as water current,sand and soil to filter,water animals that may help in cleansing such as tortoise,crocodile,snakes,frogs, and some microorganisms. A reservoir may not have this facility and therefore, the water has to be recharged and sent back to the reservoir after taking a detour.

Spring, pond, well and tank are small sources of water that are generally circulated very less and more likely to be polluted due to continuous exposure and use of water for various purposes such as washing, bathing, cleaning animals, irrigation and other purposes such as construction.Students may say that the villagers introduce tortoise into the well and tank. They also put alum , calcium into the well periodically for cleaning the well.It is also true that they do desilting. That is removing the upper layer of the soil that is full of contaminants such as minerals, particulate matter, etc,.

3.Explore:

In this stage students and teacher make small groups and collect sample water from each of the source.In the river they collect the sample at upstream and down stream.The water is tested for the presence of mineral salts, particulate matter, presence of micro organisms, Biological Oxidation demand and their

pH. They tabulate the results with the help of the teacher.

4.Explain:

Teacher and students try to inquire that why mineral salts are more in water from well and tank in comparison to the water in the river or reservoir.Students think and answer that the water interacts with the soil and rock in the well and tank and helps in the recharge of water. The mineral salt that is collected in the soil and near rock and upper layer of the rock gets dissolved in the water and thus making it slightly salty water.In some areas for example, in the Saurashtra region there is salinity of the soil. The water is likely to get mixed with the salts and salt water is obtained. In case of river and reservoir the presence of mineral salts are less.The water circulation is almost continuous resulting in separation of the particulate matter. The presence of holes in the river bed makes the water to swirl for some time and then move forward. This process takes the all the waste to go down to the river bed and clean water to flow.The water current and waves provides the enough energy for the particulate matter to move to distant places. It may be observed in the back waters of estuary and sea the water circulates and moves back and forth to give a push to the matter to move for example, Poovar island near Thiruananthapuram, back water near Chidambaram, Mangrove marshy areas in Calcutta, West Bengal.

5. Elaborates:

Teacher tries to elaborate the ideas such as why the pond or tank water is relatively fresh and minerals dissolved in it is less in comparison to the water in the well.

The reason may be that the water in the well comes in contact with the soil or rock directly and minerals in the surrounding soil get gradually dissolved in water due to a process called weathering.What measures may be undertaken in order that the water gets circulated regularly ? is a question that people in the village think and try to observe that the water gets recharged.

6.Evaluate:

Teacher and student try to review their activities, questions and observations for the more validation from the group. Sometimes, an external expert may be called upon to look into the solution of the problem and active implementation.

7. Extend:

Teacher and students try to list the similar water sources in different places and try to study the variables responsible for their effective or ineffective functioning. Recently, Council for Science and Technology, Madhya Pradesh try to verify the proposals of the projects submitted to them through the research organization.One of the project proposal was on cleaning of the Chilka lake in Madhya Pradesh. Another project was on the saving of vultures . These projects help the students and scientists to get actively involved in the actual solving of the problem.

Water quality testing is taken up in the study of various rivers in India. This has happened due to the continuous pollution taking place in urban as well as rural area. Then, comes the conclusion that pollution control measures have to be implemented with more seriousness and commitment to clean environment.

Concluding Remarks

The concluding remarks for the article is as follows:

5E and 7E constructivist model is useful for teaching science, mathematics, and languages. The teacher need to prepare for the lessons and provide more freedom for learners to participate. Continuous feedback from students will help in monitoring the progress of students. Constructivist learning models provide facility for developing individual profile of the

student and facilitate continuous comparison of the performance of the students. It provides opportunity for the students to demonstrate the creativity in their work and behaviour.

REFERENCES

Bybee,R.W. (1997) Achieving scientific literacy, Portsmouth, N.H: Heinemann.

Cepni,S, Akdeniz,A and Keser,O.F (2000) The development of sample guide materials suitable for cohesive learning theory in science education, Turkiye Physics Association,Nineteenth Physics Congress, Fi rat University, Elazi g.

Cherry, Gamaliel, R (2011) Analysis of attitude, and achievement using the 5 E instructional models in an interactive television environment, ERIC, ED.528813)

Eisenkraft, A (2003) Expanding the 5 E model, The Science Teacher, National Science Teachers Association, 1840 Wilson blvd,Arlington,VA 22201-3000

Gov. of M.P. Council for Science and Technology, Bhopal: Government of Madhya Pradesh.

Joshua and Krishnan, S (2015). The Effectiveness of 7E Model on Achievement in Mathematics of Secondary School Students,Journal of Community Guidance and Research,32(1),March 2015,151-163,ISSN No.0970-1346

Schiro, M.S.(2008) Curriculum Theory Conflicting Visions and Enduring Concerns, New Delhi: Sage Publications Inc.

Article Received on	**01.04.2016**	**Reviewed on**	**02.04.2016**
Observations reflected on	**03.04.2016**	**Modified on**	**07.04.2016**

*** *Dr. R. S. Mani*** : **Professor, Dept. of Education (CASE), Faculty of Education and Psychology, The Maharaja Sayajirao University of Baroda, Vadodara, Gujarat. Pin 390002**
e-mail : *subramani_mudaliar@yahoo.com*

EDUSEARCH
ISSN: 0976-1160
Vol. 7, No.1, Apr. 2016

Constructivist Models : 5E and 7E Models in Science Education

*Dr. R. S. Mani**

Key Words : Constructivism, 5 E model, 7 E model, Active Learning.

Abstract

Constructivism is a structure that provides facility of more interaction for the student and gain more in terms of the knowledge. The knowledge construction takes place from the side of the student that facilitates more interaction. Here the teacher is supposed to act as a facilitator.

In this paper an attempt is made to describe 5E and 7E model of constructivism. The constructivism facilitates more transfer and comprehension. The peer interaction increases and more activities are included to facilitate better concept formation. There is more facility for comparing and contrasting to observe uniformity and differences.

Introduction

An instructional model or learning cycle is a sequence of stages teachers may go through to help students develop a full understanding of a lesson concept. Teacher uses scaffolding and it enables a student to go beyond what he or she could do independently.

5 E- Learming Model

The 5 E learning cycle model requires instruction to include the following discrete elements: Engage Explore, Explain, Elaborate and Evaluate.Engage, Explore, Explain, Elaborate and Evaluate follow a sequence that maintains an order. However, there are situations that the elements in the model could overlap each other or show combined effect. For the purposes of understanding the 5 E model is presented as Engage, Explore, Explain, Elaborate and Evaluate.

1. Engage:

This is the first stage in which the teacher tries to understand the student and tries to motivate the student through some presentation of instructional material to the level of the student for

example, teacher is trying to present about the aerosols and their effect. In this stage, he may present a table of green house gases in percentage of its presence in air such as Carbon mono oxide, Carbon-di-oxide, Methane, and Chlorofluaro Carbon. Then, he will mention that ten most polluted cities are in India.

He will present the name of the cities and shows the aerosol as the air pollution. This motivates the student to study the aerosol and its effects on air.

2. Explore:

Teacher and students have developed some general outline of the aerosol pollution in air in India. However, the rate of pollution, area covered and extent of its intensity has to be discovered. They will discuss various methods of study of aerosols through experimentation.

The suggestions come up as follows: a) Balloon experiment) Using electronic precipitator) Collecting air sample from different places and analyzing for its components. They may discuss the recent micro satellite experiment conducted by ISRO and Chandrasekhar Saraswati University, Kanchi.d) Collect data from the PUC testing centres and analyze it for its pattern for example in Vadodara.They may find that Vadodara is one of the highly polluted city.e) Teacher along with some students could collect some air sample near the industry and using it for analyzing with the chromatographic techniques to identify the components. This reveals the presence of aerosols and to some extent the percentage of their presence in a given sample area. Estimate the coverage with the grid method. Teachers and student discuss and small groups are formed to explore with the available facilities. Students may contact the Environment control agency and collect the data. They may also contact government authorities to provide the data already collected by the instruments installed on the top of the buildings in cities and villages.

3. Explain:

On completing the data collection and analysis, teacher and students will discuss the results of the data for the extent of aerosol pollution. They may invite a scientist working on the topic to observe and guide in the analysis of the data and interpretation. The reasons for the aerosol pollution may be due to for example. increase in the number of automobiles in the cityii) increased consumption of petrol and diesel as compared to the natural gas(LPG).iii) Use of Nitrogen in place of the other fuels.iv) One tries to discuss the reason for the more percentage of Methane and Chlorofluro Carbon than the Carbon-mono oxide and Carbon-di-oxide.in air.v) One group of students make an estimate of the percentage of garbage collected by Vadodara Municipal Corporation through their records and discussion with the authority and garbage is burnt in air.vi) A small group students make a list of industries in and around Vadodara and make a table of the products produced by them and the data gathered from their chimneys for the functioning of the precipitators.vii) all the students will discuss about the concept of Carbon credit.viii) Students may make a list of the list of hospitals and clinics in the city and their method of disposal of medical waste. The discussion following the use of incinerator for the burning and other methods of safe disposal will reflect on the aerosol present in air.ix) A small group will computer simulate the data and image and estimate the extent of aerosol pollution in simulation method.x) The increase in the aerosol in air may be mainly attributed to the increased burning of fossil fuels.

Teacher and students on discussion find some of the reasons more valid and significantly contributing to the problem. On studying the data pattern and

analysis, students and teacher will be able to identify the causes for the aerosol pollution in the given area namely Vadodara.

4. Elaborate:

Differences between mean scores were in favour of the treatment group on both topic and achievement levels. Findings reveal that the use of inquiry based instruction to improve achievement. The 5 E learning cycle model requires instruction to include the following discrete elements: Engage, Explore, Explain, Elaborate and Evaluate.

Elaborate: In this stage teacher and student try to elaborate the concept being explored. In the previous stage, the teacher and students try to give an explanation.

The reason may be adequate or may not be but some of the points being presented needs some more clarity and it come through elaborate presentation. The field notes, experimental data nothings may not be able to explain in details. In the elaboration stage, the teacher presents the concepts in context and gives some comparison and try to enlist all the essential characteristics. While doing all these activities, he/she may take the help of students. Involvement of student is needed in almost every stage. In the example, being discussed the aerosols are of many kinds. He/She describes the aerosols and their extent of distribution in a given site.

He /She may quote and show the satellite map of the aerosol in a given region and discuss the factors that contribute to aerosol concentration. Some questions may be relevant for example, how aerosol is responsible for air pollution? How aerosol is related in with the clouds and cloud movement? Does it have any relation with rain? Does it contribute to acid rain? How do we prevent acid rain? How aerosol is responsible for global warming? These questions need an elaborate answer.

Teacher may explain the concept of carbon credit. What are the chemicals that could replace the Chlorofluoro carbon? Instead of going for combustion of waste in the open air is it possible to burn in an enclosed place safely and use the ashes for some productive purposes. There are multiple factors that contribute to the aerosol production and its concentration in a given area.

These factors could be elaborated for proper understanding. Students could ask questions for the teacher to answer and involve students in the discussion. Students could bring in more examples and different context? For example, aerosol concentration in summer (spring) and winter is the same? What measures are needed to increase the visibility of the persons riding the vehicles in the early morning or in the evening? These discussions motivate the student to further investigate the phenomenon and read about it or explore some websites. He/She may also give assignments to surf some websites related with the topic and rise some questions in the next class.

5.Evaluate:

Evaluation is a process that takes place continuously all through the investigation. The best evaluation is the self evaluation of the person to introspect and find the differences in the beginning of investigation and the end of it. However, teacher could give a small project and students could complete it in small groups. Teacher could give a paper pencil test and ask them to write in short and long form. Teacher may interview some students for finding their depth of understanding. Conduct discussion session to consolidate the characteristics of the concept. Try to involve every student in the discussion. An assignment may be to draw the aerosol on a drawing sheet giving the time, concentration and area. An observation report may be collected by the teacher to describe the characteristics of aerosol and its

interaction with dust particles in parts per million (pap).Making a list of industries that contribute to the more concentration of aerosols in Vadodara city.

A question may be while you fly from Vadodara airport by plane a thick cloud of white mash is observed. Does it affect the air plane? What happens to the suspended particles? Do they go up in the air or settle down on soil? Why a thin layer of mucus type structure is formed on the water stored in the tank? How do you explain water poisoning? Do you think Carbon-di-oxide or Carbon mono oxide will react with water? These questions to illustrate a few may make the student to think. Teacher may ask in one of the test to each to student to ask five questions on the paper and think about it.They could select one or two question and try to answer in order to understand the phenomenon.

The teacher would then see the questions raised and their quality and the type of answers provided by the students. The thinking attempted need to be rewarded. In this sense, no student will fail in the examination. Under the CCE activities such an science activity would make them think and it could be evaluated for including it in the final examination result of the student.

7 E- Learming Model

7 E Model has the following components. They are: Engage Elicits, Explore, Explain, Elaborates, Evaluate and Extend.

The five components in the 5E model remains the same with the 7E model except that two more components are added to the model.The two new components added are Elicits, and Extend. In the following paragraph the 7E model is presented in brief.

1.Engage:

This is the first stage that facilitates familiarization, motivation and finding the area of interest of students.Students are given a list of activities and they are asked to choose the activities and the small group to which one will belong to for study.The problem chosen may to study the quality of water in the different sources such as river, pond, well, tank and reservoir.

2. Elicits:

Teacher elicits from students the different characteristics of water from different sources and makes a table with the help of students. A question comes that would their be any difference between water in the running and the water that is stagnant with less circulation.

It may be observed that generally the running water has tendency to get purified for there are factors such as water current,sand and soil to filter,water animals that may help in cleansing such as tortoise,crocodile,snakes,frogs, and some microorganisms. A reservoir may not have this facility and therefore, the water has to be recharged and sent back to the reservoir after taking a detour.

Spring, pond, well and tank are small sources of water that are generally circulated very less and more likely to be polluted due to continuous exposure and use of water for various purposes such as washing, bathing, cleaning animals, irrigation and other purposes such as construction.Students may say that the villagers introduce tortoise into the well and tank. They also put alum , calcium into the well periodically for cleaning the well.It is also true that they do desilting. That is removing the upper layer of the soil that is full of contaminants such as minerals, particulate matter, etc,.

3.Explore:

In this stage students and teacher make small groups and collect sample water from each of the source.In the river they collect the sample at upstream and down stream.The water is tested for the presence of mineral salts, particulate matter, presence of micro organisms, Biological Oxidation demand and their

pH. They tabulate the results with the help of the teacher.

4.Explain:

Teacher and students try to inquire that why mineral salts are more in water from well and tank in comparison to the water in the river or reservoir.Students think and answer that the water interacts with the soil and rock in the well and tank and helps in the recharge of water. The mineral salt that is collected in the soil and near rock and upper layer of the rock gets dissolved in the water and thus making it slightly salty water.In some areas for example, in the Saurashtra region there is salinity of the soil. The water is likely to get mixed with the salts and salt water is obtained. In case of river and reservoir the presence of mineral salts are less.The water circulation is almost continuous resulting in separation of the particulate matter. The presence of holes in the river bed makes the water to swirl for some time and then move forward. This process takes the all the waste to go down to the river bed and clean water to flow.The water current and waves provides the enough energy for the particulate matter to move to distant places. It may be observed in the back waters of estuary and sea the water circulates and moves back and forth to give a push to the matter to move for example, Poovar island near Thiruananthapuram, back water near Chidambaram, Mangrove marshy areas in Calcutta, West Bengal.

5. Elaborates:

Teacher tries to elaborate the ideas such as why the pond or tank water is relatively fresh and minerals dissolved in it is less in comparison to the water in the well.

The reason may be that the water in the well comes in contact with the soil or rock directly and minerals in the surrounding soil get gradually dissolved in water due to a process called weathering.What measures may be undertaken in order that the water gets circulated regularly ? is a question that people in the village think and try to observe that the water gets recharged.

6.Evaluate:

Teacher and student try to review their activities, questions and observations for the more validation from the group. Sometimes, an external expert may be called upon to look into the solution of the problem and active implementation.

7. Extend:

Teacher and students try to list the similar water sources in different places and try to study the variables responsible for their effective or ineffective functioning. Recently, Council for Science and Technology, Madhya Pradesh try to verify the proposals of the projects submitted to them through the research organization.One of the project proposal was on cleaning of the Chilka lake in Madhya Pradesh. Another project was on the saving of vultures . These projects help the students and scientists to get actively involved in the actual solving of the problem.

Water quality testing is taken up in the study of various rivers in India. This has happened due to the continuous pollution taking place in urban as well as rural area. Then, comes the conclusion that pollution control measures have to be implemented with more seriousness and commitment to clean environment.

Concluding Remarks

The concluding remarks for the article is as follows:

5E and 7E constructivist model is useful for teaching science, mathematics, and languages. The teacher need to prepare for the lessons and provide more freedom for learners to participate. Continuous feedback from students will help in monitoring the progress of students. Constructivist learning models provide facility for developing individual profile of the

student and facilitate continuous comparison of the performance of the students. It provides opportunity for the students to demonstrate the creativity in their work and behaviour.

REFERENCES

Bybee,R.W. (1997) Achieving scientific literacy, Portsmouth, N.H: Heinemann.

Cepni,S, Akdeniz,A and Keser,O.F (2000) The development of sample guide materials suitable for cohesive learning theory in science education, Turkiye Physics Association,Nineteenth Physics Congress, Fi rat University, Elazi g.

Cherry, Gamaliel, R (2011) Analysis of attitude, and achievement using the 5 E instructional models in an interactive television environment, ERIC, ED.528813)

Eisenkraft, A (2003) Expanding the 5 E model, The Science Teacher, National Science Teachers Association, 1840 Wilson blvd,Arlington,VA 22201-3000

Gov. of M.P. Council for Science and Technology, Bhopal: Government of Madhya Pradesh.

Joshua and Krishnan, S (2015). The Effectiveness of 7E Model on Achievement in Mathematics of Secondary School Students,Journal of Community Guidance and Research,32(1),March 2015,151-163,ISSN No.0970-1346

Schiro, M.S.(2008) Curriculum Theory Conflicting Visions and Enduring Concerns, New Delhi: Sage Publications Inc.

Article Received on	**01.04.2016**	**Reviewed on**	**02.04.2016**
Observations reflected on	**03.04.2016**	**Modified on**	**07.04.2016**

*** *Dr. R. S. Mani*** : **Professor, Dept. of Education (CASE), Faculty of Education and Psychology, The Maharaja Sayajirao University of Baroda, Vadodara, Gujarat. Pin 390002**
e-mail : *subramani_mudaliar@yahoo.com*

EDUSEARCH
ISSN: 0976-1160
Vol. 7, No.1, Apr. 2016

A Study on the Institutional Environment and Academic Achievement among Students at Intermediate Level

***Dr. M. Ratna Swarupa** **

Key Words : Institutional Environment, Academic Achievement

Abstract

Socially, the child is the product of environment. If the school is able to create a congenial, pleasant and favorable climate for learning. A supporting institutional learning climate likely to create a positive attitude and facilitates learning, whereas a non-supportive climate is likely to create a negative attitude and impede learning. The purpose of the present investigation was to find the influence of Institutional environment on Academic achievement of intermediate students. The sample consisted of 400 (200boys and 200girls) students from urban and rural areas of Ranga Reddy district. The findings reveal that there is positive relationship between Institutional environment and Academic achievement. It is also inferred that girls have perceived their Institutional environment better than boys. There is no significant difference in the perceptions of urban and rural students with respect to the Institutional environment

Introduction

Schools are institutional spaces for communities of learners, including both students and teachers. Learning takes place within a web of social relationships as teachers and pupils interact both formally and informally. The first post-independence comprehensive study on the status of education in India completed in 1966 gave a major thrust to the idea of all-round development of the child's personality and intellect. It elaborated on the need for physical, intellectual and spiritual development of the child in equal measure. But even in the current years there is still mere lip service to these ideals. Parents want the child to shine in academics, no matter at what cost. Teachers see children's examination performance as a measure of their own worth. Schools rate each other on the basis of their student's performance at board examinations. In other words, academic achievement seems to be the ultimate goal in everyone's mind. In attempts to pursue this goal, all concerned seem to deny the existence of the role of

the affective school environment in student's performance. They appear to assume that intellectual performance is divorced from any feeling or perceptions the student might have.

School environment as perceived by students has an advantage of characterizing the setting through the eyes of the actual participants. Students have a good advantage point to make judgments about classrooms because they have encountered several learning environments and have enough time in a class to form accurate impressions.

One of the major aims of the education is the development of wholesome personality. Family is the socio-biological unit that exerts the greatest influence on the development and perpetuation of the individual's behavior. Next to home, school is the most important experience in the process of development of children. Both the environments, share influential place in child's life and also contribute to the development of children. School is the second home to children. Teachers and parents have greater responsibility to foster mental health status of the students. At times in adverse conditions the school may also substitute the home situations and meets the emotional needs of those neglected in the home. Pupil's perception or attitude towards the school climate or environment has got considerable influence over their mental health. School atmosphere, includes favorable attitude towards school teacher, co-students, curriculum, methods of teaching, facilities available in the classroom and teacher-student interaction.

Pupil's immediate environment is the classroom. Classroom is a place where unique face-to-face group marked by interpersonal relationships among its members. These interpersonal relationships essentially include teacher-student relationship and peer relationship. The general atmosphere within the academic activities that takes place influences the social relationships. Two types of social interactions occur in the classroom i.e. teacher vs. students and students vs. students. First one is the most referred one in educational context. However, the interaction going on amongst students is equally significant from a psycho-social view point. The success or the failure of the students also depends on the quality of classroom's social climate. The classroom environment aids the development and effective achievement of pupil.

Socially, the child is the product of environment. If the school is able to create a congenial, pleasant and favorable climate for learning, the child is likely to enjoy the schooling experience. A supporting institutional learning climate likely creates a positive attitude and facilitates learning, whereas a non-supportive climate is likely to create a negative attitude and impede learning. To facilitate effective learning and to avoid social problems that may arise out of failures, it would be expedient to include the development of a positive and healthy attitude in students towards school and towards learning.

In the present era schools have a greater responsibility to help the students in developing appropriate behavior patterns.The school is the chief supplementing institution in which children develop sound mental health. The school is charged with realization, human relationships, economic efficiency and civic responsibility. School experiences are designed to enhance growth and development, stimulate learning and to develop good behavioral patterns. The experience at school and school curriculum contribute to child's feeling of personal worth, social competence, in winning acceptance from associates, satisfaction for the students to play and to accomplish purposeful tasks and develop interests and activities which

would promote social values.

The Concept of Institutional Environment

School environment has been defined in numerous ways. *Dave* (1963) defined educational environment as "the conditions, process and psychological stimuli" which affect the educational achievement of the child. Many researchers and authors have identified the following characteristics of school environment, which may influences either negatively or positively on academic achievement of students:

(i). Positive Characteristics:

Involvement, Satisfaction, Self-worth, Social satisfaction, Competence, (Academic achievement), Intimacy, Independence, Enthusiasm, Home work, Teaching methods, Acceptance, Problem structuring, Cohesiveness, Task orientation, Teacher support, Study habits and Cognition.

(ii). Negative Characteristics:

Disengagement, Friction, Difficulty, Psycho-physical hindrance, Alienation, Cliqueness, Apathy, Formality, Direction diversity, Reproving, Disparaging and Control.

The negative characteristics impede learning and develop negative attitude and social emotional problems. Children develop withdrawal tendencies.

The study of classroom environment is of great significance as learning is the outcome of this environment. As an agent of intellectual stimulation conducive classroom environment is an important factor in strengthening the child's level of education. The kind of academic climate in school and among students, promote either a positive or a negative attitude towards their work at school. The negative attitudes are bound to have a strong influence on their academic performance and manifest themselves in undesirable behavior such as inattentiveness and truancy, which in turn further affects their academic achievement. Academic achievement is dependent on school learning environment as well as home learning environment.

The Concept of Academic Achievement

Academic achievement is an outcome of the instruction provided to the children in schools which is determined by the grades, or marks secured by the students in the examination. It generally indicates the learning outcomes of a pupil which requires a series of planned and organized experiences. Academic achievement is the core of the entire educational growth. It is regarded as an important goal of education. It is the prime and perennial responsibility of a school or any other educational institution established by the society to promote whole scholastic growth and development of a child.

Academic achievement of children depends not only upon their abilities, but also on the atmosphere within the family and school. Lack of favorable atmosphere leads to negative feelings and attitudes, which in turn affect Academic achievement. Scholastic performance plays a vital role in the determination of future success and consequently, failure to achieve certain standards in performance is sure to influence one's failure in his life.

Rationale for the Study

Today, going to educational institutions is nothing less than a nightmarish affair for students who are buckling under pressure. With exam fever rising so do the anxiety levels among students. Most students who commit suicides are in high school and intermediate level where they feel the stress is at its worst. A 17 year old girl *R. Swetha* committed suicide in February, 2011 fearing that she may have performed poorly in her first year intermediate examinations. On October 3rd, 2012 another intermediate first year student *B. Soujanya* of a corporate college

committed suicide due to pressure mounted by parents to study in city far away from home against her wishes. On February 24, 2013 another 17 year old had done the same fearing less than satisfactory performance. What is it that is driving students to suicides?

According to National Crime Records Bureau, 32.1 percent of those who committed suicide in 2009 in Andhra Pradesh fell in the 15-29 age brackets. In 2009, 2010 youngsters committed suicide due to failure in examinations across the country. Between April and June 2010, 52 students from corporate colleges committed suicide due to academic pressure. In recent years, there has been an increase in cases of student suicide and attempt to suicides especially in cities. Parental pressure and forcing children to perform beyond their potential, competition to get into prestigious institutes, comparison with peer group, and academic pressure at schools and colleges are combining to push students to the edge.

Most of the students' problems range from parents not understanding them to teachers being too harsh. Condemning the suicides is not the solution. What is needed is to eliminate the whole concept of perform or perish. It is important to understand the child without being judgmental. It is very important to be aware that examinations are not a life and death situations. Scoring little less or failing does not mean the end, a few compromises need to be made to move on in life.

Nowadays examination stress is seen more in parents than in the children. In most cases, for better or worse, it is the parent who influences the destiny of his children. Too much pressure causes behavioral problems. As the examination days approach the parents worry more about the child's achievement and this undue anxiety often results in pressurizing the children. However, an optimum stress is productive and it facilitates the growing performance of the individuals. Some amount of stress is essential in mobilizing the potentialities of the individuals to work more effectively. But increased amount for an extended period will have poisonous effects on the physical, psychological vigor and academic achievement of the students. The common symptoms include diminished pleasure in living, addiction to drugs or alcohol, smoking, irritability, fatigue, depression, insomnia, physical problems ranging from migraine, back pains to ulcers. They should be properly guided to adjust to the environment and to have control over their psychological aspects.

Review of Related Literature

Alimi, Olatunji Sabitco et. al. (2012) investigated the influence of school types and facilities on students' academic performance in Ondo state. The study revealed a significant difference in facilities available in public and private schools but no significant difference was found in academic performance of students in two types of secondary schools. *Van Ryzin,* (2011) evaluated reciprocal effects among adolescent perceptions of the school environment, engagement in learning, hope and academic achievement. The results indicate that the student's perceptions of the school environment in learning, which in turn are linked to change in academic achievement and hope. *Ming-Te-wang and Rebecca Holcombe* (2010) examined the relationships among middle school student's perception of school environment, school engagement and academic achievement. Research indicated that student's perceptions of school environment influenced their academic achievement directly and indirectly through the three types of school engagement. *Chamundeshwarand Uma*, (2008) conducted a study on achievement motivation and classroom

climate among students in different systems of education at the higher secondary level. It has been shown that achievement of students in the class has not only influenced by the motivation of the teachers but also by a positive classroom climate. *Devi and Mayuri* (2003) conducted a study on school and family factors that affect the academic achievement of residential school children. The results revealed that, among school factors-teachers qualification, physical setup, curriculum and subject matter, classroom organization, method of teaching, teacher-student interaction were found to be having effect on the academic achievement of the school children. Further, *Monoharan and Sundaram* (2003) studied certain school variables as related to classroom climate and teacher's teaching as perceived by higher secondary students. The results revealed that, there is no significant difference in classroom climate as perceived by the students in terms of locality of school (rural and urban), type of management (govtvs aided school) and getting scholarship (scholarship and non-scholarship holders). *Mishra* (2002) attempted to study the perception of classroom environment of middle school (200) children from Bilaspur district. The results revealed that urban, non-tribal and male students perceived classroom environment better than rural, tribal and girl students. *Mohanty and Pani*, (1979) studied the effect of student-teacher classroom interaction on the academic performance of students. Analysis showed that classroom interaction produced a statistically significant effect on the academic performance.

Based on these studies it is evident that the School environment plays an important role on the Academic achievement of school children. The success or the failure of the students greatly depends on the quality of classroom environment and social climate.

Methodology

The investigator has chosen the descriptive survey design for collecting the data. In the present investigation, an attempt has been made to examine the relationship between the Institutional Environment and Academic achievement by correlation design. Further, differential design was used to compare the Institutional Environment with respect to: Gender, Location of the institution and Type of management.

Objectives of the Study

1. To study the relationship between the Institutional environment and the Academic achievement of students at intermediate level.
2. To study the differential effect of the independent variables (Gender, Location, and Type of management) on institutional Environment.

Hypothesis of the Study

1. Boys and Girls differ in their perceptions with regard to Institutional environment.
2. There exists significant difference between Urban and Rural students in their perceptions with regard to Institutional environment.
3. There exists significant difference between Private unaided college students and Government college students in their perceptions with regard to Institutional environment.
4. There would be a significant correlation between Institutional environment and Academic achievement of Intermediate students.

Sample of the Study

The sample consisted of 400(200 boys and 200 girls) Intermediate students from urban and rural areas of Ranga Reddy district. Technique of stratified random sampling was employed for the selection of the students.

Tools Used

The Questionnaire was developed by

the investigator to study the Institutional environment. The tool consisted of 45 items with three dimensions viz., physical facilities in the institution, teacher-student interaction and role of the principal. There are two sections in the questionnaire; section-A consists of 20 statements which require yes or no responses.

Table.1
Description of Institutional Environment Questionnaire

Sr.	Components	No.	Items
1.	Physical facilities in the institution	20	1-20
2.	Teacher – student interaction	15	21-35
3.	Role of the Principal	10	36-45

Section-B consists of 25 statements which require responses on a five point Likert rating scale. There are both positive and negative responses. The maximum obtainable score on the scale is 145 and a minimum of 25. Higher the score, better the institutional environment.

Statistical Techniques Used

The obtained data were analyzed by calculating Mean, Standard deviation, t-test and Correlations.

Results and Interpretations

It is inferred from the table 1 that the calculated values of ' t' are greater than the table value. Hence the formulated hypothesisis accepted indicating that boys and girls differ in their perceptions with respect to Institutional environment and its dimensions.

Table.2
Difference in the Perceptions of Boys and Girls with Regard to Institutional Environment

Dimensions	Boys			Girls			t value	Sig.
	N	Mean	S.D	N	Mean	S.D		
Physical Facilities	200	61.11	10.99	200	67.13	10.76	5.53	0.01
Teacher-Student interaction	200	50.89	8.98	200	56.25	8.05	6.28	0.01
Role of the principal	200	29.46	5.18	200	32.20	5.93	4.91	0.01
Institutional Env. overall scores	200	141.46	19.32	200	155.57	19.51	7.27	0.01

Table. 3
Difference in the Perceptions of Urban and Rural Students with Regard to Institutional Environment

Dimensions		Urban			Rural		t value	Sig.
	N	Mean	S.D	N	Mean	S.D		
Physical Facilities	200	64.94	11.04	200	63.30	11.46	1.46	0.145
Teacher-Student interaction	200	53.12	8.37	200	54.02	9.44	1.01	0.311
Role of the principal	200	32.05	5.70	200	29.61	5.50	4.36	0.000
Institutional Env. overall score	200	150.11	20.39	200	146.92	20.81	1.55	0.123

(At 5% level of significance, the 't' value is 1.97)

Table. 4
Difference in the Perceptions of Private-Unaided and Government College Students with Regard to Institutional Environment

Dimensions	Private- unaided			Government			t-value	Sig.
	N	Mean	S.D	N	Mean	S.D		
Physical Facilities	200	62.52	10.77	200	65.72	11.55	2.87	0.004
Teacher-Student interaction	200	51.43	9.22	200	55.71	8.10	4.93	0.000
Role of the principal	200	31.30	5.65	200	30.36	5.78	1.65	0.099
Institutional Env. overall score	200	145.25	21.33	200	151.78	19.42	3.20	0.001

Comparing the mean scores, girls have perceived their Institutional environment better than boys.

Comparing the mean scores in the table no. 2, the students from urban areas have better score for Role of the principal dimension than students from rural areas. It is also inferred from the above table that, there is no significant difference in the perceptions of urban and rural students with respect to the dimensions-Physical facilities, Teacher-Student interaction and Institutional environment in total.

In the table no. 3 the calculated value of 't' is greater than the table value, the formulated hypothesis is accepted indicating that there is significant difference between urban and rural students in their perceptions regarding the Role of the principal dimension.

In the table 4 Since the calculated values of 't' are greater than the table value, the formulated hypothesis is accepted indicating that there is significant difference between private-unaided and government college students in their perceptions with regard to the dimensions viz. Physical facilities, Teacher-Student interaction and Institutional environment in total. Comparing the mean scores, the students from government colleges have better Physical facilities, Teacher-Student interaction and Institutional environment than students from private unaided colleges. It is also inferred from the above table that, there is no significant difference in the perceptions of private-unaided and government college students with regard to the role of the principal dimension.

Table.5
Correlation between Institutional Environment and Academic Achievement of Intermediate Students

Sr	Dimensions	N	r - value	Result
1	Physical facilities	400	0.108*	S
2	Teacher-student interaction	400	0.036	NS
3	Role of the principal	400	0.162**	S
	Institutional env overall score	400	0.120*	S

** Correlation is significant at 0.01 level (2-tailed). NS – Not Significant

* Correlation is significant at 0.05 level (2-tailed)

It is inferred from the above table that, the dimensions-Physical facilities and Role of the principal have significant positive relationship with Academic achievement.Thedimension, Teacher-student interaction has no significant correlation with Academic achievement. It can be observed from the above table that, there is positive correlation between Institutional environment and Academic achievement.

Educational Implications

The findings of the present research have a strong bearing on the Learning process and Academic achievement of the adolescents and will help the educational authorities and teachers in

solving the problems confronted by the adolescent children. There is an urgent need to control stress and conflict causing frustrations among the present generation of adolescents regarding their Aspirations and Academic performance. The result of the study will be of immense help to the people who are interested in the curriculum framing and examination reforms at the intermediate level.

1. It is recently reported that two-thirds of the Indian students are under constant tension because of high expectations placed on them by parents and teachers. Consequently, half of the students cannot concentrate on their studies properly and one-fourth of them are educationally maladjusted. World Health Organization (WHO) recommended that India should concentrate upon school and college students' mental hygiene, as it is impossible to provide thousands of psychiatrists. There is increasing incidence of young runaways and of students killing themselves. Hence the need of training teachers into capacity building in dealing with academic and psychological issues of adolescents cannot be overlooked.
2. According to the present study, majority of the students (56.1%) felt that there is no play ground in their institution with adequate sports material. As a result the colleges are compromising with the quality of learning provided through the curriculum. Adolescence is the period when maximum growth and development takes place. To optimize this development adequate provision for physical exercise, sports and games should be made in the college curriculum in order to sublimate student's instincts. The government should take more efforts to implement a compulsory games period in the college time table to achieve curricular aims with the support of heads of colleges, cluster and block functionaries.
3. The present study also reveals that the students from colleges located in urban areas have better academic achievement than students from colleges located in rural areas. Further, it is observed that students from private - unaided colleges have better academic achievement than students from government colleges. Hence government should take all possible efforts to organize interactive workshops regularly where the teachers of rural areas may be facilitated to interact with the teachers of urban colleges which produce excellent results.
4. Adolescence is the period when maximum growth and development takes place. To optimize this development, pleasant and healthy environment should be provided in colleges.
5. Many junior colleges lack playgrounds for outdoor learning activities. Consequently, these colleges naturally compromise with the quality of learning provided through the curriculum. Ensuring that minimum requirements of infrastructure and materials are available, and supporting flexible planning that will help achieve curricular aims.
6. As adolescents crave for recognition, teachers should invite their views and ideas and give due consideration and recognition.
7. The programs for adolescents should focus on the development of inter-personal communication skills, counseling in psychological, academic and health areas. There should also be a provision for academic and social opportunities to involve all of them in some constructive activities at the college and community level with less competition and more sense of co-operation.
8. There is a need for training teachers into capacity building in dealing with

academic and psychological issues of adolescents which cannot be overlooked. The students should be properly guided to adjust to the environment and to have control over their idiosyncrasies.

Conclusion

It is not the environment of home alone but school also occupies the first and the most significant place for the development of children. Children living in poor environment may fail to develop their potentials and skills to the optimum extent, may have a negative effect on their performance in school and achievements in social life while children growing up in conducive environment may show superior cognitive abilities and academic competence. It is therefore necessary to study the academic learning environment of children for enhancing the academic accomplishment of children.

REFERENCES

Alimi,OlatunjiSabitco et al. (2012). School types, facilities and academic performance of students in senior secondary schools in Ondo state, Nigeria. *International Educational Studies*, Vol.5, No.3.

Chamundeswar,S.,&Uma,V.J.(2008). An achievement motivation and classroom climate among students in different systems of education at the higher Secondary level. *Journal of Educational Research and Extension*, Coimbatore, Vol. 45, No.2, April-June 2008, pp 21-27.

Devi, S.,andMayuri, K.(2003). The effects of family and school on the academic achievement of residential school children. *Journal of Community Guidance and Research*, 20(2), 139-148.

Kimiko Fujita.(2005). To determine whether or not the extra-curricular activities have an effect on student's academic performance. http://www.Kon.org/urc/v5/fujita html.

Manoharan and Sudaram, M.A.(2003). Certain school variables as related to classroom climate and teacher's teaching effectiveness as perceived by higher secondary students. *Journal of Educational Research and Extension*, 40 (1): 1-6.

Ming-Te-wang and Rebecca Holcombe.(2010). The relationships among middle school students perception of school environment, school engagement, and academic achievement. *American Educational Research Journal*, Vol. 47, No.3, 633-662.

Mishra,M.(2002). Perception of classroom environment of middle school children. *Indian Psychological Review*, 58 (2):79-84.

Mohanty, B.,&Pani, B. (1979). Effect of student-teacher classroom interaction on the academic performance of students. *Psychological Studies*, 24 (1):35-

Article Received on	**03.11.2015**	**Reviewed on**	**12.02.2016**
Observations reflected on	**25.02.2016**	**Modified on**	**23.03.2016**

*** *Dr. M. Ratna Swarupa* : Principal, R.G.R. Siddhanti College of Education, Bolton Road, Secunderabad. Telangana**
Email: ratnaswarupa@gmail.com

EDUSEARCH
ISSN: 0976-1160
Vol. 7, No.1, Apr. 2016

Study on Academic Achievement of Senior Secondary School Students on the basis of their Brain Hemisphere Dominance

Dr. Jasbir Kaur *

Key Words : *Academic Achievement, Brain Hemisphere Dominance*

Abstract

In the present study academic achievement of the students of senior secondary school is compared on the basis of their brain hemisphere dominance. The sample of the study consisted of 800 students (N = 800). The brain hemisphere dominance was found out with the help of SOLAT test, which resulted in classifying the students into right brained, left brained and integrated brained. Academic achievement of right brained, left brained and integrated brained students were compared by applying t- test. the results reveal that The academic achievement of students with integrated hemisphere is significantly better than the students with dominant left/right brain hemisphere. and there is no significant difference between the achievement of students with dominance of left and right brain hemisphere.

Introduction

Educators have been concerned over the years with identifying those factors which facilitate learning and increased academic achievements. Investigations have yielded no simple solution to this problem. Indeed, enhancing learning and achievement seems complex and multifaceted.

The biological understanding of how two hemisphere of our brain function has now reached general consensus.

The present study deals with the comparison of academic achievement of senior secondary schools students on the basis of brain hemisphere dominance.

Many studies have shown that Brain hemisphere dominance plays an important role in the academic performance of college students. The accommodation of students learning styles in the learning environment have resulted in improved test scores while, a mismatch in learning characteristic and learning environment have resulted in poor students achievement (*Andrew, 1990; Drum et.al, 1995; klaves, 1994*)

Ozzettinkok (2007) determined the effects of the language curriculum designed in compliance with theprinciple of Neurolinguistic programming, and brain dominance on the studentsacademic achievement.

Szirony, G. M. et.al (2009) made a preliminary analysis on brain hemisphere dominance and vocational preference. Finding on this added analysis revealed a high correlation between perception of musical ability and right brain hemisphere.

Conceptual definitions

In the present study academic achievements is often taken as grade point obtained by a student in a particular class.

Hemisphericity is the cerebral dominance of an individual in retaining and processing modes of information in this own style of learning and thinking.

Saba.G (2010) conducted a study to find out the effect of handedness on intelligence level of student. ANOVA showed non significant difference between the intelligence of student at different education levels.

Erin Michelle Oliver (2012) conducted a study to find out associations between problem solving strategies and brain hemisphericity. The finding shows that there exists significant relationship between problems solving strategies and brain hemisphericity.

Objective of the study

- To compare the academic achievements of senior secondary school students on the basis of their brain hemisphere dominance. (Right, Left and Integrated)

Hypothesis

- Academic achievement of senior secondary students will differ significantly on the basis of their brain hemisphere dominance.

Tools

For measuring brain hemisphericity dominance of selected subjects SOLAT scale by *D. Venket Raman* (1994) was used. The reliability coefficient of correlation for the right, left and integrated hemisphere function were found to be 0.89, 0.65 and 0.71 respectively. The validity for the right, left and integrated hemisphere is 0.842, 0.621 and 0.678 respectively.

Academic Achievement Questionnaire was constructed by the researcher and the reliability and validity of the test was found to be 0.70 and 0.65 respectively. The study was conducted on a sample of 800 students of class XI drawn from different schools of Durg District.

The SOLAT test and academic achievement test were administered on 800 students of XI standard. The data collected weretabulated approximately and suitable statistical procedure were used for analysis.

To verify the hypothesis "Academic achievements of senior secondary students will differ significant on the basis of their hemisphere dominance "t" test was used. The obtained result of such statistical analysis is presented in the table given below.

Table 1

Comparison of academic achievements ofstudents with right left and integrated brain hemisphere dominance.

Group	N	M	sd	df	t
RBH dominance	232	55.5	8.7	407	0.28
LBH Dominance	367	55.7	9.3		NS
RBH dominance	232	55.5	8.7	430	5.21
IBH Dominance	201	60.9	12.6		p<.01
LBH Dominance	367	55.7	9.3	566	5.23
IBH Dominance	201	60.9	2.6		p<.01

From the analysis of entries reported in the above table, it is evident that the academic achievements of student exhibits dominant right brain hemisphere (M = 55.5) and dominant left brain hemisphere (M = 55.7) did not differ statistically. The reported t = 0.28, was found to be statistically insignificant.

The academic achievements of

students with integrated brain hemisphere (M= 60.9) was found to be significantly higher as compared to students with dominant right brain hemisphere (M= 55.5). the reported t = 5.21, confirm this finding that the difference between these two group is statistically significant at .01 level.

The academic achievement of student with integrated brain hemisphere (M= 60.9) was foundto be significantly higher as compared to academic achievement of students with dominant left brain hemisphere (M= 55.7). The reported t = 5.23, confirm this finding that the difference between these two groups is significant (statistically) at .01 level.

Results

1. The academic achievement of students with integrated hemisphere is significantly better than the students with dominant left/right brain hemisphere.
2. There is no significant difference between the achievement of students with dominance of left and right brain hemisphere.

Educational implication

On the basis of the above mentioned findings, it can be concluded that brain hemisphericity plays a big part in academic achievement of students so by identifying the brain hemisphere dominance the academic achievement of individual could be improved while conducting this piece of research, the researcher feels that similar study can be conducted in the light of socio economic status.

REFERENCES

Andrew R.H.(1990). The development of a learning styles program in low socioeconomic, underachieving northcarolina elementary school. *Journal of reading, writing and learning disabilities International*,, 6, 307-314

Dunn, R. Debella, T., etal (1995) learning style researches define difference differently.*Educational leadership*, 38(5), 372 – 375,

Erin Michelle Oliver (2012); Relationship between problem solving strategies and brain hemisphericity in high school students. Texas state university ecommon@texas state university, Honors Degree Thesis,

Ozzettinkok (2007). Learning styles and academic performance of criminology students in English.*Unpublished Master's Thesis*, Baguiocity,

Saba, G (2010); *effect of Handedness on Intelligence level of students. Journal of the Indian Academy of applied Psychology*, vol.35, No. 1, 85 – 91,

Szivony, G.M. et.al. (2009) Brain hemisphere dominance and vocational preference. A preliminary analysis. Work: *A journal of Prevention, Assessment and Rehabilitation*, volume 29, Number 4/2007.

Article Received on	**15.02.2016**	**Reviewed on**	**21.02.2016**
Observations reflected on	**22.02.2016**	**Modified on**	**27.03.2016**

*** *Dr. Jasbir Kaur* : Associate Professor Rungta College of Science & Technology, Durg. Disst. Durg. Chhattisgarh.**
Email: mail2jasbir.kaur.gill@gmail.com

EDUSEARCH
ISSN: 0976-1160
Vol. 7, No.1, Apr. 2016

A Study on Moral Intelligence among Adolescents of Kerala

Dr. Fathima Jaseena M.P.M*

Key Words : Moral Intelligence, Adolescents

Abstract

Adolescence is a period of active growth and development. We notice physical, sexual, social, emotional development of individuals at this stage. It is the time for developing attitude towads independence. At this stage, students to face lot of pressure with family and society.

But the situation leads to more problems such as stress, loneness misbehavior, sexual maturity rapid physical changes but they can survive with help of moral maturity& moral intelligence.

Moral Intelligence refers to the ability to apply ethical principles to personal goals, values and actions. It is the ability to know right from wrong and behave ethically. This study tries to know the level of Moral Intelligence of Adolescents.

Introduction

Education is the influence of environment on individual with a view to producing change in the habits of behavior of thoughts and attitudes (*Thompson*). Education means the totality of experience gained by an individual from birth to death. The function of education is to help in the growth of helpless young animal in to happy moral and effiecient human being. The fact that main concern of education is the development of man. Since education is the integral part of human life, its field is very vast and complex.Todays generation faces lots of problems in life.

The peer interaction with friends sometimes leads to use of alcohol, tobacco and narcotics etc. Disciplinary issues like breaking rules violent interaction in their daily life we can notice. All the episodes of violence at schools are highly publicized. These types of attitudes among the students by finding out their emotional intelligence, mental ability, personality, social intelligence and moral intelligence.

Theoretical Aspects.

Moral Intelligence refers to the ability to apply ethical principles to personal goals, values and actions. It is the ability to know right from wrong and behave ethically. The more established cognitive, emotional and social intelligence, but has great potential to improve our understanding of learning and behavior. Use of Moral Intelligence is development, as the basis of intelligence. The Moral Intelligence is consists of competencies related to Integrity, Responsibility, Forgiveness and Compassion.

Moral intelligence developed to its fullest by *Doug Lennick* and *Fred Kiel* (2005) in their book of the same name, has more to do with values and behaviours than what we would think of as "Intelligence" or some raw concept of mental area means such as IQ (*Osburn*, 2011).

Moral Intelligence is more established cognitive, emotional and social intelligence, but has great potential to improve our understanding of learning and behaviour (*Clarken*, 2009). Moral Intelligence is "the capacity to determine how universal human principles should be applied to our values, goals and actions" (*Lennick* D).

The construct of moral intelligence consist of integrity, responsibility, forgiveness and compassion (*Lennick and Kiel*, 2005). It also includes ten sub categories of trust, courage, secrecy, fulfilling, personal commitments and responsibility against personal decisions, self control, self limitation, assisting others care for others. Understanding others perceptions and understanding spiritual requirements (belief, faith and courtesy).

Objective of the Study:

1.To measure the level of Moral Intelligence among the adolescents.

Research Questions

1. What is the level of Moral Intelligence among the adolescents ?
2.Does there exists difference in the levels of Moral Intelligence among adolescents.

Methodology

A survey technique was the method adopted for the study.

Sample

The sample comprised of 500 Higher secondary school students of Kerala.

Tool Used for the Study

The Tool for the study is Moral Intelligence Scale (*jaseena&lasitha* 2015). It is a three point scale, consists of 40 statements belonging to different dimensions of Moral Intelligence.

Statistical Techniques Used:

The collected data were analysed through preliminary statistics &percentile analysis.

Findings of the Study:

Descriptive statistics of the variables Moral Intelligence for the total sample given in table-1

Table reveals that in the case of Moral Intelligence, the two measures of central tendency viz., Mean and Median for the variables are almost equal and Mode is slightly deviated from the Mean. The extent of Skewness obtained is -.096 which shows the distribution is negatively skewed. The measure of Kurtosis is 0.840 which is platykurtic. Skewness obtained is nearer to zero indicating that the distribution has the possibility to be normal.

Thus it can be concluded that the distribution of Moral Intelligence is not

Table 1

Variable	sample	mean	Median	Mode	SD	Skewness	Kurtosis
Moral intelligence	500	112.28	113	119	10.0012	._096	.840

considerably deviating from the normality.

Extent of Moral Intelligence

The maximum score obtainable for Moral Intelligence in the scale 135 and minimum score is 88. The obtained maximum score for the investigator 148 and minimum score is 133. The obtained Mean score is 112.28 which is equal the medium value 113 on the scale. So it can be interpreted that the extent of Moral Intelligence is average among Higher Secondary School Students. The details are given in Table No 2

Table 2

Percentile norm of Moral Intelligence for the total sample

Sr.	Percentile	Value
1.	P10	98.10
2.	P20	102
3.	P30	107
4.	P40	109
5.	P50	113
6.	P60	116
7.	P70	119
8.	P80	122

Table 2 reveals that the 10th percentile of the Moral Intelligence score of total sample is 98. That means the Moral Intelligence scores of 10 percent of Students lies below the score 98. P50 is 113, which means below and above Moral Intelligence score 113 an equal number of Students lie. In similar way we can interpret all other percentiles.

Conclusion:

In the preliminary analysis and, the extent of Moral Intelligence analyzed and found that Higher Secondary School Students are average in their Moral Intelligence. Higher Secondary School Students have moderate Moral Intelligence.

The study indicates that it is better to adapt certain strategies in the educational context for the development of a successful morally intelligent personality.

This is the age of digital knowledge, in such a situation how can our generation face challenges of tomorrow? So if they possess medium level of morality ,they can minimize their tension,stress and emotional imbalances very easily.

REFERENCES

Best, J.W. & Khan, J.V. (2012). *Research in education* (10thed.).New Delhi: Pearson Prentice-Hall of India Private. Limited.

Clarken, Rodney, H. (2010). Considering Moral Intelligence as part of holistic education, Online submission, American educational research association .April- 3 0 May.

Lennick, D. & Kiel, F. (2005) Moral Intelligence. Pearson Education Inc. Prentice Hall. July 15.

Osburn, Olayiwola Idowu, Ajayi, & Oluwagbemega Samson (2015) Moral Intelligence an Antidote to Examination malpractices in Nigerian Schools*, Universal Journal of Educational research.* V3 n2 P32- 38.

Article Received on	**04.02.2016**	**Reviewed on**	**21.02.2016**
Observations reflected on	**28.02.2016**	**Modified on**	**22.03.2016**

*** *Dr. Fathima Jaseena M.P.M.*** : **Asstt .Professor in Education, Farook Training College, Kozhikode, Kerala.** ***jessympm@gmail.com***

EDUSEARCH
ISSN: 0976-1160
Vol. 7, No.1, Apr. 2016

Comparative study of Moral Values of the students with respect to type of School and Gender

Manisha Vijayvargiya *

Key Words : Moral Values, CBSE & CG Board Schools

Abstract

By morality we mean a set of ideas, values sanctioned by society that become an integral part of the individual self through the process of development . Moral values play an important role in shaping personality development of the children. The schools under CBSE and State boards are different with respect to their curriculum and atmosphere. Researcher became curious for knowing the difference in the status of Moral values.

A sample of 200 students with equal representation of gender and type of school has been taken purposively. Tool of Moral Value (MVS) by Arun Kumar Singh and Alpana Sen Gupta was administered on the students of both the schools. The data was analysed by applying t-test.

It is found that CG board school students as well as boys possess high moral value than CBSE school children and of girls.

Introduction-

The Psychologist's concept of moral behavior is much like the layman's and Psychoanalysts concept of conscience or moral character (*DoNelson*,1973). Morality is inferred from a person's intrinsically motivated resistance to temptation and from his guilt feelings that follow acts of transgression when he understands and also accepts prevailing standards of morality of the specific society (*Kohalberg*,1963,1964). By morality we mean internationalization of a set of ideas, values, virtues sanctioned by society that become an integral part of the individual self through the process of development. It is sum total of an individual's way of behaving that is judged through person's ethical rightness or wrongness (*Sinha and Verma*,1992)

Moral Values play an important role in shaping personality of the children. *Freud* (1933) considered super-ego as the moral commander of the personality and emphasized its observing, judging and punishing aspects. He also explored the effective dimensions of morality and also

threw light on the dark corners of personality out of which morality grows.

Objectives-

1.To Compare the moral values of the students of CBSE and CG board schools.
2.To study the gender differences with respect to Moral values of students at primary level.

Hypotheses-

1.There will be no significant difference in the moral values of the students of CBSE and CG board schools.
2.There will be no significant difference in the moral values with respect to gender of the students.

Review of Literature-

Sambhi. P.(1989) in her study entitled *A study of the value patterns and some Personality Variables of the students studding in three institutions* and found that, the value patterns of the three groups were found to be significantly different.

*Padmanabhan,T.*1992. *A study of the values of high school pupils in relation to certain selected variables* and found that boys and girls differed in respect of theoretical, economic,political, social and antithetical values.

Sample-

A sample of 200 students from five CBSE and five CG board affiliated schools were taken. 100 students from each type of school (50 Girls and 50 boys) were taken purposively for study.

Methodology-

Descriptive Survey Method was used for study.

Tools-

For this study Moral Value Scale by *Alpana Sen Gupta and Arun Kumar Singh* was used. This tool is structured on the basis of four dimensions; Lying, Dishonesty, Stealing and Cheating. It is valid and reliable for measuring moral value of the children of 6 to 12 years of age.

Statistical Technique Used -

Mean,S.D and t-tests were applied to find out the results for comparative status of Moral values with respect to gender in the children of CBSE and CG Board schools.

Data Analysis -

As per the hypotheses ware drawn, analysis of the dats has been done as per the following table.

Table 1

Means and Standard deviations and t-values of the moral values data based on the gender and type of school.

Type of board/ Gender	N	Mean	sd	df	t-value
CBSE	100	328.5	6.4	198	2.56
CG	100	344.0	6.1		p<.05
Girls	100	342.5	2.5	198	2.45
Boys	100	330.0	4.6		p<.05

Result-

On perusal of the above table it was observed that in the case of CBSE and CG board school students 't' calculated value was 2.56 is more than the table value of 1.94 at .05 level. In the second case of gender it was observed that 't' calculated is 2.45, which is more than the table value of 1.97 at 0.05 level of significance. Hence, both the Research hypotheses were rejected and it is concluded that

(i) There is a significant difference in the moral values of the students of CBSE and CG board affiliated schools

(ii)There will be significant difference in the moral values with respect to the gender.

Findings-

- Students from CG Board affiliated possess singnificantly high moral values than CBSE Schools .
- Boys have shown higher moral values than the girls.

REFERENCES

Do nelson, E. (1973). Personality: A Scientific Approach Goodyear Publishing Company, Inc. Pacific Palisades, California.

Singh, A.K. & Sengupta, A. (1997). Moral Value Scale. Kacheri Ghat, Kacheri Ghat, Agra.

Singh, A. K. (1997). Tests, Measurement and Research Methods in Behavioral Sciences, Bharti Bhavan, Patna.

Article Received on	**10.04.2016**	**Reviewed on**	**11.04.2016**
Observations reflected on	**12.04.2016**	**Modified on**	**15.04.2016**

*** *Manisha Vijayvargiya* : Research Scholar, Institute of Advanced Studies in Education, Tarbahar, Bilaspur. Chhattisgarh**
E-mail : *vijayvargiyamanisha@gmail.com*

EDUSEARCH
ISSN: 0976-1160
Vol. 7, No.1, Apr. 2016

Smart Classes : An Innovation in Classroom Teaching

Deep Kumar *

Key Words : Quality, Smart Classes, Communication

Abstract

Quality education is an essential requisite in today's competitive environment. This paper discusses about the smart classes as innovative method of teaching in Indian education scenario which provides quality education to students by helping them in better concept formation, concept elaboration, improvement in reading skills and academic achievement.

In ancient days students were taught in gurukuls where they were taught by the gurus. But this system was replaced by modernized culture. New methods of teaching have been introduced which is known as smart class. It uses instructional material, 3D animated modules and videos, and all the renowned schools are using this concept. Now the students are thrilled at this concept of innovation and interactive learning process. The concept of digitized classroom has not only made education interesting but a chance to students to enhance their performance.

Introduction:

Smart class is a modern class using multimedia, internet and e_learning devices in classroom teaching. These classes are something different to traditional classes. It is consisted of a white board, projector, computers and multimedia. Our education is going to be modernized and is going to be using "Interactive white board teaching learning techniques in schools".

The Benefits of Going for Smart Classrooms in Education

We all know how helpful it is to remember something that is taught visually to us rather than the one that is read through pages after pages. Just imagine, how beneficial would it be for students to understand a chapter visually in class. The concept of smart class education is indeed a blessing to the students of the 21st Century. Technology is changing the way life functions and if it's for the good, then why not go for it!

Smart classes use all interactive modules like videos and presentations and these visually attractive methods of

teaching becomes appealing to students who are struggling with the traditional method of teaching in a classroom. In fact, smart classes are almost like watching movies as sometimes, animated visuals are used to teach a point. This kind of visual is both eye-catching and young students can easily relate with them. This is because the audio-visual senses of students are targeted and it helps the students store the information fast and more effectively. And then, there is the advantage of utilizing much of the time wasted earlier in drawing or preparing diagrams on board. Smart boards have all these information in memory and can be presented during the time of class lectures and thus, the time saved can be used in more important things.

Students and teachers who have problems with chalk dust and they tend to suffer from allergic reactions. The smart boards saves you from such distress and won't let you develop any health issues later. Smart boards are a lot smarter when it comes to field trips which are impossible with textbooks. A field trip to the deserts of Sahara or the rainforests of the Amazon basin becomes easy with visuals in the smart boards of smart classroom. These visuals are definitely more attractive than those descriptions in a few lines of a textbook.

One of the main reasons behind the constant increase in popularity of smart classes is the fact that this kind of education is perfect for all kinds of students. A classroom has students with varied power of understanding and learning, and studying from notes and other materials becomes difficult for some students. But the use of smart classes and modern technology eases the learning process for all students. Moreover, this kind of education in class promotes more interaction between teacher and student with more participation from both sides.

When you take the negative side of this kind of smart education, there are just a few when compared to the myriad advantages it offers to students. Some technical fault that might arise during a class lecture is a common concern among those lobbying against smart technologies in classroom education. Then, there is the costing factor as well that is preventing schools to adopt this technology. With smart education comes the problem of high cost of education.

The possibilities or advantages of smart classrooms are endless. Although adopting such a new concept might be a tough decision for many, but the technology can create a new opening for the education sector. Its indeed a blessing, all you need to do is to give it a try!

Teacher's active role in smart school and smart class education

In our teacher's teaching training programs, we have to put some topics on "teacher's role as a facilitator in learning", because now a day's it is being more fascinating in smart and active teaching learning methodologies. First let us discuss about what is a smart school?

A smart school is a modern school using smart and active technologies in classroom teaching as well as school management. It is the technological aspect of the smart school, somewhere there should be various schools that are smart without the help of any

technological support and appropriate infrastructure.

Role of a Teacher in a Smart Class.

We have discussed about smart school and smart class, so it will be easy to understand about smart class education. We have to realize the difference between the traditional teaching learning and the smart teaching learning methodologies. In modern active and innovative learning system teacher's role is going to be as a facilitator. So in smart class, it is clear that teacher's role will be as a facilitator.

Teacher should be an expert to smart learning and smart education. He should be trained for it. He has to know how to use computers and internet in classroom teaching-learning. Teachers have to know the innovative use of smart and innovative teaching learning.

Teacher has to know how to use interactive learning technology in classroom. In a smart class, it may be possible to use interactive learning technology through online learning. Online education and eLearning will be the more attractive aspect of smart school classes in future.

Teacher should be friendly with students and well acquaint with the technology. If teacher do not have a proper attitude in smart education, we cannot get desired output from smart class. Teacher should be as a facilitator in learning. It will be very nice if teacher's role will be as a facilitator in learning. Smart learning makes students easy to learn with multimedia, computers and internet. Teacher has to facilitate them in learning. He has to teach students how to learn from multimedia, internet and the other innovative means of learning.

Reasons why smart boards are an essential component in the modern day classroom:

1. **Provides Flexibility**: Interactive whiteboards allow many different forms of media – including photos, illustrations, maps, graphs, games, and video, to be displayed. These tools not only enrich the classroom experience but also help to expand the nature of content that can be used in learning. In addition, SMART Boards makes learning to be more dynamic owing to the different forms of presenting information.
2. **Enhanced teaching/learning experience**: SMART Boards provide new ways for teachers to teach, and student to learn. These tools support a wide variety of learning styles. On the other hand, the Boards come with touchscreen capabilities that allow tactile learners to touch and interact with the board.
3. **Interact and share**: The interactive nature of SMART boards offers learners an opportunity to share and participate in the instructional process. Interactivity provides a platform for students to demonstrate their grasp of the subject through touching, drawing, and writing. Every learner has an opportunity to participate or contribute to the presentation and/or discussion via notebooks and tablets. In addition, the boards provide for rapid assessment whereby learners can receive immediate feedback. Teachers and students are able to identify individual

strengths and weaknesses in various subject areas and isolate areas/topics that need more focus or review.

4. **Low-Maintenance**: SMART Boards are neat and easy to use. There are no hassles cleaning or maintaining whiteboards. The data on the screen can be modified using a specialized highlighting tool or pen. There is no need for using unhygienic chalk or marker pens.
5. **Access to online information & tools**: SMART boards allow learners to easily access a rich database of online resources. Teachers can use the wide variety of online information sources such as knowledge databases, online video and news items to reinforce their lessons. Learners can also quickly access the wide range of powerful tools and resources to conduct research and supplement their usual study material.
6. **Going Green**: Interactive boards are also environmentally friendly. They offer teachers an entirely different way of presenting information to students, which eliminates the need for writing, printing or photocopying. Which, contribute to eliminate waste and pollution, from over-utilization of paper and ink.
7. **Technology Integration**: SMART boards allows for integration of various technologies in order to improve the learning experience. For instance, it is possible to attach tools such as microscopes, document cameras, cameras or video cameras to a whiteboard to aid in instruction. It is also possible to integrate the interactive learning tools with a wide range of software applications.
8. **Communication**: Interactive whiteboards allow for connectivity in different locations; making ideal collaboration and distance learning environments. When using SMART boards, student show to increase student-to-student collaboration and increase overall participation in the lesson.

Conclusion:

Overall, incorporating SMART Boards to the classroom environment is likely to change the way teachers impart knowledge to students and at the same time simplify the learning process for students. Students will find it easy to engage with lessons and gain a better understanding of the overall lesson. It is an ideal tool for any classroom setting. The education field needs technology like this for students, learners, and educators to continue to grow in their field.

REFERENCES

Becker, H.(2005). Findings from Teaching, Learning and Computing Survey: is Lary Cuban Right?" Teaching, Learning and Computing.

Besa (2001). ICT in UK State schools: A summary. Online at www.besanet.org.uk accessed 20/3/2015

Briner, M. (1999). Constructivism: The Theories. [Online] Available: http:// currivulum.calstatela.edu/faculty/psparks/theoriests/501const.htm [2011, November 25]

Corporate Diary (2007). Smart Teaching and Learning inside the Classroom.

Davidson, J. (2002). Press release by Minister of Education January 14th 2002. Cardiff, Welsh Assembly Government. Dun and Bradstreet Information Service India Pvt. Ltd. (2010). Study of Effectiveness of Educomp Smart Class Program.

Fox R (2000). Using ICT for interactive teaching in primary literacy and numeracy.

Garrett, H.E. (Reprint 2005), Statistics in Psychology and Education. Kalyani Publishers, Rajender Nagar, Ludiyana. 141008

Glover, D. and Miller, D. (2002a). The interactive whiteboard as a force for pedagogic change: the experience of five elementary schools in an English education authority. *Information Technology in Childhood Education.* Norfolk, Vermont, AACE. Haridas. http://www.indiastudychannel.com/experts/28438-Are-smart-classes-beneficial-students.aspx

Lincoln (1992). The humanist tradition. In P. Jackson (Ed.), Handbook of Research on Curriculum. New York: MacMillan.

Sevindik, T. (2007) Future,s learning environments in health education: the effect of Smart Classrooms on the academic achievements of the students at health college.

Writing, A. (2009) . Advantages of Smart Classroom. (On-line) POSTED BY FORADIAN — 14TH AUGUST '13http://www.edtechboard.com/the-benefits-of-going-for-smart-classrooms-in-your/accessed 25/02/2015 http://patners.becta.org.uk/page_documents/research/wtrs_whiteboards.pdfaccessed 23/3/2015

Article Received on	**30.03.2016**	**Reviewed on**	**01.04.2016**
Observations reflected on	**02.04.2016**	**Modified on**	**05.04.2016**

*** *Deep Kumar* : Asstt .Professor St. Xavier's College of Education, Digha Ghat, Patna. Bihar. E-mail : *deep2008.mail@gmail.com***

EDUSEARCH
ISSN: 0976-1160
Vol. 7, No.1, Apr. 2016

Impact of 'English Language Club' for developing Reading Skills among Students at High School Level

*Caroline Satur * & Dinesh Kumar Jain ***

Key Words : English Language Club, Reading Skills

Abstract

The purpose of this study was to enable pupils to learn, to understand, to read and to initiate them in literary appreciation in English and to give them a fairly good command over the language.

A sample of hundred students' participated in this study to determine the development of Reading Skill through the English Language Club by the Recognition and Reading Skill Test, Comprehension Test and English Language Club (Reading Cards) and English Achievement Test (Self-made test).

Statistics were used for establishing the test standards.

The results of analysis showed a high level of achievement in Reading Skill for the sampled students in the Experimental Group and the reliability was found to be 19.94 which revealed that the total test had good reliability and validity.

Introduction :

One of the most important factors in the field of education is learning. It is the resultant process of all different education activities. Man has some special attributes such as thinking reasoning, etc. These special powers enable him to learn things rapidly. Learning is the base of all human developments and hence it occupies a dominant lace converging all the different processes and activities of education. It is only learning that is education and it brings about constructive and desirable behavioural changes in the recipients. According to *Garry* and *Kingsley*, "Learning is a process by which behaviour is originated or changed through practice and training."

Language is communication. Though it is a natural and in birth part of human existence, language owns by itself the honour of being original and cumulative as well as contemporary. Its arbitrariness makes it a skill and its rhetoric and procedural consistence cogitation in language is resonant and is more than

required. The efficiencies of using a language in its forms and features take shape through preference in its skills.

The use of an 'English Language Club' is to fulfill the primary aim of teaching English in High Schools, to enable pupils to learn, as well as make it possible for them to understand to read English and to initiate them in literary appreciation or cultural enjoyment and to give them a fairly good command over the language through various interesting reading material, developing their reading skills and level of comprehension.

Rationale

The present study aims at examining and evaluating the levels in the development of reading and comprehension skills in High School students with the effective use of various language materials and study materials nurtured as a contributory activity with the students through an "English Language Club" creating interest in L2.

Objectives of the study :

- To test recognition and reading skill ability in students.
- To test the level of comprehension.

Hypotheses of the study:

- There will be no significant difference between the achievements of comprehension of the students belonging to the Controlled and Experimental groups.
- There will be no significant difference in the achievement of Recognition and Reading skill belonging to the Controlled and Experimental groups.

Research Method:

The Experimental method is used in this research.

Sample

The sample of the study is selected from class IX and X students of by the purposive sampling method Government High School, Mahmand, Bilha Block, Bilaspur (CG). It is distributed in two equal parts viz.

Groups	Boys	Girls	Total
Control	25	25	**50**
Experimental	25	25	**50**
Total	**50**	**50**	**100**

Research Tools

1. Self-madeTest for Reading skill and Recognition.
2. Self-made test for mearurement of Reading Comprehension viz. Short stories, paragraphs etc.
3. English Language Club activity Reading cards
4. Self- made Achievement in English

Statistical Devices :

The statistics used in the analysis of data are Mean, Standard Deviation and t-value.

The data collected was analyzed and processed in accordance with the hypotheses formulated by the computer, however a simple calculator did simple treatment of data. Invariably the data is treated for Mean, employing t-value.

Data Analysis :

Hypothesis 1

Table 1

Means, sd's and t-value of the achievements of comprehension of Experimental and Control Groups

Groups	**N**	**M**	**sd.**	**df**	**t-value**
Experimental	50	14.06	3.8	98	2.7
Control	50	12.5	2.1		p<.01

The calculated t-value is significantly higher than the table value at df 98 (t=2.63) at 0.01 level. Hence it can be said that there is a significant difference in the achievements of comprehension of the Experimental and Control Groups.

Table 2

Means, sd's and t-value of the achievements of recognition and reading skill of both Groups

Groups	**N**	**M**	**sd.**	**df**	**t-value**
Experimental	50	6.4	2.6	98	7.1
Control	50	2.8	2.7		p<.01

The calculated t-value is significantly higher than the table value at df 98 (t=2.63) at 0.01 level. Hence it can be said that there is a significant difference in the achievements of Recognition and Reading Skill of the Experimental and Control Groups.

Results

1. The experimental group has achieved significantly better level of comprehension than the control group.
2. The experimental group has achieved significantly better level of Recognition and Reading Skill than the control group.

Educational Importance Of An English Language Club

- The teacher is a felicitator. The English Language Club is provisionally administered through activity and can become a well-accustomed process.
- It is important for the teacher to understand that evaluating language is a continuous process. Every time the teacher allows comprehension through unseen texts, it is realized as a condensed effort to interpret words, structures and derivatives to reach the ultimate meaning of the text.

REFERENCES

Aggarwal R.S [1999]: A Modern Approach To Verbal & Non-verbal Reading, Rajendra Ravindra Printers, New Delhi.

Dash, M.(1991): Analysis of cognitive and speech related processes in relation to reading efficiency and IQ V Survey of Educational Research Vol. II., PP 143.

Geetha. Nagaraj [2005]: English Language Teaching – Approaches methods Teachings Orient Longman Private Limited Kolkatta. Pg-122,123,126,133,98-100.

Ms. Neelima Sharma and Dr. P.N. Ramani [2005] : CTE-03 Teaching Strategies-Teaching of English As a Second Language, Indira Gandhi National Open University School Of Humanities. Pg-32-34,39,40,48-50

Prakash, P. [1988]: Development of Reading proficiency. Relationship with mentalinguistic awareness and cognitive processing skills. Ph. D, Psy. Utkal University Fifth Survey of Research in Education. Volume, II,

Ram S.K. [1989]: Survey of Methods and Techniques of Teaching English in Class VI.Independent Study, NCERT (ER1C FUNDED) Fifth Survey of Research in Education,Vol,II,PP.770

Shelat, M.H. [1984]: Impact of reading improvement programme in Gujrati on reading comprehension of pupils of Class-VI of varying intelligence and coming from different SED. Ph.D. Edu, Sardar Patel University in Fourth Survey of Research in Education, Volume-I, NCERT Pg-661.

Singh Dr. M.K.(2005): Teaching of English International Publishing House, Meerut,

Article Received on	**30.03.2016**	**Reviewed on**	**01.04.2016**
Observations reflected on	**02.04.2016**	**Modified on**	**25.04.2016**

*** *Caroline Satur* : Research Scholar, Dept. of Education, Dr. C. V. Raman University, Kota, Bilaspur. (C.G.) *caroline.satur@gmail.com***

*** *Dinesh K. Jain*: Lecturer, Institute of Advanced Studies in Education, Tarbahar, Bilaspur. (C.G.): *iasebilaspur@gmail.com***

EDUSEARCH
ISSN: 0976-1160
Vol. 7, No.1, Apr. 2016

प्राथमिक स्तरीय विद्यार्थियों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों का अध्ययन

डॉ. अमित कुमार दवे *

विशिष्ट शब्दावली : *गृहकार्य, वर्तनीगत् त्रुटियाँ, संयुक्ताक्षर, शिरोरेखा, वर्ण, मात्रा, अनुस्वार,*

सारांश

शिक्षा के विविध स्तरों का आधार स्तंभ प्राथमिक स्तर है। प्राथमिक स्तर पर छात्रों में यदि गृहकार्य के माध्यम से लेखन दक्षता सम्बन्धी सूक्ष्मताओं पर ध्यान देकर तत्सम्बन्धी समस्याओं अथवा लेखन सम्बन्धी वर्तनीगत् त्रुटियों के दूर करने के प्रयास किए जाएँ तो भावी राष्ट्र भाषायी दक्षता से युक्त होगा।

प्रस्तुत शोध आलेख में डॉ. दवे ने गृहकार्य में छात्रों द्वारा की जाने वाली वर्तनीगत् त्रुटियों का विश्लेषण प्रस्तुत किया है। आलेख में मात्रा, अनुस्वार, विसर्ग, विरामादि चिह्नों का उचित प्रयोग, शिरोरेखा एवं सामान्य दूरी, वर्णों की बनावट, र् के विविध प्रयोग, श् ष् स् ह् का प्रयोग व लेखन संयुक्ताक्षरों का प्रयोग व लेखन सम्बन्धी त्रुटियों को पेनी दृष्टि से अवलोकित कर विषद् रूप में विश्लेषित किया गया है। इस आलेख में प्राथमिक स्तरीय समग्र छात्रों द्वारा एवं क्रमशः सरकारी निजी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों का उल्लेख करने का प्रयास किया गया है तथा पृथक-पृथक स्तरीय विद्यालयों द्वारा क्षेत्रानुसार की जाने वाली वर्तनीगत् त्रुटियों को भी विश्लेषित कर प्रस्तुत किया गया है।

प्रस्तावना-

शिक्षा के विविध स्तरों का आधार स्तंभ प्राथमिक स्तर है। प्राथमिक स्तरीय शिक्षा व्यवस्था सुनियोजत रूप से सम्पन्न करवाई जाए तो भावी शैक्षिक परिदृश्य सुखद ही दिखेंगे। इसी सुखद परिदृश्य की चाह प्राथमिक स्तर पर सुनियोजित एवं विशुद्ध गृहकार्य सम्पन्न करवाने से यथार्थ में बदली जा सकती है। प्राथमिक स्तर पर छात्रों में यदि गृहकार्य के माध्यम से लेखन दक्षता सम्बन्धी सूक्ष्मताओं पर ध्यान देकर तत्सम्बन्धी समस्याओं अथवा लेखन सम्बन्धी वर्तनीगत् त्रुटियों के दूर करने के प्रयास किए जाएँ तो भावी राष्ट्र भाषायी दक्षता से युक्त होगा। भाषायी रूप से दक्ष राष्ट्र हर क्षेत्र में दक्ष होगा, इसकी कल्पना हम वर्तमान में भी कर सकते हैं।

उक्त तथ्य को दृष्टि पथ पर रखकर प्राथमिक स्तरीय छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों का अध्ययन करने का मानस बनाया। प्राथमिक स्तरीय छात्रों द्वारा गृह कार्य में की जाने वाली वर्तनीगत् त्रुटियों का अध्ययन निम्न क्षेत्रों मात्रा संबंधी त्रुटियाँ, अनुसार - विसर्ग संबंधी त्रुटियाँ, चन्द्रबिन्दु संबंधी त्रुटियाँ, विरामादि चिह्नों के उचित प्रयोग संबंधी त्रुटियाँ, शिरोरेखा एवं सामान्य दूरी संबंधी त्रुटियाँ, वर्णों की बनावट एवं लेखन संबंधी त्रुटियाँ, र, के प्रकारों के प्रयोग संबंधी त्रुटियाँ, श्, ष्, स्, ह् के प्रयोग व लेखन संबंधी त्रुटियाँ, संयुक्ताक्षरों के प्रयोग व लेखन संबंधी त्रुटियाँ, अन्य विशेष त्रुटियाँ आदि को दृष्टिपथ पर रखकर किया गया।

शोध उद्देश्य :

प्रस्तुत शोध कार्य हेतु निम्न उद्देश्यों का निर्धारण किया गया ;

1. प्राथमिक स्तरीय विद्यार्थियों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों का अध्ययन करना।

2. सरकारी विद्यालयी प्राथमिक स्तरीय विद्यार्थियों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों का अध्ययन करना।

3. निजी विद्यालयी प्राथमिक स्तरीय विद्यार्थियों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् अशुद्धियों का अध्ययन करना।

शोध विधि -

प्रस्तुत शोध कार्य हेतु सर्वेक्षण विधि का प्रयोग किया गया।

शोध न्यादर्श -

शोध कार्य हेतु न्यादर्श के अन्तर्गत उदयपुर एवं जयपुर संभाग के 20 प्राथमिक स्तरीय विद्यालयों का चयन किया गया जिनमें 10 सरकारी एवं 10 निजी थे। इन विद्यालयों का चयन सोद्देश्य न्यादर्श चयन विधि द्वारा किया गया। इन चयनित विद्यालयों से दो-दो छात्रों के गृहकार्य का विशेषतः हिन्दी भाषा के सम्बन्ध में विषद् अध्ययन किया गया। कुल सरकारी एवं निजी 20 विद्यालय चयनित किए गए। प्रत्येक विद्यालय से 2-2 विद्यार्थियों यादृच्छिक न्यादर्श चयन विधि से चयनित किया गया। इस प्रकार कुल 40 विद्यार्थियों को न्यादर्श के रूप में चुना गया।

शोध उपकरण -

प्रस्तुत शोध कार्य को तार्किक व सार्थक बनाने हेतु स्वनिर्मित उपकरण ''वर्तनीगत् त्रुटि अवलोकन पत्रक'' का निर्माण किया गया।

1. प्राथमिक स्तरीय छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों का विश्लेषण

प्राथमिक स्तरीय विद्यालयों के छात्रों (N=40) द्वारा गृहकार्य में की जाने वाली ''वर्तनीगत् त्रुटियों का अध्ययन करने हेतु ''वर्तनीगत् त्रुटि अवलोकन प्रपत्र'' नामक स्वनिर्मित उपकरण के माध्यम से दत्तों का संकलन किया गया। दत्त संकलनोपरान्त आँकड़ों को व्यवस्थित कर प्राथमिक स्तरीय विद्यार्थियों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों का मध्यमान एवं मानक विचलन ज्ञात कर विश्लेषण किया गया ।

विश्लेषण -

सारणी संख्या 1 को देखकर यह ज्ञात होता है कि प्राथमिक स्तरीय समग्र विद्यार्थियों (N= 40) द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित दत्तों का मध्यमान 58.57 एवं मानक विचलन 12.54 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु 60 से कम है। अतः यह कहा जा सकता है कि प्राथमिक स्तरीय समग्र छात्र, (N= 40) गृहकार्य में मात्रा संबंधी, अनुस्वार, विसर्ग सम्बन्धी, चन्द्रबिन्दु, विरामादि चिह्नों, शिरोरेखा एवं सामान्य दूरी, वर्णों की बनावट, र का उचित उपयोग श, ष, स, ह के एवं संयुक्ताक्षरों के प्रयोग-लेखन से सम्बन्धित वर्तनीगत् त्रुटियों सामान्यतः करते हैं।

सारणी संख्या 1

प्राथमिक स्तरीय छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों के दत्तों का मध्यमान एवं मानक विचलन

क्र.	वर्तनीगत् त्रुटियों से संबंधित क्षेत्र	मध्यमान	मा.विच.
1.	मात्रा संबंधी त्रुटियाँ	6.20	1.44
2.	अनुसार - विसर्ग संबंधी त्रुटियाँ	6.08	1.33
3.	चन्द्रबिन्दु संबंधी त्रुटियाँ	2.68	1.16
4.	विरामादि चिह्नों के उचित प्रयोग संबंधी त्रुटियाँ	6.33	1.27
5.	शिरोरेखा एवं सामान्य दूरी संबंधी त्रुटियाँ	7.45	0.96
6.	वर्णों की बनावट एवं लेखन संबंधी त्रुटियाँ	6.88	1.20
7.	र, के प्रकारों के प्रयोग संबंधी त्रुटियाँ	5.55	1.18
8.	श, ष, स, ह के प्रयोग व लेखन संबंधी त्रुटियाँ	5.30	1.11
9.	संयुक्ताक्षरों के प्रयोग व लेखन संबंधी त्रुटियाँ	6.15	1.35
10.	अन्य विशेष त्रुटियाँ	5.95	1.13
	योग	58.57	12.54

क्षेत्रानुसार विश्लेषण-

प्राथमिक विद्यालय स्तरीय छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - प्रथम ''मात्रा संबंधी त्रुटियाँ'' के दत्तों का मध्यमान 6.20 एवं मानक विचलन 1.44 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु 6 से अधिक है। अतः यह कहा जा सकता है कि प्राथमिक विद्यालय स्तरीय छात्रों द्वारा गृहकार्य में मात्रा संबंधी त्रुटियाँ से सम्बन्धित क्षेत्रान्तर्गत ि, ी, ु, ू, े, ै, ो, ौ जैसी वर्तनीगत् त्रुटियों सामान्य से अधिक की जाती हैं।

प्राथमिक विद्यालय स्तरीय छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - द्वितीय 'अनुस्वार - विसर्ग सम्बन्धी त्रुटियाँ' के दत्तों का मध्यमान 6.08 एवं मानक विचलन 1.33 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु

'6' से अधिक है। अतः यह कहा जा सकता है कि प्राथमिक विद्यालय स्तरीय छात्रों द्वारा गृहकार्य में अनुस्वार, विसर्ग की त्रुटियाँ से संबंधित क्षेत्रान्तर्गत (ं , ः) अनुस्वार एवं विसर्ग लगाने सम्बन्धी वर्तनीगत् त्रुटियाँ सामान्य से अधिक की जाती हैं।

प्राथमिक विद्यालय स्तरीय छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - तृतीय 'चन्द्र बिन्दु सम्बन्धी त्रुटियाँ के दत्तों का मध्यमान 2.68 मानक विचलन 1.16 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु '6' से कम है। अतः कहा जा सकता है कि प्राथमिक विद्यालय स्तरीय छात्रों द्वारा गृहकार्य में 'चन्द्र बिन्दु संबंधी त्रुटियाँ से सम्बन्धित' क्षेत्रान्तर्गत चन्द्र बिन्दु लगाने से सम्बन्धित वर्तनीगत् त्रुटियाँ सामान्य से बहुत ही कम की जाती हैं।

प्राथमिक विद्यालय स्तरीय छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - चतुर्थ ''विरामादि चिह्नों के उचित प्रयोग से सम्बन्धित त्रुटियाँ'' के दत्तों का मध्यमान 6.33 एवं मानक विचलन 1.27 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु '6' से अधिक है। अतः कहा जा सकता है कि प्राथमिक विद्यालय स्तरीय छात्रों द्वारा गृहकार्य में 'विरामादि चिह्नों के उचित प्रयोग' से सम्बन्धित त्रुटियों से सम्बन्धित क्षेत्रान्तर्गत विरामादि चिह्नों के उपयोग सम्बन्धी वर्तनीगत् त्रुटियाँ सामान्य से अधिक की जाती हैं।

प्राथमिक विद्यालय स्तरीय छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - पंचम 'शिरोरेखा एवं सामान्य दूरी सम्बन्धी त्रुटियाँ' के दत्तों का मध्यमान 7.45 एवं मानक विचलन 0.96 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु '6' से अधिक है। अतः ं कहा जा सकता है कि प्राथमिक विद्यालय स्तरीय छात्रों द्वारा गृहकार्य में 'शिरोरेखा एवं सामान्य दूरी सम्बन्धी' त्रुटियाँ से सम्बन्धित क्षेत्रान्तर्गत उचित शिरोरेखा के प्रयोग, वर्णों, शब्दों एवं वाक्यों के लेखन में सामान्य दूरी रखने सम्बन्धी वर्तनीगत् त्रुटियाँ सामान्य से बहुत ही अधिक की जाती हैं।

प्राथमिक विद्यालय स्तरीय छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - षष्ठम 'वर्णो की बनावट एवं लेखन सम्बन्धी त्रुटियाँ' के दत्तों का मध्यमान 6.88 एवं मानक विचलन 1.20 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु '6' से अधिक है। अतः यह कहा जा सकता है कि प्राथमिक विद्यालय स्तरीय छात्रों द्वारा गृहकार्य में वर्णो की बनावट एवं लेखन सम्बन्धी त्रुटियाँ से सम्बन्धित क्षेत्रान्तर्गत वर्णो की उचित बनावट, शिरोरेखा एवं उनके लेखन से सम्बन्धित वर्तनीगत् त्रुटियां सामान्य से अधिक की जाती हैं।

प्राथमिक विद्यालय स्तरीय छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - सप्तम 'र् के प्रकारों के प्रयोग सम्बन्धी त्रुटियाँ' के दत्तों का मध्यमान 5.55 एवं मानक विचलन 1.18 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु '6' से कम है। अतः यह कहा जा सकता है कि प्राथमिक विद्यालय स्तरीय छात्रों द्वारा गृहकार्य में र् के प्रकारों के प्रयोग सम्बन्धी त्रुटियाँ से सम्बन्धित क्षेत्रान्तर्गत र् के प्रकारों के प्रयोग जैसे (र्, ्र , ृ , ्र, र) आदि से सम्बन्धित वर्तनीगत् त्रुटियाँ सामान्य से कम की जाती हैं।

प्राथमिक विद्यालय स्तरीय छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - 'अष्टम 'श्, ष्, स्, ह् के प्रयोग व लेखन सम्बन्धी त्रुटियाँ' के दत्तों का मध्यमान 5.30 एवं मानक विचलन 1.11 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु '6' से कम है। अतः यह कहा जा सकता है कि प्राथमिक विद्यालय स्तरीय छात्रों द्वारा गृहकार्य में 'श्, ष्, स्, ह् के प्रयोग व लेखन सम्बन्धी त्रुटियाँ' से सम्बन्धित क्षेत्रान्तर्गत श्, ष्, स्, ह् के प्रयोग व लेखन सम्बन्धी वर्तनीगत् त्रुटियाँ सामान्य से कम की जाती हैं।

प्राथमिक विद्यालय स्तरीय छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - नवम 'संयुक्ताक्षरों के प्रयोग व व लेखन सम्बन्धी त्रुटियाँ' के दत्तों का मध्यमान 6.15 एवं मानक विचलन 1.35 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु '6' से अधिक है। अतः कहा जा सकता है कि प्राथमिक विद्यालय स्तरीय छात्रों द्वारा गृहकार्य में 'संयुक्ताक्षरों के प्रयोग व लेखन सम्बन्धी त्रुटियाँ' से सम्बन्धित क्षेत्रान्तर्गत क्ष, त्र, ज्ञ के साथ अन्य संयुक्ताक्षरों के लेखन सम्बन्धी वर्तनीगत् त्रुटियाँ सामान्य से अधिक की जाती हैं।

प्राथमिक विद्यालय स्तरीय छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - दशम 'अन्य विशेष अवलोकित त्रुटियाँ' के दत्तों का मध्यमान 5.95 एवं मानक विचलन 1.13 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु '6' से कम है। अतः यह कहा जा सकता है कि प्राथमिक विद्यालय स्तरीय छात्रों द्वारा गृहकार्य में अन्य 'विशेष अवलोकित त्रुटियाँ' से सम्बन्धित क्षेत्रान्तर्गत सीधी रेखा में न लिख पाना, पंक्ति टेढ़ी होना, समान दिखने वाले वर्णो से सम्बन्धित भ्रम, अनावश्यक पेरा बदलना अथवा बदलना ही नहीं जैसी वर्तनीगत् त्रुटियाँ सामान्य से कम की जाती हैं।

2. प्राथमिक स्तरीय सरकारी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों का विश्लेषण

प्राथमिक स्तरीय सरकारी विद्यालयों के छात्रों (N-20) द्वारा गृहकार्य में की जाने वाली वर्तनीगत् अशुद्धियों/त्रुटियों का

अध्ययन करने हेतु ''वर्तनीगत् त्रुटि अवलोकन, प्रपत्र'' नामक स्वनिर्मित उपकरण के माध्यम से दत्तों का संकलन किया गया। दत्तों के संकलन के पश्चात् आंकड़ों के आधार पर प्राथमिक स्तरीय सरकारी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से सम्बन्धित मध्यमान एवं मानक विचलन ज्ञात कर विश्लेषण किया गया।

सारणी संख्या 2

प्राथमिक स्तरीय सरकारी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों के दत्तों का मध्यमान एवं मानक विचलन

क्र.	वर्तनीगत् त्रुटियों से संबंधित क्षेत्र	मध्यमान	मा.विच.
1.	मात्रा संबंधी त्रुटियाँ	6.95	1.54
2.	अनुसार - विसर्ग संबंधी त्रुटियाँ	6.80	1.19
3.	चन्द्रबिन्दु संबंधी त्रुटियाँ	3.50	0.95
4.	विरामादि चिह्नों के उचित प्रयोग संबंधी त्रुटियाँ	7.40	0.75
5.	शिरोरेखा एवं सामान्य दूरी संबंधी त्रुटियाँ	7.95	0.88
6.	वर्णों की बनावट एवं लेखन संबंधी त्रुटियाँ	7.50	0.95
7.	र, के प्रकारों के प्रयोग संबंधी त्रुटियाँ	6.05	1.15
8.	श्, ष्, स्, ह् के प्रयोग व लेखन संबंधी त्रुटियाँ	6.00	0.97
9.	संयुक्ताक्षरों के प्रयोग व लेखन संबंधी त्रुटियाँ	7.00	0.72
10.	अन्य विशेष त्रुटियाँ	6.75	0.72
	योग	65.90	13.85

विश्लेषण -सारणी संख्या 2 को देखकर यह ज्ञात होता है कि प्राथमिक स्तरीय सरकारी विद्यालयों के छात्रों (N-20) द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से सम्बन्धित के दत्तों का मध्यमान 65.90 एवं मानक विचलन 13.85 प्राप्त हुआ है। यह मध्यमान मध्य बिन्दु 60 से अधिक है । अतः कहा जा सकता है कि प्राथमिक स्तरीय सरकारी विद्यालयों के छात्रों द्वारा गृहकार्य में मात्रा सम्बन्धी, अनुस्वार, विसर्ग, शिरोरेखा, चन्द्रबिन्दु, विरामादि चिह्नों, सामान्य दूरी, वर्णों की बनावट, र् का उचित प्रयोग व लेखन श्, ष्, स्, ह् एवं संयुक्ताक्षरों के प्रयोग-लेखन से सम्बन्धित वर्तनीगत् त्रुटियाँ सामान्य से अधिक की जाती हैं।

क्षेत्रवार विश्लेषण -प्राथमिक स्तरीय सरकारी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - प्रथम ''मात्रा सम्बन्धी त्रुटियाँ'' के दत्तों का मध्यमान 6.95 एवं मानक विचलन 1.54 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु ''6'' से अधिक है। अतः यह कहा जा सकता है कि प्राथमिक स्तरीय सरकारी विद्यालयों के छात्रों द्वारा गृहकार्य में मात्रा सम्बन्धी त्रुटियों से सम्बन्धित क्षेत्रान्तर्गत ह्रस्व-दीर्घ मात्राएँ लगाने जैसी (ि, ी, ु, ू, े, ै, ो) जैसी वर्तनीगत् त्रुटियाँ सामान्य से अधिक की जाती हैं।

प्राथमिक स्तरीय सरकारी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - द्वितीय 'अनुस्वार-विसर्ग सम्बन्धी त्रुटियाँ' के दत्तों का मध्यमान 6.80 मानक विचलन 1.19 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु '6' से अधिक है। अतः यह कहा जा सकता है कि प्राथमिक स्तरीय सरकारी विद्यालयों के छात्रों द्वारा गृहकार्य में अनुस्वार - विसर्ग सम्बन्धी त्रुटियाँ से सम्बन्धित क्षेत्रान्तर्गत (ं) अनुस्वार एवं विसर्ग (ः) के उचित प्रयोग करने जैसी वर्तनीगत् त्रुटियाँ सामान्य से अधिक की जाती हैं।

प्राथमिक स्तरीय सरकारी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - तृतीय 'चन्द्र बिन्दु सम्बन्धी त्रुटियाँ' के दत्तों का मध्यमान 3.50 एवं मानक विचलन 0.95 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु '6' से कम है। अतः कहा जा सकता है कि प्राथमिक स्तरीय सरकारी विद्यालयों के छात्रों द्वारा गृहकार्य में चन्द्र बिन्दु सम्बन्धी त्रुटियाँ से सम्बन्धित क्षेत्रान्तर्गत चन्द्र बिन्दु लगाने में, स्पष्टतः उल्लेख करने जैसी वर्तनीगत् त्रुटियाँ सामान्य से कम की जाती हैं।

प्राथमिक स्तरीय सरकारी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - चतुर्थ 'विरामादि चिह्नों के उचित प्रयोग से सम्बन्धी त्रुटियाँ' के दत्तों का मध्यमान 7.40 एवं मानक विचलन 0.75 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु '6' से बहुत ही अधिक है। अतः कहा जा सकता है कि प्राथमिक स्तरीय विद्यालय के छात्रों द्वारा गृहकार्य में विरामादि चिह्नों के उचित प्रयोग सम्बन्धी त्रुटियाँ से सम्बन्धित क्षेत्रान्तर्गत विरामादि चिह्न लगाने व न लगाने जैसी वर्तनीगत् त्रुटियाँ सामान्य से अधिक की जाती हैं।

प्राथमिक स्तरीय सरकारी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - पंचम 'शिरोरेखा एवं सामान्य दूरी सम्बन्धी त्रुटियाँ' के दत्तों का मध्यमान 7.95 एवं मानक विचलन 0.88 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु '6' से बहुत अधिक है। अतः यह कहा जा

सकता है कि प्राथमिक स्तरीय सरकारी विद्यालयों के छात्रों द्वारा गृहकार्य में शिरोरेखा एवं सामान्य दूरी सम्बन्धी त्रुटियाँ से सम्बन्धित क्षेत्रान्तर्गत शब्दों-वर्णों पर शिरोरेखा लगाने, न लगाने एवं शब्द, वर्ण, वाक्य के मध्य दूरी का अनुपात सही नहीं रखने जैसी वर्तनीगत् त्रुटियाँ सामान्य से बहुत ही अधिक की जाती हैं।

प्राथमिक स्तरीय सरकारी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - षष्ठम 'वर्णों की बनावट एवं लेखन सम्बन्धी त्रुटियाँ' के दत्तों का मध्यमान 7.50 एवं मानक विचलन 0.95 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु '6' से बहुत ही अधिक है। अतः कहा जा सकता है कि प्राथमिक स्तरीय सरकारी विद्यालयों के छात्रों द्वारा गृहकार्य में 'वर्णों की बनावट एवं लेखन सम्बन्धी त्रुटियाँ' से सम्बन्धित क्षेत्रान्तर्गत वर्णों की उचित बनावट, उनके आकार एवं वर्णों के उचित लेखन न कर पाने जैसी वर्तनीगत् त्रुटियाँ सामान्य से अधिक की जाती हैं।

प्राथमिक स्तरीय सरकारी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - सप्तम 'र् के प्रकारों के प्रयोग सम्बन्धी त्रुटियाँ' के दत्तों का मध्यमान 6.05 एवं मानक विचलन 1.15 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु '6' से कुछ ही अधिक है। अतः कहा जा सकता है कि प्राथमिक स्तरीय सरकारी विद्यालयों के छात्रों द्वारा गृहकार्य में 'र् के प्रकारों के प्रयोग सम्बन्धी त्रुटियाँ' से सम्बन्धित क्षेत्रान्तर्गत र् के प्रयोग सम्बन्धी (ँ, ं , ृ , ॅ, र) वर्तनीगत् त्रुटियाँ सामान्य से कुछ ही अधिक की जाती हैं।

प्राथमिक स्तरीय सरकारी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - अष्टम श्, ष्, स्, ह् के प्रयोग व लेखन सम्बन्धी त्रुटियाँ' के दत्तों का मध्यमान 6.00 एवं मानक विचलन 0.97 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु '6' के समान ही है। अतः यह कहा जा सकता है कि प्राथमिक स्तरीय सरकारी विद्यालयों के छात्रों द्वारा गृहकार्य में श्, ष्, स्, ह् के प्रयोग व लेखन सम्बन्धी त्रुटियाँ से सम्बन्धित क्षेत्रान्तर्गत श्, ष्, स्, ह् के प्रयोग व लेखन जैसी वर्तनीगत् त्रुटियाँ सामान्यतः की जाती हैं।

प्राथमिक स्तरीय सरकारी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - नवम 'संयुक्ताक्षरों के प्रयोग व लेखन सम्बन्धी त्रुटियाँ' के दत्तों का मध्यमान 7.00 एवं मानक विचलन 0.97 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु '6' से अधिक है। अतः यह कहा जा सकता है कि प्राथमिक स्तरीय सरकारी विद्यालयों के छात्रों द्वारा गृहकार्य में 'संयुक्ताक्षरों के प्रयोग व लेखन सम्बन्धी त्रुटियाँ' से सम्बन्धित क्षेत्रान्तर्गत क्ष, त्र, ज्ञ व अन्य संयुक्ताक्षरों के लेखन-प्रयोग में वर्तनीगत् त्रुटियाँ सामान्य से अधिक की जाती हैं।

प्राथमिक स्तरीय सरकारी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - दशम 'अन्य विशेष अवलोकित त्रुटियाँ' के दत्तों का मध्यमान 6.75 एवं मानक विचलन 0.72 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु '6' से अधिक है। अतः यह कहा जा सकता है कि प्राथमिक स्तरीय सरकारी विद्यालयों के छात्रों द्वारा गृहकार्य में 'अन्य विशेष अवलोकित त्रुटियाँ' से सम्बन्धित क्षेत्रान्तर्गत टेढ़ा-मेड़ा लिखना, अक्षरों को घुमावदार रखना, वाक्यांश समापन की स्पष्टता न दिखना, समान वर्णों के लेखन में भ्रम आदि वर्तनीगत् त्रुटियाँ सामान्य से अधिक की जाती हैं।

3.प्राथमिक स्तरीय निजी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों का विश्लेषण

प्राथमिक स्तरीय निजी विद्यालयों के छात्रों (N-20) द्वारा गृहकार्य में की जाने वाली वर्तनीगत् अशुद्धियों/त्रुटियों का अध्ययन करने हेतु ''वर्तनीगत् त्रुटि अवलोकन प्रपत्र'' नामक स्वनिर्मित उपकरण के माध्यम से दत्तों का संकलन किया गया। दत्तों के संकलन के पश्चात् आंकड़ों के आधार पर प्राथमिक स्तरीय निजी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से सम्बन्धित मध्यमान एवं मानक विचलन ज्ञात कर विश्लेषण किया गया।

विश्लेषण -सारणी संख्या 3 को देखकर यह ज्ञात होता है कि प्राथमिक स्तरीय निजी विद्यालयों के छात्रों (N-20) द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से सम्बन्धित मध्यमान 51.20 एवं मानक विचलन 12.55 प्राप्त हुआ है। यह मध्यमान मध्य बिन्दु 60 से कम है। अतः कहा जा सकता है कि प्राथमिक स्तरीय निजी विद्यालयों के छात्रों गृहकार्य में मात्रा सम्बन्धी, अनुस्वार, विसर्ग, शिरोरेखा, चन्द्रबिन्दु, विरामादि चिह्नों, सामान्य दूरी, वर्णों की बनावट, र् का उचित प्रयोग व लेखन श्, ष्, स्, ह् एवं संयुक्ताक्षरों के प्रयोग-लेखन से सम्बन्धित वर्तनीगत् त्रुटियाँ सामान्य से कम करते हैं।

क्षेत्रवार विश्लेषण -प्राथमिक स्तरीय निजी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - प्रथम ''मात्रा सम्बन्धी त्रुटियाँ'' के दत्तों का मध्यमान 5.45 एवं मानक विचलन 0.83 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु ''6'' से कम है। अतः कहा जा सकता है कि प्राथमिक स्तरीय निजी विद्यालयों के छात्रों द्वारा गृहकार्य में 'मात्रा सम्बन्धी त्रुटियाँ से सम्बन्धित क्षेत्रान्तर्गत ह्रस्व-दीर्घ (ि,ी,ु,ू,े,ै,ो,ौ) जैसी वर्तनीगत् त्रुटियाँ सामान्य से कम की जाती हैं।

सारणी संख्या 3

प्राथमिक स्तरीय निजी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों के दत्तों का मध्यमान एवं मानक विचलन

क्र.	वर्तनीगत् त्रुटियों से संबंधित क्षेत्र	मध्यमान	मा.विच.
1.	मात्रा संबंधी त्रुटियाँ	5.45	0.83
2.	अनुसार - विसर्ग संबंधी त्रुटियाँ	5.35	1.04
3.	चन्द्रबिन्दु संबंधी त्रुटियाँ	1.85	0.67
4.	विरामादि चिह्नों के उचित प्रयोग संबंधी त्रुटियाँ	5.25	0.55
5.	शिरोरेखा एवं सामान्य दूरी संबंधी त्रुटियाँ	6.95	0.76
6.	वर्णो की बनावट एवं लेखन संबंधी त्रुटियाँ	6.25	1.12
7.	र, के प्रकारों के प्रयोग संबंधी त्रुटियाँ	5.05	0.99
8.	श्, ष्, स्, ह् के प्रयोग व लेखन संबंधी त्रुटियाँ	4.60	0.75
9.	संयुक्ताक्षरों के प्रयोग व लेखन संबंधी त्रुटियाँ	5.30	1.13
10.	अन्य विशेष त्रुटियाँ	5.15	0.88
	योग	51.20	12.54

प्राथमिक स्तरीय निजी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - द्वितीय 'अनुस्वार - विसर्ग सम्बन्धी त्रुटियों के दत्तों का मध्यमान 5.35 एवं मानक विचलन 1.040 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु '6' से कम है। अतः कहा जा सकता है कि प्राथमिक स्तरीय विद्यालयों के छात्रों द्वारा गृहकार्य में अनुस्वार, विसर्ग सम्बन्धी त्रुटियाँ से सम्बन्धित क्षेत्रान्तर्गत अनुस्वार (ं) एवं विसर्ग (ः) के उचित प्रयोग करने जैसी वर्तनीगत् त्रुटियाँ सामान्य से कम की जाती हैं।

प्राथमिक स्तरीय निजी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - तृतीय 'चन्द्र बिन्दु सम्बन्धी त्रुटियाँ' के दत्तों का मध्यमान 1.85 एवं मानक विचलन 0.67 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु '6' से बहुत ही कम है। अतः यह कहा जा सकता है कि प्राथमिक स्तरीय निजी विद्यालयों के छात्रों द्वारा गृहकार्य में चन्द्र बिन्दु (ँ) लगाने जैसी वर्तनीगत् त्रुटियाँ सामान्य से बहुत की कम अर्थात् न के बराबर की जाती हैं।

प्राथमिक स्तरीय निजी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - चतुर्थ 'विरामादि चिह्नों के उचित प्रयोग सम्बन्धी त्रुटियाँ के दत्तों का मध्यमान 5.25 एवं मानक विचलन 0.55 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु '6' से कम है। अतः यह कहा जा सकता है कि प्राथमिक स्तरीय निजी विद्यालयों के छात्रों द्वारा गृहकार्य में 'विरामादि चिह्नों के उचित प्रयोग से सम्बन्धी त्रुटियाँ' से सम्बन्धित क्षेत्रान्तर्गत विरामादि चिह्नों में निर्देशात्मक चिह्न एवं अल्प विराम लगाने जैसी वर्तनीगत् त्रुटियाँ सामान्य से कम की जाती हैं।

प्राथमिक स्तरीय निजी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - पंचम शिरोरेखा एवं सामान्य दूरी सम्बन्धी त्रुटियाँ के दत्तों का मध्यमान 6.95 एवं मानक विचलन 0.76 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु '6' से अधिक है। अतः कहा जा सकता है कि प्राथमिक स्तरीय निजी विद्यालयों के छात्रों द्वारा गृहकार्य में 'शिरोरेखा एवं सामान्य सम्बन्धी त्रुटियाँ' से सम्बन्धित क्षेत्रान्तर्गत शिरोरेखा लगाने, न लगाने एवं लेखन में सामान्य अनुपात में दूरी न बनाएँ रखने जैसी वर्तनीगत् त्रुटियाँ सामान्य से अधिक की जाती हैं।

प्राथमिक स्तरीय निजी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - षष्ठम वर्णो की बनावट एवं लेखन सम्बन्धी त्रुटियाँ के दत्तों का मध्यमान 6.25 एवं मानक विचलन 1.12 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु '6' से अधिक है। अतः यह कहा जा सकता है कि प्राथमिक स्तरीय निजी विद्यालयों के छात्रों द्वारा गृहकार्य में 'वर्णो की बनावट एवं लेखन सम्बन्धी त्रुटियाँ' से सम्बन्धित क्षेत्रान्तर्गत वर्णो की आदर्श स्थिति के अनुरूप बनावट न रख पाने जैसी वर्तनीगत् त्रुटियाँ सामान्य से अधिक की जाती हैं।

प्राथमिक स्तरीय निजी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - सप्तम 'र् के प्रकारों के प्रयोग सम्बन्धी त्रुटियाँ' के दत्तों का मध्यमान 5.05 एवं मानक विचलन 0.99 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु '6' से कम है। अतः कहा जा सकता है कि प्राथमिक स्तरीय निजी विद्यालयों के छात्रों द्वारा गृहकार्य में र् के प्रकारों के प्रयोग सम्बन्धी त्रुटियाँ से सम्बन्धित क्षेत्रान्तर्गत र् के (र्, ्र , , ‸ , र :) के प्रयोग जैसी वर्तनीगत् त्रुटियाँ सामान्य से कम की जाती हैं।

प्राथमिक स्तरीय निजी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियाँ से संबंधित क्षेत्र - अष्टम

'श्, ष्, स्, ह् के प्रयोग व लेखन सम्बन्धी त्रुटियाँ' के दत्तों का मध्यमान 4.60 एवं मानक विचलन 0.75 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु '6' से कम है। अतः कहा जा सकता है कि प्राथमिक स्तरीय निजी विद्यालयों के छात्रों द्वारा गृहकार्य में 'श्, ष्, स्, ह् के प्रयोग व लेखन सम्बन्धी त्रुटियाँ' से सम्बन्धित क्षेत्रान्तर्गत श्, ष्, स्, ह् के उचित प्रयोग व लेखन जैसी वर्तनीगत् त्रुटियाँ सामान्य से बहुत ही कम की जाती हैं।

प्राथमिक स्तरीय निजी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - 'नवम 'संयुक्ताक्षरों के प्रयोग व लेखन सम्बन्धी त्रुटियाँ' के दत्तों का मध्यमान 5.30 एवं मानक विचलन 1.13 प्राप्त हुआ है। यह मध्यमान मध्यबिन्दु '6' से कम है। अतः कहा जा सकता है कि प्राथमिक स्तरीय निजी विद्यालयों के छात्रों द्वारा गृहकार्य में 'संयुक्ताक्षरों के प्रयोग व लेखन सम्बन्धी त्रुटियाँ से सम्बन्धित क्षेत्रान्तर्गत क्ष, त्र, ज्ञ व अन्य संयुक्ताक्षरों के लेखन जैसी वर्तनीगत् त्रुटियाँ सामान्य से कम की जाती हैं।

प्राथमिक स्तरीय निजी विद्यालयों के छात्रों द्वारा गृहकार्य में की जाने वाली वर्तनीगत् त्रुटियों से संबंधित क्षेत्र - दशम 'अन्य विशेष अवलोकित त्रुटियाँ' के दत्तों का मध्यमान 5.15 एवं मानक विचलन 0.815 प्राप्त हुआ है। यह मध्यमान मध यबिन्दु '6' से कम है। अतः कहा जा सकता है कि प्राथमिक स्तरीय निजी विद्यालयों के छात्रों द्वारा गृहकार्य में 'अन्य विशेष त्रुटियाँ' से सम्बन्धित क्षेत्रान्तर्गत पूर्व उक्त क्षेत्रों के अलावा वर्तनीगत् त्रुटियाँ सामान्य से बहुत ही कम की जाती हैं।

निष्कर्ष -

1. प्राथमिक स्तरीय छात्रों (एन-40) द्वारा गृहकार्य में समस्त क्षेत्रान्तर्गत वर्तनीगत सामान्य त्रुटियाँ की जाती हैं। जिनमें से मात्रा सम्बन्धी, विरामादि चिह्नों के उचित प्रयोग सम्बन्धी, शिरोरेखा एवं सामान्य दूरी सम्बन्धी, वर्णों की बनावट रूप से की जाती हैं। समग्र एवं लेखन सम्बन्धी, संयुक्ताक्षरों के प्रयोग व लेखन सम्बन्धी त्रुटियाँ प्रमुख रूप से की जाती हैं। समग्र त्रुटियों के क्षेत्रान्तर्गत प्राथमिक स्तरीय समग्र छात्रों द्वारा सामान्य से अधिक वर्तनीगत् त्रुटियाँ की जाती हैं। जबकि प्राथमिक स्तरीय समग्र छात्र अनुस्वार-विसर्ग (ं, ः) सम्बन्धी, चन्द्रबिन्दु (ँ) सम्बन्ध, (र्) के प्रकारों के प्रयोग सम्बन्धी, श्, ष्, स्, ह् के प्रयोग व लेखन सम्बन्धी के साथ अन्य विशेष वर्तनीगत् त्रुटियाँ क्षेत्र के अन्तर्गत सामान्य से कम वर्तनीगत् त्रुटियाँ करते हैं।

2. प्राथमिक स्तरीय सरकारी विद्यालयों के विद्यार्थियों द्वारा गृहकार्य में वर्तनीगत् त्रुटियों के समस्त क्षेत्रान्तर्गत त्रुटियाँ सामान्य से अधिक की जाती हैं। प्राथमिक स्तरीय सरकारी विद्यालयों के छात्र (एन-20) श्, ष्, स्, ह् के प्रयोग व लेखन सम्बन्धी क्षेत्र में वर्तनीगत् त्रुटियाँ सामान्य एवं चन्द्रबिन्दु सम्बन्धी त्रुटियाँ नामक क्षेत्र में वर्तनीगत त्रुटियाँ सामान्य से कम करते हैं। शेष सभी क्षेत्रों में प्राथमिक स्तरीय सरकारी विद्यालयों के छात्र गृहकार्य में सामान्य से अधिक वर्तनीगत् त्रुटियाँ करते हैं।

3. प्राथमिक स्तरीय निजी विद्यालयों के विद्यार्थियों द्वारा गृहकार्य में वर्तनीगत् त्रुटियों के समस्त क्षेत्रान्तर्गत त्रुटियाँ सामान्य से कम की जाती हैं। प्राथमिक स्तरीय निजी विद्यालयों के विद्यार्थियों द्वारा गृहकार्य में क्षेत्र पंचम शिरोरेखा एवं सामान्य दूरी सम्बन्धी त्रुटियाँ एवं क्षेत्र षष्ठम वर्णों की बनावट एवं लेखन सम्बन्धी त्रुटियाँ से सम्बन्धी वर्तनीगत् त्रुटियाँ अधिक करते हैं। शेष सभी क्षेत्रों में प्राथमिक स्तरीय निजी विद्यालयों के छात्र गृहकार्य में सामान्य से कम वर्तनीगत् त्रुटियाँ करते हैं।

संदर्भ ग्रंथ सूची

डॉ. लता पाण्डे, पढ़ना सिखाने की शुरूआत और पढ़ने से संबंधित अन्य लेखों का संकलन, एन.सी.ई.आर.टी. नई दिल्ली, 2011
कामता प्रसाद गुरू, हिन्दी व्याकरण, पंचशील प्रकाशन, जयपुर, 2013
कृष्णकुमार, बच्चे की भाषा व अध्यापक, नेशनल बुक ट्रस्ट, नई दिल्ली,
रमन बिहारी लाल, हिन्दी शिक्षण, रस्तोगी बुक कम्पनी, मेरठ।
शर्मा, शुक्ला एवं त्रिपाठी, हिन्दी भाषा/भाषा शिक्षण, साहित्य चन्द्र प्रकाशन, नई दिल्ली, 2007
शर्मा एवं गौड़, हिन्दी शिक्षण, अरिहन्त प्रकाशन, जयपुर।

Article Received on	**05.03.2016**	**Reviewed on**	**20.03.2016**
Observations reflected on	**25.03.2016**	**Modified on**	**31.03.2016**

* ***डॉ. अमित कुमार दवे*** सहा. प्राध्यापक, शिक्षा संकाय, जनार्दनराय नगर, राजस्थान विद्यापीठ विश्वविद्यालय, डबोक, उदयपुर, राज. ***Email: amit.dave50@yahoo.com***

EDUSEARCH
ISSN: 0976-1160
Vol. 7, No.1, Apr. 2016

छत्तीसगढ़ के उच्चतर माध्यमिक विद्यालयों के विद्यार्थियों में एड्स जागरूकता का अध्ययनः बस्तर जिले के विशेष सन्दर्भ में

डॉ. रचिता श्रीवास्तव *

विशिष्ट शब्दावली : *एड्स जागरूकता, बस्तर जिला*

सारांश

प्रस्तुत शोध का मुख्य उद्देश्य बस्तर जिला के उच्चतर माध्यमिक विद्यालयों के विद्यार्थियों में एड्स जागरूकता का अध्ययन करना था। एड्स जागरूकता मापनी द्वारा एड्स जागरूकता फलांक प्राप्त किया गया।

प्रस्तुत शोध हेतु न्यादर्श के रूप में बस्तर जिले के उच्चतर माध्यमिक शालाओं में अध्ययनरत 80 विद्यार्थियों का चायन किया गया है।

उपकल्पनाओं के जाँच के लिए काई वर्ग एवं टी-टेस्ट का योग किया गया। परिणाम यह प्रदर्शित करता है कि ग्रामीण छात्र-छात्राओं की तुलना में शहरी छात्र-छात्राओं में एड्स जागरूकता अधिक है।

अधिकांश छात्र-छात्राएँ एच.आई.वी. एड्स के प्रति सामान्य जागरूकता रखते हैं परन्तु एच.आई.वी. संक्रमण को लेकर अभी भी मिथ्या है। ग्रामीण छात्र-छात्राओं की तुलना में शहरी छात्र-छात्राओं में एड्स जागरूकता अधिक है। जागरूकता स्तर पर लिंग का कोई सार्थक प्रभाव नहीं है। बस्तर क्षेत्र में जगरूकता अभियान हेतु संचार रणनीति को सुनिश्चित करना उचित होगा।

प्रस्तावना

एड्स, ह्यूमन इम्यूनोडेफिशिएंसी वायरस (एचआईवी) के संक्रमण से होने वाला एक खतरनाक बीमारी है। एड्स दुनिया भर में महामारी की तरह फैला हुआ है, जिससे पुरूष और महिलाएँ ही नहीं बच्चे भी प्रभावित हो रहे हैं। भारत दुनिया में दक्षिण अफ्रीका और नाइजीरिया के बाद तीसरा एचआईवी प्रभावित देश है। यहाँ 21.17 लाख लोग एचआईवी से संक्रमित हैं। नाको (2014) के अनुसार भारत में कुछ राज्यों में संक्रमण घटा है तो कुछ राज्यों में बढा है। छत्तीसगढ भारत के उन राज्यों में शामिल है जहाँ एचआईवी संक्रमण का प्रतिशत दिन प्रति दिन बड़ रहा है। यह राज्य के लिए ही नहीं पूरे मानव जगत के लिए एक चिंता का विषय है।

टी.एन.एन. (2013) के एक रिपोर्ट के अनुसार पिछले एक दशक में छ.ग. में 16000 हजार से भी ज्यादा एचआईवी संक्रमण का मामला दर्ज किया गया है। कुल दर्ज मामलों में 39 प्रतिशत महिलाएँ हैं। संक्रमित लोगों में 8 प्रतिशत बच्चे हैं जिनकी उम्र 14 साल से कम है। एच.आई.वी. एड्स एक ऐसा रोग है, जिसका बचाव तो है पर इस रोग के उपचार लिए कोई कारगर औषधि नहीं है। अब तक ऐसी कोई दवा या इंजेक्शन नहीं बना जिससे एचआईवी वायरस को खत्म किया जा सके। इसके सम्बंध में जागरूकता ही इस रोग का उपचार है।

छत्तीसगढ़ में बस्तर सम्भाग नक्सल प्रभावित आदिवासी क्षेत्र के नाम से जाना जाता है। ताजा रिपोर्ट के अनुसार बस्तर

संभाग में एच.आई.वी. एड्स का संक्रमण धीरे- धीरे बढ़ रहा है जो राज्य के लिए चिंता का विषय है। पीटीई, रायपुर (2013) के अनुसार 2012-13 में 2011-12 की तुलना में बस्तर संभाग के कुछ जगहों में संक्रमण में वृद्धि दर्ज की गई है। यह वृद्धि जगदलपुर में 51 से 70, कोंडागांव में 14 से 15, सुकमा में 1 से 7 देखी गई है। यद्यपि कांकेर में संक्रमण दर घटा है।

सरकार द्वारा एड्स जागरूकता के विभिन्न उपाय किए जा रहे हैं पर लोगों में कितनी जागरूकता है इसके बारे में कुछ कहा नहीं जा सकता। एच.आई.वी. एड्स से प्रभावित सबसे ज्यादा युवा वर्ग ही है। अतः युवाओं में इसके प्रति जागरूकता का होना बहुत आवश्यक है। वर्तमान शोध अध्ययन इस दिशा में एक कोशिश है। एड्स जागरूकता के सम्बन्ध में भारत एवं विदेश में अध्ययन हुए हैं परन्तु आदिवासी क्षेत्र में एड्स जागरूकता के सम्बन्ध में बहुत कम अध्ययन हुआ है।

सेवानन मुरूगन, सब्रिमुथू, पोंगिया उमादेवी एवं चंद्रन गन्ना देसिगन (2010) ने नीलगिरी के आदिवासी युवाओं में एच. आई.वी. एड्स जागरूकता के बारे में अध्ययन किया और पाया कि युवा एच.आई.वी. एड्स के बारे में जानते हैं पर आदिवासी युवकों में व्याप्त भ्रान्तियों को कम करने के लिए भैषजिक सूचना देने की शीघ्र आवश्कता है।

के.मलेशअप्पा, शिवराम कृष्णन,एवं शशि कुमार (2012) ने ग्रामीण युवा पुरूष एवं महिलाओं में एच.आई.वी. एड्स के प्रति जागरूकता और अभिवृति को जानने के लिए समुदाय आधारित क्रास सेक्शनल अध्ययन किया। अध्ययन में पाया कि अशिक्षित युवाओं में एच.आई.वी. संक्रमण को लेकर बहुत सारी गलत धारणा एवं झूठा विश्वास है। अध्ययन में लक्षित वर्ग को व्यापक एवं वैज्ञानिक सूचना देने की अवश्यकता महसूस की गई।

उद्देश्य

अध्ययन के मुख्य उद्देश्य निम्नानुसार है :

1. बस्तर जिला के स्कूली छात्र-छात्राओं में एड्स जागरूकता के स्तर का अध्ययन करना।
2. छात्र एवं छात्राओं के एड्स जागरूकता स्तर का तुलनात्मक अध्ययन करना।
3. एड्स जागरूकता स्तर पर क्षेत्र के प्रभाव का अध्ययन करना।

उपकल्पना

शोध अध्ययन के उद्देश्यों को ध्यान में रखते हुए निम्न उपकल्पना निर्मित की गई :

1. बस्तर जिला के स्कूली छात्र-छात्राओं में एड्स जागरूकता का स्तर सामान्य होगा।
2. छात्र एवं छात्राओं के एड्स जागरूकता स्तर में सार्थक अंतर नहीं होगा।
3. शहरी एवं ग्रामीण क्षेत्र के विद्यार्थियों के एड्स जागरूकता स्तर में सार्थक अंतर नहीं होगा।

न्यादर्श

वर्त्तमान शोध हेतु बस्तर संभाग में स्थित उच्चतर माध्यमिक विद्यालयों से 80 छात्र-छात्राओं का चयन किया गया है। इसमें 40 विद्यार्थी शहरी क्षेत्र के स्कूलों से है तथा 40 ग्रामीण क्षेत्र के स्कूलों से हैं।

क्षेत्र	छात्र	छात्रा	कुल
शहरी	20	20	40
ग्रामीण	20	20	40
कुल	40	40	80

उपकरण

स्कूली छात्र-छात्राओं के एड्स जागरूकता का स्तर मापने हेतु एड्स जागरूकता मापनी का उपयोग किया गया है। यह मापनी शोधकर्ता द्वारा यू.जी.सी. परियोजना के तहत विकसित की गई है।

प्रदत्त विश्लेषण

तालिका-1

एड्स जागरूकता स्तरानुसार छात्र-छात्राओं का %

	जागरूकता स्तर				
	निम्न	सामान्य	उच्च	कुल	काई-वर्ग
आवृत्ति	06	64	10	80	61.97
प्रतिशत	7.5	80	12.5	100	p<.01

प्रस्तुत शोध की प्रथम उपकल्पना यह थी कि बस्तर जिला के स्कूली छात्र-छात्राओं में एड्स जागरूकता का स्तर सामान्य होगा। परिकल्पना कि पुष्टि के लिए काई वर्ग परीक्षण का प्रयोग किया गया है। तालिका-1 के अनुसार प्राप्त काई वर्ग का मान 61.97 है जो 0.01 विश्वास स्तर पर, 2 df में तालिका मान से अधिक है जो परिणाम के सार्थक होने कि पुष्टि करता है। स्पष्ट रूप से देखा जा सकता है कि जागरूकता स्तर के तीनों वर्ग में मूल्य बराबर नहीं है। 80 प्रतिशत छात्र-छात्राओं में एच.आई.वी. एड्स के प्रति सामान्य जागरूकता रखते हैं।

तालिका-2 छात्र एवं छात्राओं के एड्स जागरूकता फलांकों के मध्यमान, मानक विचलन और टी-अनुपात को प्रदर्शित करता है। तालिका के अनुसार टी का मान 0.37 प्राप्त हुआ है जो .05 स्तर पर निर्धारित मान से कम है। यहाँ पर शून्य

डा.रचिता श्रीवास्तव
सहायक प्राध्यापक
षा.वि.या.ता. (साइंस कालेज) दुर्ग, छ.ग.

तालिका-2

छात्र एवं छात्राओं के एड्स जागरूकता फलांकों के मध्यमान

समूह	संख्या	मध्यमान	मा. वि.	स्व. अंश	टी-मूल्य
छात्र	40	15.57	4.26	78	0.37
छात्रा	40	12.50	4.64		NS

परिकल्पना को स्वीकार किया जाता है। अर्थात छात्र एवं छात्राओं के एड्स जागरूकता फलांकों के मध्यमान के बीच सार्थक अंतर नहीं है।

तालिका-3

शहरी एवं ग्रामीण विद्यार्थियों के एड्स जागरूकता फलांकों के मध्यमान

क्षेत्र	संख्या	मध्यमान	मा. वि.	स्व. अंश	टी-मूल्य
शहरी	40	17.3	4.0	78	5.80
ग्रामीण	40	13.47	4.03		p<.01

उपरोक्त तालिका-3 में शहरी विद्यार्थियों का एड्स जागरूकता प्रदत्तों का मध्यमान 17.3 है तथा ग्रामीण क्षेत्र के विद्यार्थियों के एड्स जागरूकता फलांकों के मध्यमान 13.47 है। मध्यमानों में अंतर का टी- मूल्य 5.80 प्राप्त हुआ है जो .01 विश्वास स्तर पर सार्थक अंतर प्रदर्शित करता है। यहाँ पर शून्य परिकल्पना अस्वीकार की जाती है। शहरी क्षेत्र में ग्रामीण क्षेत्र की तुलना में जागरूकता का स्तर अधिक है।

परिणाम एवं व्याख्या

1. बस्तर झेत्र के स्कूली छात्र-छात्राओं में एड्स के प्रति जागरूकता का स्तर सामान्य है।
2. छात्र एवं छात्राओं के एड्स जागरूकता स्तर में कोई सार्थक अंतर नहीं है।
3. ग्रामीण विद्यार्थियों की तुलना में शहरी विद्यार्थियों में एड्स जागरूकता अधिक है।

प्राप्त परिणाम पूर्व अध्ययनों के परिणाम के सामान है. अधिकांश विद्यार्थी एच.आई.वी. एड्स के प्रति सामान्य जागरूकता रखते हैं परन्तु एचआईवी संक्रमण को लेकर अभी भी मिथ्या है। वे इस विषय में बात करने में भी संकोच करते हैं। नियंत्रण एवं उपचार के सम्बन्ध में जागरूकता बहुत कम है। उत्तर बस्तर क्षेत्र में एच.आई.वी. एड्स के बारे में लोगों को अभी और जागरूक करने की जरूरत है। जगरूकता अभियान हेतु संचार रणनीति को सुनिश्चित करना होगा।

संदर्भ ग्रंथ सूची

मलेशअप्पा, के., शिवराम कृष्णन एवं शशि कुमार (2012) अवरनेस एंड अटिटूड ऑफ यूथ टूवर्ड एचआइवी एड्स इन रूरल साउथ इंडिया, बायो मेडिकल रिसर्च, 23 (2), 241-246

नाको (2014) स्टेट फास्ट शीट 2014, स्वास्थ्य एवं परिवार कल्याण मन्त्रालय, भारत सरकार।

पी.टी.आई, रायपुर (2013). नम्बर आफ एड्स पेशेंट्स अप इन छ.ग,रायपुर टाप्स लिस्ट, 20 मार्च, 2013।

सेवानन मुरूगन, सब्रिमुथू, पोंगिया उमादेवी एवं चंद्रन गन्ना देसिगन (2010) अवरनेस अबाउट एच.आई.वी. एड्स अडोलेसेंट बोयस इन ट्राइबल विलेज ऑफ नीलगिरी डिस्ट्रिक्ट, साऊथ इंडिया, हुमिनिटी एंड सोशल साइंस जर्नल, 5 (1), 63-67।

टी.एन .एन. (2013). ओवर सोलह हजार एच आई वी केस फाउंड इन छ.ग. इन लास्ट वन डिकेड, 1 दिसम्बर, 2013।

Article Received on	**01.04.2016**	**Reviewed on**	**08.04.2016**
Observations reflected on	**10.04.2016**	**Modified on**	**14.04.2016**

* ***डॉ. रचिता श्रीवास्तव*** : सहायक प्राध्यापक, शासकीय वि.या.ता. विज्ञान महाविद्यालय, दुर्ग छत्तीसगढ़। ***Email: srachita@yahoo-com***

EDUSEARCH
ISSN: 0976-1160
Vol. 7, No.1, Apr. 2016

माध्यमिक स्तर के विद्यार्थियों की हिन्दी भाषा में उपलब्धि पर भूमिका निर्वाह विधि का विश्लेषणात्मक अध्ययन

डॉ. अनुराधा संकेत सुपेकर *

विशिष्ट शब्दावली : ***हिन्दी भाषा में उपलब्धि, भूमिका निर्वाह विधि***

सारांश

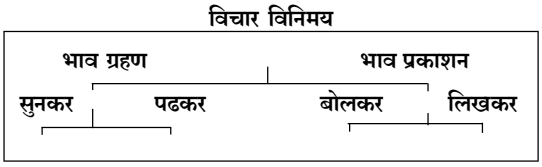
प्रस्तुत शोध का मुख्य उद्देश्य हिन्दी भाषा शिक्षण में नवाचार को सम्मिलित किए जाने की सम्भावनाओं को तलाशना तथा उसके अनुसार अध्यापन से विद्यार्थियों की भाषा उपलब्धि स्तर में पडने वाले प्रभाव का अध्ययन करना है।

भूमिका निर्वाह प्रक्रिया में अधिगमकर्ताओं को कुछ भूमिकाएँ निभानी होती है। भूमिका निर्वाह विधि शिक्षण को कलात्मक रूप प्रदान करने का एक ढ़ंग है। इसका सम्बन्ध ज्ञानात्मक एवं सामाजिक कौशल के विकास से है। इसमें कक्षा को छोटे-छोटे समूहों में बांटकर एक मनोरंजनपूर्ण वातावरण में एक विधिवत रूपरेखा यथा प्रकारण अथवा पात्र का चुनाव, कार्यक्रम की रूपरेखा का निर्धारण, पात्र भूमिका का निर्धारण, वार्तालाप, निरीक्षण विधि का चयन, पात्र अभिनय की समीक्षा, त्रुटियों को सुधारने के लिए सुझाव तैयार की जाती है। शोध अध्ययन में पाया कि भूमिका निर्वाह विधि के प्रयोग से विद्यार्थियों के उपलब्धि स्तर में उन्नति होती है।

प्रस्तावना

शिक्षण एक कलात्मक प्रक्रिया है जिसमें ज्ञान प्रदान करना, कौशल विकास अनुदेशन देना एवं सीखने वाले को उत्साहित करना आदि क्रियाएँ अपना सहयोग देती हैं। शिक्षण प्रक्रियाओं की एक ऐसी व्यवस्था है जिसमें एक व्यक्ति दूसरे को ज्ञान प्रदान करने के लिए, शिक्षण कार्य को व्यवहार में आत्मीयता के साथ वांछित परिवर्तन लाने का प्रयास करता है। शिक्षण सामाजिक, सांस्कृतिक एवं नैतिक प्रक्रिया है जिसका स्वरूप और संगठन समाज के सामाजिक एवं सांस्कृतिक रूप के अनुसार बदलता रहना है।

शिक्षण प्रक्रिया के अंतर्गत, विद्यार्थी-शिक्षक-पाठ्यचर्या एवं शिक्षण विधियाँ, शैक्षिक वातावरण आदि आते हैं। इस पाठ्यचर्या में भाषा एक अनिवार्य विषय होता है। विश्व के कण-कण में ज्ञान प्रदान करने की शक्ति है जिसे हम अपने बुद्धि कौशल से प्राप्त कर सकते हैं, किन्तु भाषा की अनुपस्थिति में हम किसी भी ज्ञान का अवबोधन नहीं कर सकते इसलिये शिक्षण प्रक्रिया के अन्तर्गत भाषा सर्वोच्च स्थान रखती है। भाषा द्वारा हम विचारों का आदान-प्रदान करते हैं -



प्रत्येक व्यक्ति के पास महान से महान भाव संचित हो सकते हैं, किन्तु भाषा ही वह साधन है जिसके सहारे वह इन्हें दूसरों तक पहुँचा सकता है।

संसार में कुल मिलाकर लगभग दो हजार आठ सौ भाषाएँ हैं जिनमें तेरह भाषाओं के बोलने वालों की संख्या साठ करोड़ से अधिक है। संसार की भाषाओं में हिन्दी भाषा को विश्व में तृतीय स्थान प्राप्त है एवं इसके बोलने वालों की संख्या तीस करोड़ है। भारतीय गणराज्य के सात राज्यों में लोगों की मातृ भाषा हिन्दी है। अन्य राज्यों में इसका स्थान राष्ट्र भाषा एवं राजभाषा के रूप में द्वितीय भाषा के रूप में होता है। हिन्दी हमारे देश में युगों-युगों से विचार विनिमय का माध्यम रही है। यह एक जीवित और सशक्त भाषा है। भारतीय विद्यालयों में हिन्दी भाषा एक अनिवार्य विषय है, जो प्रथम अथवा द्वितीय भाषा के रूप में पढ़ाई जाती है। जिसके अन्तर्गत विद्यार्थियों में भाषाई कौशलों का विकास किया जाता है, हिन्दी के माध्यम से बालकों में उपयुक्त दृष्टिकोण एवं अभिवृत्तियों का विकास किया जाता है। इसके दो लाभ होते हैं; बालक भाषा और साहित्य में रूचि लेकर पुस्तक एवं पत्रिकाओं को पढ़कर साहित्यिक चर्चा करेगा तथा अच्छे लेख लिख सकेगा। इसके साथ ही उसमें सद्वृत्तियों जैसे आस्था, श्रद्धा, देशप्रेम, मानवीयता के प्रति स्नेह सहृदयता एवं संवेदनशीलता का विकास होगा।

इस प्रकार देखा जा सकता है कि हिन्दी भाषा शिक्षण अनेक बहुमुखी उद्देश्यों की पूर्ति में सहायक हो सकता है। इन उद्देश्यों की प्राप्ति तभी हो सकती है जब हिन्दी शिक्षक सही शिक्षण विधियों का उपयोग करता है। हिन्दी शिक्षण में कई प्रकार की विधियों का प्रयोग किया जाता है उनमें से एक है भूमिका निर्वाह विधि।

भूमिका निर्वाह विधि

भूमिका निर्वाह जैसे की नाम से विदित है, इस प्रक्रिया में अधिगमकर्ताओं को कुछ भूमिकाएँ निभानी होती है अर्थात् उन्हें स्वयं को उस पात्र अथवा घटना विशेष का अंग बनना होता है। भूमिका निर्वाह विधि शिक्षण को कलात्मक रूप प्रदान करने का एक ढ़ंग है। इसका सम्बन्ध ज्ञानात्मक एवं सामाजिक कौशलों के विकास से है। इसमें कक्षा को छोटे-छोटे समूहों मे बांटकर उनसे दूसरों के लिए एक मनोरंजनपूर्ण वातावरण में एक विधिवत रूपरेखा तैयार की जाती है। यथा प्रकरण अथवा पात्र का चुनाव, कार्यक्रम की रूपरेखा का निर्धारण, पात्र भूमिका का निर्धारण, निरीक्षण विधि का चयन, पात्र अभिनय की समीक्षा, त्रुटियों को सुधारने के लिए सुझाव एवं वार्तालाप आदि क्रियाओं को सम्मिलित किया जाता है।

औचित्य

हिन्दी शिक्षक के रूप में शोधकर्ता द्वारा अपने अध्यापन कार्य में यह अनुभव किया गया कि हिन्दी शिक्षण में नवाचार युक्त शिक्षण विधियाँ आवश्यक है।पूर्व में किये गए शोधकार्यो का अध्ययन करने पर ज्ञात हुआ कि हिन्दी भाषा में उपलब्धि स्तर में वृद्धि को लेकर कोई कार्य नहीं हुआ है, अतः शोधकर्ता द्वारा प्रस्तुत शीर्षक का चुनाव किया गया।

उद्देश्य

शोध अध्ययन का उद्देश्य;

- माध्यमिक स्तर के विद्यार्थियों की हिन्दी भाषा में उपलब्धि पर भूमिका निर्वाह विधि के प्रभाव का अध्ययन करना है।

परिकल्पना

- माध्यमिक स्तर के विद्यार्थियों की हिन्दी भाषा में उपलब्धि पर भूमिका निर्वाह विधि का सार्थक प्रभाव नहीं पाया जाएगा।

शोधविधि :-

प्रस्तुत अध्ययन में प्रयोगात्मक विधि, पश्चपरीक्षण नियंत्रित समूह प्रारूप प्रविधि का प्रयोग किया गया।

न्यादर्श :-

प्रस्तुत अध्ययन् हेतु देवास शहर में स्थित एक माध्यमिक विद्यालय के कक्षा नवमीं के 120 छात्रों को न्यादर्श के तहत सम्मिलित किया गया। जिसमें नियंत्रित समूह में 60 तथा प्रयोगात्मक समूह में 60 विद्यार्थियों को उनके समान भाषाई उपलब्धि के आधार पर बांटा गया है।

उपकरण :-

अध्ययन कार्य में शोधकर्ता द्वारा निम्नलिखित उपकरणों का चयन किया गया।

1. शैक्षिक उपलब्धि परीक्षण
2. पाठ योजना

प्रदत्तों का विश्लेषण :-

प्रदत्तों का विश्लेषण मध्यमान, प्रामाणिक विचलन एवं टी परीक्षण द्वारा किया गया।

परिणाम एवं विश्लेषण :-

हिन्दी भाषा में उपलब्धि के फलांकन से प्राप्त प्रदत्तों का विश्लेषण 'टी' परीक्षण के द्वारा किया गया जो इस प्रकार है। तालिका क्र 1 के अनुसार विद्यार्थियों की शैक्षिक उपलब्धि पर भूमिका निर्वाह के प्रभाव के लिए 'टी' का मान 22.11 पाया गया जो 118 df के लिए 0.01 स्तर पर सार्थक पाया गया। अर्थात् प्रयोगात्मक समूह एवं नियंत्रित समूह की हिन्दी भाषा में

तालिका क्र. 1

पश्चपरीक्षण नियंत्रित समूह प्रारूप मध्यमान, प्रामाणिक विचलन एवं टी-परीक्षण

समूह	N	M	SD	df	t-value
प्रयोगात्मक	60	58.06	2.51	118	22.11
नियंत्रित	60	47.89	10.33		p<.01

शैक्षिक उपलब्धि में सार्थक अंतर पाया गया जो कि भूमिका निर्वाह विधि की प्रभाविता को सिद्ध करता है।

परिणाम

हिन्दी भाषा अध्यापन में भूमिका निर्वाह विधि अधिक प्रभावी सिद्ध हुई है।

शैक्षिक निहितार्थ :-

1. हिन्दी भाषा शिक्षण को सरल एवं बोधगम्य बनाने के लिए भूमिका निर्वाह विधि का प्रयोग किया जा सकता है।
2. छात्रों में विषय वस्तु के प्रति रूचि उत्पन्न करने के लिए भी भूमिका निर्वाह विधि उपयोगी है।
3. इस विधि के अन्तर्गत विद्यार्थी सामूहिक रूप से कार्य करते हैं अतः छात्रों में सहिष्णुता, सहयोग, भाईचारे, एकता जैसे कई मूल्यों का प्रत्यक्ष-अप्रत्यक्ष रूप से विकास किया जाता है।

संदर्भ ग्रंथ सूची

भटनागर सुरेश (2006) - शिक्षण अधिगम प्रक्रिया का विकास आर.लाल बुक डिपो मेरठ।

Buch.M.B. Third survey of research in Education 1978.

Buch.M.B. Fourth survey of research in Education.

चाँद किरण (2007) - शिक्षा समाज और विकास कनिष्क पब्लिशर्स नई दिल्ली।

डॉ. पाण्डेय रामशकल (2009) - हिन्दी शिक्षण विनोद पुस्तक मंदिर आगरा।

डॉ. प्रसाद वासुदेवनंदन (1998) - आधुनिक हिन्दी व्याकरण और रचना भारती भवन पटना।

दुबे. श्री कृष्ण (2007) - मूल्यों का शिक्षण राधा प्रकाशन मंदिर आगरा।

कौल लोकेश (2007) - शैक्षिक अनुसंधान की कार्य प्रणाली विकास पब्लिशिंग हाऊस।

कुलश्रेष्ठ एस.पी. (2005) - शैक्षिक तकनीकी के मूल आधार अग्रवाल पब्लिकेशन आगरा।

मंगल एस. के, मंगल उमा (2009) - शिक्षा तकनीकी पी.एच.आई लर्निंग प्राइवेट लि. दिल्ली।

पाठक पी.डी. - सफल शिक्षणकला विनोद पुस्तक मंदिर आगरा।

Sharma A.K. Fifth survey of research in Education. 1988 to 1992.

Article Received on	**01.04.2016**	**Reviewed on**	**08.04.2016**
Observations reflected on	**10.04.2016**	**Modified on**	**14.04.2016**

* ***डॉ. अनुराधा संकेत सुपेकर*** : रीडर, बी.सी.जी. शिक्षा महाविद्यालय, देवास, मध्यप्रदेश।

Email: amitdeshpande42@gmail.com

EDUSEARCH
ISSN: 0976-1160
Vol. 7, No.1, Apr. 2016

प्राथमिक विद्यालयों के शिक्षकों की पर्यावरणीय-जागरूकता का अध्ययन

अनिता यादव *

विशिष्ट शब्दावली : ***पर्यावरणीय जागरूकता, प्राथमिक विद्यालयों के शिक्षक***

सारांश

आज का युग परिवर्तनशील है जो निरंतर विकास की ओर बढ़ रहा है, जैसे शिक्षा, व्यवसाय, औद्योगिक क्षेत्र आदि। किन्तु यह सब विकास हमारे पर्यावरण को पीछे छोड़ता हुआ उसे दूषित करता जा रहा है। पर्यावरण हमारी प्राकृतिक धरोहर है, इसकी शुद्वता व स्वच्छता को बनाये रखना हमारा कर्तव्य ही नहीं हमारी आवश्यकता भी है।

शिक्षा के माध्यम से बच्चों में पर्यावरण जागरूकता लाने का प्रयास किया जा रहा है। किन्तु इससे भी पहले हमें यह जानना आवश्यक है कि प्राथमिक विद्यालय के शिक्षकों में पर्यावरण जागरूकता कितनी है जो बच्चों में पर्यावरण जागरूकता को मजबूती प्रदान करते हैं। प्रस्तुत शोध अध्ययन में शासकीय एवं अशासकीय प्राथमिक विद्यालयों के शिक्षकों में पर्यावरण जागरूकता का अध्ययन हेतु कोरबा जिले के 200 शिक्षकों चयन कर उन पर डॉ. प्रवीण कुमार झा द्वारा विकसित पर्यावरण जागरूकता मापनी का प्रयोग किया गया है।

निष्कर्ष से ज्ञात होता है कि शासकीय एवं अशासकीय प्राथमिक विद्यालय के शिक्षकों की पर्यावरणीय जागरूकता में सार्थक अन्तर नहीं होता है।

प्रस्तावना

मानव जीवन में शिक्षा का महत्वपूर्ण स्थान है शिक्षा ही मनुष्य को सही अर्थों में मनुष्य बनाती है। संस्कृत में कहा गया है कि जो व्यक्ति विद्या, साहित्य, संगीत तथा कलाओं से विहीन रहता है वह बिना पूंछ का पशु है -

'साहित्य संगीत कलाविहीनः सक्षात् पशुः पुच्छ विषाणहीनः। '

शिक्षा के माध्यम से ही मनुष्य अपनी पाशविक शक्तियों का दमन कर उन्हें कल्याणकारी मार्ग की ओर ले जाता है और अपने जीवन में 'सत्यम शिवम् सुन्दरम्' की स्थापना करता है। प्रकृति के साथ मानव को संतुलन बनाकर रहना चाहिए, तभी वनों का विकास एवं संरक्षण हो सकता है। जीवन का आधार संतुलन है, वनों का विकास संवर्धन, रोपण, समन्वय एवं संतुलन की भावना किया जाना चाहिए तभी हम पर्यावरण की सुरक्षा कर सकते हैं। किसी भी देश की संस्कृति को समझने के लिये पहले पर्यावरण को समझने की आवश्यकता है।

अतः मनु स्मृति में कहा गया है ''कि नदी व पर्वत शिखर पर मलमूत्र त्याग नहीं करना चाहिए। आयुर्वेद में गाय के मूत्र को भी औषधि के रूप में उपयोग किया जाता है। वेदों के अनुसार गाय को कामदेव की पुत्री कहा गया है।''

रूसो के कथनानुसार :- ' प्रकृति की ओर वापिस लौटो'' हवन तथा यज्ञ के कार्यक्रमों से भी प्रदूषण का नियंत्रण होता है। इससे मच्छर, मक्खी और जहरीले कीटाणु नष्ट होते हैं।

कौटिल्य के अर्थशास्त्र, *वात्सायन* के कामसूत्र तथा *बाराही* संहिता आदि कतिपय पौराणिक ग्रंथों में वनस्पतियों के संरक्षण, रोपण तथा संकलन के निर्देश मिलते हैं।'' *जिसबर्ट* के अनुसार, ' पर्यावरण जैसे कि शब्द से ही स्पष्ट है यह सब कुछ है जो किसी वस्तु को चारों ओर से घेरे रहता है और प्रत्यक्ष रूप से प्रभावित करता है।''

सन् 1972 के प्रथम विश्व पर्यावरण सम्मेलन में तत्कालीन प्रधानमंत्री *श्रीमती इंदिरा गांधी* ने पश्चिमी राष्ट्रों की पर्यावरणीय जागरूकता पर कटाक्ष करते हुए भारतीय पक्ष को इस प्रकार उजागर किया - ' एक ओर धनी राष्ट्र हमारी गरीबी को चिन्ता जनक मानते हैं और दूसरी ओर वह हमें प्रगति के लिये अपनाये गये उन तरीकों के खतरों से सावधान करते हैं जिन्हें अपनाकर वह स्वयं विकसित हुए। हम पर्यावरण को क्षति नहीं पहुँचाना चाहते परन्तु हम अपने देश के अधिकांश निवासियों के दयनीय जीवन स्तर को एक क्षण के लिये भी अनदेखा नहीं कर सकते।'

अध्ययन का उद्देश्य

अध्ययन हेतु निम्नलिखित उद्देष्य निर्धारित किये गये हैं :

1. शासकीय एवं अशासकीय प्राथमिक विद्यालय के शिक्षकों की पर्यावरणीय जागरूकता अध्ययन करना।
2. शहरी क्षेत्र के शासकीय प्राथमिक विद्यालय के महिला व पुरूष शिक्षकों की पर्यावरणीय जागरूकता का अध्ययन करना।
3. शहरी एवं ग्रामीण के प्राथमिक विद्यालय के पुरूष शिक्षकों की पर्यावरणीय जागरूकता का अध्ययन करना।
4. ग्रामीण क्षेत्र के शासकीय एवं अशासकीय प्राथमिक विद्यालय के शिक्षकों की पर्यावरणीय जागरूकता का अध्ययन करना।
5. शहरी क्षेत्र के शासकीय एवं अशासकीय प्राथमिक विद्यालय की पर्यावरणीय जागरूकता का अध्ययन करना।

शोध परिकल्पनाएँ

प्रस्तुत शोध हेतु निम्नलिखित परिकल्पनाओं का निर्माण किया गया है।

1 शासकीय एवं अशासकीय प्राथमिक विद्यालय के शिक्षकों की पर्यावरणीय जागरूकता में सार्थक अंतर नहीं पाया जायेगा।

2 शहरी क्षेत्र की शासकीय प्राथमिक विद्यालय के महिला व पुरूष शिक्षकों की पर्यावरणीय जागरूकता में सार्थक अंतर नहीं पाया जायेगा।

3 शहरी एवं ग्रामीण क्षेत्र के प्राथमिक विद्यालय के पुरूष शिक्षकों की पर्यावरणीय जागरूकता में सार्थक अंतर नहीं पाया जायेगा।

4 ग्रामीण क्षेत्र के शासकीय एवं अशासकीय प्राथमिक विद्यालय के शिक्षकों की पर्यावरणीय जागरूकता में सार्थक अंतर नहीं पाया जायेगा।

5 शहरी क्षेत्र के शासकीय एवं अशासकीय प्राथमिक विद्यालय के शिक्षकों की पर्यावरणीय जागरूकता में सार्थक अंतर नहीं पाया जायेगा।

अध्ययन की विधि

न्यादर्श

प्रस्तुत शोध अध्ययन के लिये छत्तीसगढ़ राज्य के कोरबा जिले के शासकीय एवं अशासकीय ग्रामीण एवं शहरी क्षेत्र के प्राथमिक विद्यालय 200 शिक्षकों का न्यादर्श के रूप में चयन किया गया है।

उपकरण

पर्यावरणीय जागरूकता (अभिवृत्ति) मापनी (EAAM)- डॉ. प्रवीण कुमार झा, माधेपुरा, बिहार द्वारा विकसित एवं नेशनल साइकोलॉजिकल कार्पोरेशन, कचहरी घाट आगरा द्वारा प्रकाशित मापनी का प्रयोग किया गया।

प्रदत्त विश्लेषण

परिकल्पना 1. *शासकीय एवं अशासकीय प्राथमिक विद्यालय के शिक्षकों की पर्यावरणीय जागरूकता में सार्थक अंतर नहीं पाया जायेगा।*

इस परिकल्पना की सार्थकता की जांच के लिये शासकीय एवं अशासकीय प्राथमिक विद्यालय के शिक्षकों की पर्यावरणीय जागरूकता के अध्ययन प्राप्तांकों का मध्यमान, प्रमाणिक विचलन एवं टी का मान गणना द्वारा प्राप्त किया जो तालिका क्र. 1 में इस प्रकार है

तालिका क्र. 1

शासकीय एवं अशासकीय प्राथमिक विद्यालय के शिक्षकों की पर्यावरणीय जागरूकता प्रदत्त विश्लेषण

शिक्षक	N	M	Sd	df	t-value
शासकीय शाला	100	54.7	8.7	198	1.45
अशासकीय शाला	100	44.7	7.8		NS

उपर्युक्त तालिका से स्पष्ट है कि शासकीय एवं अशासकीय प्राथमिक विद्यालय के शिक्षकों का मध्यमान 54.7 एवं 44.7 है। मध्यमान के अंतर की सार्थकता जांचने के लिये टी परीक्षण किया गया है। गणना से प्राप्त t का मान 1.45 है जबकि 198 df के लिये 0.01 सार्थकता स्तर का t का सारणीगत मान 2.61 है। गणना से प्राप्त t का मान सारणीगत मान से कम है अतः शून्य परिकल्पना स्वीकृत होती है।

परिकल्पना 2 *शहरी क्षेत्र की शासकीय प्राथमिक विद्यालय के महिला व पुरूष शिक्षकों की पर्यावरणीय जागरूकता में सार्थक अंतर नहीं पाया जायेगा।*

इस परिकल्पना की सार्थकता की जाँच के लिये शहरी क्षेत्र के शासकीय प्राथमिक विद्यालय के महिला एवं पुरूष शिक्षकों की पर्यावरणीय जागरूकता अध्ययन के प्राप्तांकों का मध्यमान, प्रमाणिक विचलन एवं t का मान गणना द्वारा प्राप्त किया जो तालिका क्र. 2 में इस प्रकार है :-

तालिका क्र. - 2

शहरी क्षेत्र की शासकीय प्राथमिक विद्यालय के महिला व पुरूष शिक्षकों की पर्यावरणीय जागरूकता का प्रदत्त विश्लेषण

शिक्षक	N	M	Sd	df	t-value
शहरी महिला	50	39.4	8.7	98	0.72
शहरी पुरूष	50	40.2	7.8		NS

उपर्युक्त तालिका से स्पष्ट है कि महिला एवं पुरूष शिक्षकों के पर्यावरणीय जागरूकता के प्रदत्तों का मध्यमान 39.4 एवं 40.2 है। मध्यमान के अंतर की सार्थकता जांचने के लिये t परीक्षण किया गया है। गणना से प्राप्त t का मान 0.72 है जबकि 98 df के लिये 0.01 सार्थकता स्तर का t का सारणीगत मान 2.63 है। गणना से प्राप्त t का मान सारणीगत मान से कम है अतः शून्य परिकल्पना स्वीकृत होती है।

परिकल्पना 3. *शहरी एवं ग्रामीण क्षेत्र के प्राथमिक विद्यालयों के पुरूष शिक्षकों की पर्यावरणीय जागरूकता में सार्थक अंतर नहीं पाया जायेगा।*

इस परिकल्पना की सार्थकता की जांच के लिये शहरी एवं ग्रामीण क्षेत्र के प्राथमिक विद्यालय के पुरूष शिक्षकों की पर्यावरणीय जागरूकता अध्ययन के प्राप्तांकों का मध्यमान प्रमाणिक विचलन एवं t का मान गणना द्वारा प्राप्त किया जो तालिका क्र. 03 में इस प्रकार है

तालिका क्र. - 3

शहरी एवं ग्रामीण क्षेत्र के प्राथमिक विद्यालय के पुरूष शिक्षकों की पर्यावरणीय जागरूकता का प्रदत्त विश्लेषण

शिक्षक	N	M	Sd	df	t-value
शहरी पुरूष	50	43.6	7.7	98	1.41
ग्रामीण पुरूष	50	45.8	7.7		NS

उपर्युक्त तालिका से स्पष्ट है कि शहरी एवं ग्रामीण पुरूष शिक्षकों पर्यावरणीय जागरूकता के प्रदत्तों का मध्यमान 43.6 एवं 45.8 है। मध्यमान के अंतर की सार्थकता जांचने के लिये t परीक्षण किया गया है। गणना से प्राप्त t का मान 1.41 है जबकि 98 df के लिये 0.01 सार्थकता स्तर का t का सारणीगत मान 2.63 है। गणना से प्राप्त t का मान सारणीगत मान से कम है अतः शून्य परिकल्पना स्वीकृत होती है।

परिकल्पना 4 *ग्रामीण क्षेत्र के शासकीय एवं अशासकीय प्राथमिक विद्यालय के शिक्षकों की पर्यावरणीय जागरूकता में सार्थक अंतर नहीं पाया जायेगा।*

इस परिकल्पना की सार्थकता की जाँच के लिये ग्रामीण क्षेत्र के शासकीय एवं अशासकीय प्राथमिक विद्यालय के शिक्षकों की पर्यावरणीय जागरूकता अध्ययन के प्राप्तांकों का मध्यमान प्रमाणिक विचलन एवं t का मान गणना द्वारा प्राप्त किया जो तालिका क्र. 4 में इस प्रकार है

तालिका क्र 4

ग्रामीण क्षेत्र के शासकीय एवं अशासकीय प्राथमिक विद्यालय के शिक्षकों की पर्यावरणीय जागरूकता का प्रदत्त विश्लेषण

शिक्षक	N	M	Sd	df	t-value
ग्रामीण शासकीय	50	17.2	3.9	98	0.65
ग्रामीण अशासकीय	50	17.7	4.2		NS

उपर्युक्त तालिका से स्पष्ट है कि ग्रामीण क्षेत्र के शासकीय एवं अशासकीय प्राथमिक विद्यालय के शिक्षकों का पर्यावरणीय जागरूकता का मध्यमान 17.2 एवं 17.7 है। मध्यमान के अंतर की सार्थकता जांचने के लिये t परीक्षण किया गया है। गणना से प्राप्त अ का मान 0.65 है जबकि 98 df के लिये 0.01 सार्थकता स्तर का t का सारणीगत मान 2.63 है। गणना से प्राप्त t का मान सारणीगत मान से कम है अतः शून्य परिकल्पना स्वीकृत होती है।

परिकल्पना 5 *शहरी क्षेत्र के शासकीय एवं अशासकीय प्राथमिक विद्यालय के शिक्षकों की पर्यावरणीय जागरूकता में सार्थक अंतर नहीं पाया जायेगा।*

इस परिकल्पना की सार्थकता की जाँच के लिये शहरी क्षेत्र के शासकीय एवं अशासकीय प्राथमिक विद्यालय के शिक्षकों की पर्यावरणीय जागरूकता अध्ययन के प्राप्तांकों का मध्यमान प्रमाणिक विचलन एवं टी का मान गणना द्वारा प्राप्त किया जो तालिका क्र. 5 में इस प्रकार है

तालिका क्र - 5

शहरी क्षेत्र के शासकीय एवं अशासकीय प्राथमिक विद्यालय के शिक्षकों की पर्यावरणीय जागरूकता का प्रदत्त विश्लेषण

शिक्षक	N	M	Sd	df	t-value
शहरी शासकीय	50	16.0	3.9	98	3.84
शहरी अशासकीय	50	18.9	3.6		NS

उपर्युक्त तालिका से स्पष्ट है कि शहरी क्षेत्र के शासकीय एवं अशासकीय प्राथमिक विद्यालय के शिक्षकों का पर्यावरणीय जागरूकता प्रदत्तों का मध्यमान 16.0 एवं 18.9 है। मध्यमान के अंतर की सार्थकता जांचने के लिये t परीक्षण किया गया है। गणना से प्राप्त t का मान 3.84 है जबकि 98 df के लिये 0.01 सार्थकता स्तर का t का सारणीगत मान 2.63 है। गणना से प्राप्त t का मान सारणीगत मान से अधिक है अतः शून्य परिकल्पना अस्वीकृत होती है।

निष्कर्ष

1. शासकीय एवं अशासकीय प्राथमिक विद्यालय के शिक्षकों की पर्यावरणीय जागरूकता में सार्थक अन्तर नहीं होता है।
2. शहरी क्षेत्र के शासकीय प्राथमिक विद्यालय के महिला एवं पुरूष शिक्षकों की पर्यावरणीय जागरूकता में सार्थक अन्तर नहीं होता है।
3. शहरी एवं ग्रामीण क्षेत्र के प्राथमिक विद्यालय के पुरूष शिक्षकों की पर्यावरणीय जागरूकता में सार्थक अन्तर नहीं होता है।
4. ग्रामीण क्षेत्र के शासकीय एवं अशासकीय प्राथमिक विद्यालय के शिक्षकों की पर्यावरणीय जागरूकता में सार्थक अंतर नहीं होता है।
5. शहरी क्षेत्र के अशासकीय प्राथमिक विद्यालय के शिक्षकों की पर्यावरणीय जागरूकता शासकीय शालाओं के शिक्षकों से सार्थक रूप से अधिक होती है।

संदर्भ ग्रंथ सूची

भटनागर डॉ.आर.पी. भटनागर डॉ. मीनाक्षी ''1997'' शिक्षा अनुसंधान मेरठ ईगल बुक्स इंटरनेशनल पृ 279-298
ब्यास हरिश्चन्द्र ''1992'' पर्यावरण शिक्षा क्यों और कैसे प्रायमरी शिक्षक पृ.3
सी.ई.ई. ''1998'' हरे-भरे भविष्य की ओर पर्यावरण शिक्षण केन्द्र, अहमदाबाद
कपिल डॉ.एच.के. ''1996'' अनुसंधान विधियां विनोद पुस्तक मंदिर आगरा
खरे, ब्रम्हस्वरूप ''1989'' '' स्कूल शिक्षा के पर्यावरणीय उन्मुखीकरण की योजना'' पलास अप्रैल पृ 29-34
एन.सी.ई.आर.टी. ''1992'' ''पर्यावरण संरक्षण का विज्ञान'' संस्करण
नवभारत कैरियर ''रिपोर्ट'' ''पर्यावरण शिक्षा से संबंधित कुछ खेल'' पलाश अंक-2 अगस्त
पुरे, डॉ.भरत ''1989'' पर्यावरण अध्ययन कानपुर-3 किताब घर पृ 131-142, 153
पाण्डेय, डॉ. विनोद ''1998'' पर्यावरण तथा प्रदूशण भोपाल (म.प्र.) हिन्दी ग्रंथ अकादमी
रघुवंशी डॉ.अरूण रघुवंशी डॉ.चंद्रलेखा ''1995'' शिक्षक निर्देशक भोपाल एस.सी.ई.आर.टी.
त्रिपाठी डॉ. एस.एस. ''1996'' ''पर्यावरण शिक्षा'' आगरा विनोद पुस्तक मंदिर आगरा
उपाध्याय डॉ. राधा वल्लभ ''1998'' मनोविज्ञान एवं शिक्षा के सांख्यिकी आगरा पब्लिकेशन

Article Received on	**10.04.2016**	**Reviewed on**	**11.04.2016**
Observations reflected on	**12.04.2016**	**Modified on**	**15.04.2016**

* ***अनिता यादव*** : सहायक प्राध्यापक, शिक्षा संकाय, कमला नेहरू महाविद्यालय, कोरबा छत्तीसगढ़।
Email: aykorba@gmail.com

EDUSEARCH
ISSN: 0976-1160
Vol. 7, No.1, Apr. 2016

ग्रामीण-महिलाओं के आर्थिक-सबलीकरण में शिक्षा की भूमिका एवं उत्तरदायित्व : एक विवेचना

*डॉ. जितेन्द्र लोढ़ा * एवं फूलचन्द महोलिया ***

विशिष्ट शब्दावली : ***आर्थिक सबलीकरण, शैक्षिक दायित्व***

सारांश

शिक्षा की आयोजनाओं व पाठ्यक्रमों में यदि लैंगिक-असमानताओं के साथ-साथ क्षेत्र विशेष के परिवेश (ग्रामीण-शहरी) के प्रति सावधानी बरती जाएगी, तभी ही हम शिक्षा को समता, दक्षता एवं गुणवत्ता के पटल पर सही मायने से आंक सकेंगे।

ग्रामीण-महिलाओं के आर्थिक-सबलीकरण की अवधारणा, अपने विकास के लिए शिक्षा व शिक्षा-जगत से किंचित भी परे नहीं हो सकती। ग्रामीण-महिलाएं ही क्यों ? किसी भी व्यक्ति या वर्ग के जीवन में उत्पादकीय-पक्षों के निर्माण में, शिक्षा की अहम भूमिका है।

ग्रामीण जीवन के आर्थिक-उन्नयन में शिक्षा के ज्ञानात्मक, कौशलात्मक एवं अभिवृत्तियात्मक कार्य, अपने सनातन रूप में आज भी कारगर व इस दिशा के समाधानीय विकल्प है।

शिक्षा तो विकास की वह वाहिनीका है, जिसे किसी भी मार्ग पर ले जाया जा सकता है। मार्ग तो हम और आप ही तय करते हैं, तो क्यों न हम शिक्षा को ग्रामीण-महिलाओं के अर्थो-पार्जन की राह दिखा दें।

विषयपरक-पृष्ठभूमि

भारत के ग्रामीण-विकास से संदर्भित लगभग सभी पहलुओं में ग्रामीण-महिलाओं की कामकारी अर्थात उनका योगदान जग जाहिर व महत्वपूर्ण है, फिर भी उनके रोज़गार व कामगारियों की अहमियत को उनके परिवारों व स्वामियों के संदर्भ में देखे जाने का ट्रेंड आज भी प्रचलित है। जबकि अर्थ-जगत में किसी प्रकार के लैंगिक-विभेद को मान्यता नहीं है। उसमें मानव मात्र को उत्पादन का साधन या स्वामी समझा जाता है, फिर वह चाहे पुरूष हो या स्त्री। जो साधन की भूमिका निभायेगा, वही उत्पादन में से हिस्सा अर्थात आय प्राप्ति का हकदार होगा। स्त्रियों, विशेषकर भारत की ग्रामीण-स्त्रियों का उत्पादनीय कार्यों में सक्रिय रूप से संलिप्त होने के बावजूद भी उन्हें न तो साधन के रूप में मान्यता मिली है, और न ही उन्हें अर्थ स्वरूप में सम्यक् प्रतिफल मिलता दिखाई देता है। फलतः उनमें आर्थिक-निबलीकरण एवं पर-निर्भरता की भावनाएँ विकसित हो जाती हैं, जो उनके आर्थिक-सशक्तिकरण में अवरोध का कार्य करती हैं।

अतः इस दिशा में शिक्षा की प्राथमिक भूमिका व दायित्व यह है कि वह ग्रामीण-महिलाओं के लिए, उनके परिवेश के अनुकूल, ऐसे शैक्षिक-प्रावधान व व्यवस्थाओं को गढ़े, जिससे वे अपने भावी जीवन में न केवल अर्थोपार्जन की सशक्त-इकाई बने, बल्कि साथ ही साथ अपने अर्थोपार्जन पर अपना स्वतंत्र

अधिकार व उसे मान्यता प्रदान करने के सामाजिक-पर्यावरण को भी विकसित कर सके। इस प्रकार स्पष्ट है कि जहाँ एक ओर आर्थिक-स्वतंत्रता एवं आत्मनिर्भरता स्त्री-मुक्ति की कुंजी है, तो वहीं दूसरी ओर शिक्षा इस कुंजी की प्राप्ति का सबसे सबल मार्ग है। इसलिए शिक्षा की चौहद में ग्रामीण-महिलाओं को लाना, वर्तमान भारत के ग्रामीण-विकास की अनिवार्य व नैसर्गिक मांग है।

शिक्षा की आयोजनाओं व पाठ्यक्रमों में यदि लैंगिक-असमानताओं के साथ-साथ क्षेत्र विशेष के परिवेश (ग्रामीण-शहरी) के प्रति सावधानी बरती जाएगी, तभी ही हम शिक्षा को समता, दक्षता एवं गुणवत्ता के पटल पर सही मायने से आंक सकेंगे। मौजूदा शिक्षा-नीति में स्त्री-शिक्षा विमर्श को लेकर सांकेतिक न्यूनतावाद का दृष्टिकोण प्रचलित है। सांकेतिक न्यूनतावाद में छात्रवृत्ति प्रदान करना, बैंक में कुछ राशि प्रतिमाह जमा कराना, गणवेश, साइकिल, स्कूटी, पाठ्य-पुस्तकें एवं कम्प्यूटर आदि के बांटने की प्रक्रिया शामिल है। यह सच है कि ऐसे उपहार भी उनकी व्यक्तिगत-क्षमताओं में इज़ाफा करते हैं। लेकिन स्त्री-विमर्श अर्थात जेण्डर रिश्तों के संदर्भ में शिक्षा व उसकी आयोजनाओं के समक्ष, जो प्रकृति व व्यापकता है, उनसे निपटने के लिए ऐसे छोटे उपाय अपर्याप्त है। इसके लिए हमें स्त्रियों के सांस्कृतिक-दमन एवं उनके शैक्षिक-वंचन की पृष्ठभूमियों को देखकर, महिला-सशक्तिकरण की व्यापक शैक्षिक-सम्भावनाओं को तलाशना होगा, जिससे वे कौशलों से परिपूर्ण व स्वयं निर्णयकर्ता के रूप में प्रतिस्थापित होकर, अपना सामाजिक व आर्थिक-पक्ष इतना मजबूत बना ले कि शेष सभी भेदभाव उसके तेजस से स्वतः मिट जाए। अतः अपने समानतावादी एवं सर्वहितार्थ उपागम के चलते शिक्षा, स्त्रियों के कल्याण से कहीं भी परे नहीं हो सकती।

विषय की गम्भीरता को समझते हुए आज हमें शिक्षा के माध्यम से स्त्रियों में, विशेषकर ग्रामीण-स्त्रियों में (क्योंकि वे इस दिशा में ज्यादा हीनतर है) अपने आर्थिक -विकास की संवेदनाएँ, ज्ञान, प्रशिक्षण, कौशल, दक्षता एवं निर्णय लेने की क्षमताओं के विकास के साथ-साथ उनमें अपने उत्पादकीय कार्यों की पहचान व मूल्य अंकन की क्षमताओं को भी विकसित करना होगा। इस संबंध में प्रसिद्ध अर्थ चिन्तक *टी. डब्ल्यू शुल्ज* का यह कथन प्रासंगिक है कि ''आर्थिक-सशक्तिकरण के लक्ष्य में आप के पास साधन मौजूद हो, लेकिन किसी व्यवसाय का तकनीकी ज्ञान तथा तद्नुरूप कौशल न हो, साक्षर न हो तो, उत्पादन (आय) में कमी आना स्वाभाविक है।''

इस प्रकार स्पष्ट है कि राष्ट्र के आर्थिक-सुदृढ़ीकरण के साथ-साथ स्त्री-संदर्भित आर्थिक-सबलीकरण की आवधारणा भी शिक्षा की फलन है। इसलिए अर्थ जगत में शिक्षा के खर्च को विनियोग तत्व माना जाता है। क्योंकि शिक्षा पर किया खर्च साधन की योग्यताओं, कौशलों, दक्षताओं एवं क्षमताओं में इज़ाफा करता है, और यह इज़ाफा राष्ट्र की उत्पादकता को कई गुना बढ़ा सकता है। इसे यदि हम आज के व्यवहार में भी देखे तो स्पष्ट दिखाई पड़ता है कि आजकल की पढ़ी-लिखी व काम करने वाली आधुनिक महिलाएँ आर्थिक मामलों में ज्यादा आत्मनिर्भर है। चूंकि आर्थिक-आत्मनिर्भरता महिलाओं को मानसिक गुलामी से मुक्त करने का सबसे श्रेष्ठ मार्ग है, जिसको पाने के लिए हमें न केवल शिक्षा रूपी राजमार्ग पर चलना होगा, बल्कि इस राजमार्ग की पहुँच को हमारी ग्रामीण-महिलाओं तक भी ले जाना होगा, तब जाकर कहीं हम सशक्त ग्रामीण-नारियों के संसार की कल्पना कर सकते हैं।

ग्रामीण-महिलाओं के आर्थिक-सबलीकरण में शिक्षा की भूमिका

भारत के संदर्भ में 'महिला-शिक्षा' का उपागम आज दिन तक सुधार की बैसाखियों पर आधारित है। ग्रामीण-महिलाओं की शैक्षिक-दशा तो कोढ़ में खाज़ के समान है। इसका आशय यह कदापि नहीं है कि भारत में ग्रामीण-महिलाओं के शैक्षिक-पिछड़ेपन को लेकर कोई उपाय नहीं किये गये हैं। जो प्रयास किये गये हैं, और किये जा रहे हैं, उसके लिए हम कृत-कृत्य है। शिक्षा अधिकार विधेयक-2009 के लागू होने, शिक्षा में लैंगिक असमानता व क्षेत्र आदि के रिसावों को दूर करने के अथक प्रयासों, महिला-सशक्तिकरण के विधिक-उपायों के साथ-साथ महिलाओं के सामाजिक व आर्थिक-विकास हेतु विभिन्न पंचवर्षीय योजनाओं के सदृश्य में अनेक कार्यक्रमों की क्रियान्वितियों के बावजूद, शिक्षा की चारदिवारी में, आज भी ग्रामीण-महिलाओं के सबलीकरण में, उसकी भूमिका व उत्तरदायित्व के प्रश्न बाकी है।

जो बात मुख्य व महत्वपूर्ण है, वह यह है कि शिक्षा की प्रक्रिया में ग्रामीण-महिलाओं को कितने किस्म के व कितने पुख्ता शैक्षिक-अनुभव व इंतज़ामात मिल पाते हैं। जिसके चलते उनमें आत्मविश्वास बढ़े, उनके कौशलों में इज़ाफा हो, अपना भविष्य स्वयं गढ़ सके और समाज के संचालन में बेहतर भागीदार बन सके। इस संबंध में एन.सी.ई.आर.टी. के निवर्तमान अध्यक्ष व शिक्षाविद् *कृष्ण कुमार* का यह चिन्तन एकदम समीचीन है कि ''स्त्रियों की कुशलताओं व निर्णयकर्ताओं के रूप में आर्थिक-श्रमबल में भागीदारी की उनकी क्षमताओं को लेकर, जो गहरी मानसिक बाधाएँ हैं, उन्हें लांघा जाए, तभी जाकर महिला-सबलीकरण के मुद्दे को शिक्षा के पटल पर

सही मायने में रेखांकित कर पायेंगे।''

नयी आर्थिक-नीति के बाद शिक्षा को देश के आर्थिक-विकास के महत्वपूर्ण कारक के रूप में देखा जाने लगा है। शायद यही कारण है कि अब ''ज्ञान आधारित अर्थव्यवस्था'' शब्दावली का प्रचलन शुरू हो गया है, और यह बात सत्य भी है शिक्षा अपने फलदायी प्रक्रम में एक व्यक्ति, समुदाय या राष्ट्र के आर्थिक-विकास का एक सशक्त माध्यम है। यहाँ पर मद्रास विकास संस्थान के पूर्व अध्यक्ष एवं प्रसिद्ध भविश्यशास्त्री *प्रो. मैल्कम एस. आदिशेषैया* का यह कहना एकदम प्रासंगिक है कि ''किसी भी समाज या वर्ग में व्यापक व सूक्ष्म आर्थिक-परिवर्तन लाने का सबसे सशक्त माध्यम शिक्षा है। चाहे मुद्दा गरीबी हटाने का हो, मानव-पूंजी निर्माण का हो, जनशक्ति नियोजन का हो या फिर आर्थिक-बेहतरी का हो, सभी में शिक्षा व उसकी विभिन्न अवधारणाओं का महत्वूपर्ण योगदान है।''

नयी शिक्षा-नीति-1986 एवं प्रोग्राम ऑफ एक्शन-1992 में भी महिला-सबलीकरण की दृष्टि से स्वीकारा गया है कि ''स्त्रियों की पदवी में मूल परिवर्तन लाने के लिए शिक्षा का उपयोग एक अभिकर्त्ता के रूप में किया जाएगा। राष्ट्रीय-शिक्षा प्रणाली की महिला-सशक्तिकरण की दृष्टि से सकारात्मक व मध्यस्था वाली भूमिका होगी। साथ ही यह संकल्प लिया गया है कि स्त्रियों की निरक्षरता के उन्मूलन को उच्च प्राथमिकता दी जाएगी।'' आज भारत सरकार की अनेकानेक योजनाओं एवं विधिक उपायों के चलते ग्रामीण-महिलाओं तक शिक्षा की पहुँच तो है, लेकिन उनकी निजी चेतना व शिक्षातंत्र की मंशाओं में रिसाव होने के कारण ही शिक्षा पूर्ण रूप से अपनी सक्रिय भूमिका नहीं निभा पा रही है। इस बात को बीजिंग (चीन) में 4 से 15 सितम्बर, 1995 में आयोजित चतुर्थ महिला-संदर्भित विश्व-सम्मेलन में भी गहन मंथन के बाद स्वीकारा गया कि ''महिलाओं की उन्नति एवं सबलीकरण का मुख्य माध्यम व आधार, शिक्षा एवं शिक्षातंत्र की मंशाएँ ही है।''

1986 में 'विकास में महिलाओं की भागीदारी' पर प्रथम विश्व सर्वेक्षण किया गया, जिसके प्राप्त आंकड़ों से यह निष्कर्ष सामान्य हुआ कि ''विकास कार्यों में महिलाओं की महत्वपूर्ण भूमिका है। विकास में महिलाओं से संदर्भित भूमिकाओं के ग्राफ में शिक्षित महिलाओं का योगदान उच्च स्तरीय पाया गया। साथ में यह भी देखा गया कि शिक्षा से वंचित महिलाओं में अपने कार्यों के आर्थिक-अंकन, मूल्य भान एवं उसके लेखांकन का दृष्टिकोण न्यून स्वरूप में था''। इस प्रकार के अनेकानेक निष्कर्ष, अपने आप में ही यह सिद्ध करते हैं कि महिलाओं के आर्थिक-सबलीकरण में शिक्षा की भूमिका मुख्य व महत्वपूर्ण है। चूंकि यहाँ बात ग्रामीण-महिलाओं के सबलीकरण की है तो शिक्षा की भूमिका भी, 'ग्रामीण-महिला विकास सापेक्ष उद्देश्यों' एवं तद्नुरूप उसके कार्यों की सफल क्रियान्वितियों के दृष्टिकोण में निहित है। शिक्षा द्वारा महिलाओं का आर्थिक-सबलीकरण, उसके द्वारा प्रदत्त ज्ञान, कौशल एवं अभिवृत्तियात्मक दृष्टिकोणों के सम्यक् प्रबंधन-स्वरूप का ही फलन है। अतः ग्रामीण-महिलाओं के आर्थिक-सबलीकरण में शिक्षा की भूमिकाओं के विभिन्न पक्षों की महत्वात्मक-बानगी को अग्र आरेख द्वारा स्पष्ट किया जा रहा है।

ग्रामीण-महिलाओं के आर्थिक-सबलीकरण में शिक्षा की भूमिका के विविध पक्ष

शिक्षा के ज्ञानात्मक पक्ष की भूमिका

- ग्रामीण-महिलाओं को कार्यक्षमता एवं वृत्तिक-कौशलों के व्यवहारिक व सैद्धांतिक पक्षों की जानकारी देना।
- ग्रामीण-परिवेश के विभिन्न प्रशिक्षणों, रोज़गारों, कार्य के अवसरों एवं अर्थ-सृजन की विविध गतिविधियों की जानकारी देना।
- ग्रामीण-महिलाओं में उत्पादकीय कार्यों की पहचान व उसके मूल्यों की जानकारी को प्रकट करवाना।
- अर्थ-आयोजनाओं में ग्रामीण-महिलागत नियोजनों व आरक्षणों की जानकारी प्रकट करना।
- ग्रामीण-महिलाओं की उन्नति के अधिकारों, नियमों एवं विधिक दृष्टिकोणों की जानकारी प्रदान करना।
- ग्रामीण-महिला आर्थिक-सबलीकरण के क्षेत्र की मानसिक व व्यवस्थापकीय बाधाओं की जानकारी को प्रकट कर, उनके समाधानीय दृष्टिकोण प्रदान करना।
- विभिन्न विधाओं के योग्यतापरक ज्ञान व उसके विशिष्टीकरण को ग्रामीण-महिलाओं के संदर्भ में प्रबंधित करना।
- ग्रामीण-परिवेश के स्वरोज़गार के दृष्टिकोणों की जानकारी प्रदान करना।
- आर्थिक-सबलीकरण की समग्र सूचनाओं व स्रोतों की जानकारी प्रकट करना।
- मीडिया आधारित जनजागरण के कार्यक्रमों को दिशा देना।

शिक्षा के कौशलात्मक-पक्ष की भूमिका	शिक्षा के अभिवृत्तियात्मक-पक्ष की भूमिका
• नेतृत्व एवं निर्णयात्मक क्षमताओं का विकास करना। • आत्मविश्वास एवं आत्मनिर्भरता के कौशलों का विकास करना। • श्रेष्ठ अवसर एवं विकल्प चयन की योग्यता का विकास करना। • साहसिकता का प्रशिक्षण प्रदान करना। • स्वावलम्बन की दक्षता का विकास करना। • क्षमताओं को सामर्थ्य में बदलने की योग्यताओं का विकास करना। • सहअस्तित्व एवं स्वयं-सहायता के कौशलों का विकास करना। • विभिन्न विधाओं से संबंधित बहुआयामी वृत्तिक-कौशलों की दक्षता का विकास करना।	• लैंगिक-संवेदनशीलता के स्तर को बढ़ाना। • आर्थिक-सबलीकरण के प्रति जागरूकता के स्तर को बढ़ाना। • पेशेवराना अंदाज को बढ़ाना। • आत्मविश्वास व आत्मनिर्भरता की भावनाओं को बढ़ाना। • श्रम-साधना के प्रति विश्वास को बढ़ाना। • कार्य की दशाओं के प्रति संवेदनशीलता को बढ़ाना। • कार्य-कुशलता व पूर्णतया की धारणाओं में विश्वास पैदा करना। • अर्थ-अर्जन व सृजन की दूरदर्शिता को बढ़ाना। • प्रयासों के प्रति संवेदनशीलता व अवसरों का लाभ उठाने की प्रवृत्ति विकसित करना।

आरेख में वर्णित ग्रामीण-महिलाओं के आर्थिक-सबलीकरण के विविध पक्षों को नियोजित व एकीकृत स्वरूप में लागू कर, तद्नुरूप क्रियात्मक-दृष्टिकोणों को वांछित दिशा देकर ही हम, ग्रामीण-महिलाओं के सबलीकरण की विविध अवधारणाओं को चतुर्दिक-स्वरूप में प्राप्त कर सकते हैं। यह हम सिद्ध स्वरूप में जानते हैं कि भारत की प्रगति, गांवों की प्रगति पर निर्भर करती है, और गांवों की प्रगति की कहानी ग्रामीण-महिलाओं के विकास व समृद्धि से परे नहीं हो सकती। क्योंकि समाज की व्यवस्था या अव्यवस्था, नागरिक दायित्वों एवं कौशलों की दृढ़ता या उपेक्षा, आत्मशक्ति की मजबूती या दुर्बलता जैसी अनेकानेक संवेदनशील भावनाओं को नारी-शक्ति जैसा चाहे वैसा मोड़ सकती है। इसीलिए ग्रामीण-महिलाओं का शिक्षित होना जरूरी है, ताकि हम वांछित ग्रामीण-विकास मॉडल को साकार रूप दे सकें।

ग्रामीण-महिलाओं की आर्थिक-उन्नति हेतु शैक्षिक-दायित्व

आज उत्पादन के सभी क्षेत्रों में आवश्यकता तथा तद्नुरूप विशिष्टीकरण को तवज़ो दिया जाता है। भारत गाँवों का देश है, अतः ग्रामीण-विकास मॉडल की आवश्यकता में ग्रामीण-महिला शिक्षा के विशिष्टीकरण की प्रबल मांग है। चूंकि शिक्षा जीवन के सभी क्षेत्रों के विकास की अधिष्ठात्री है। इसलिए भारत के शैक्षिक पैरोकारों से यह अपेक्षा की जाती है कि वे ग्रामीण-महिलाओं की शैक्षिक-दशाओं के सभी संदर्भों को देख कर, उनके अनुरूप शैक्षिक-आयोजनाओं को दिशा दे। भारतीय ग्रामीण-महिलाएँ अपने प्राकृत स्वरूप में श्रम-जीवी व कामगार तो होती है, लेकिन अपने अर्थ-पक्ष को लेकर इतनी सहज व सपाट होती है कि वे अपनी आर्थिक-उन्नती की बाधाओं को भी पहचान नहीं पाती। इसके साथ-साथ उनमें शैक्षिक व आर्थिक जागरूकता का स्तर भी न्यून पाया जाता है, जिसके चलते उनमें सदैव आर्थिक-निबलता का आलम छाया रहता है। ग्रामीण-शिक्षा की इस प्रकार की दशाओं की पृष्ठभूमि में राष्ट्रीय पाठ्यचर्चा प्रारूप-2005 में 'शिक्षा के सामाजिक-संदर्भों' के निर्देशन में कहा गया है कि ''शिक्षा-व्यवस्था उस समाज से अलग-थलग होकर काम नहीं करती, जिसका वह एक भाग है। यह सबके हित में है कि शिक्षा मनुष्य को लिंग-असमानताओं से मुक्त कराये। साथ ही उसका उत्तरदायित्व है कि वह ग्रामीण क्षेत्र की महिलाओं के असुरक्षित शिक्षा-क्षेत्रों को सबलता प्रदान करते हुए, इस दिशा के सभी-अवरोधों को दूर करे ताकि शिक्षा के हलकों में जातिगत, आर्थिक तथा स्त्री-पुरूष संबंधों का पदानुक्रम, सांस्कृतिक विविधता और असमान-विकास को प्रबंधित किया जा सके।''

इस प्रकार से शिक्षा को किसी खास समय, स्थान, क्षेत्र और वर्ग के संदर्भ में व्यापक और शाश्वत मानवीय आकांक्षाओं और मूल्यों की समकालीन और प्रासंगिक अभिकरण व अभिव्यक्ति बनना पड़ता है, तभी जाकर वह मौजूदा समाज की महत्वाकांक्षाओं और जरूरतों की प्राप्ति का आधार बनती है। इसी विचार-क्रम की पृष्ठभूमि में ग्रामीण-महिलाओं के आर्थिक-सबलीकरण की दृष्टि से, शिक्षा के उत्तरदायी पहलू अग्र प्रकार है।

- ग्रामीण-महिलाओं के लिए, उनके निज परिवेश की पृष्ठभूमि में, पृथक से व्यावसायिक-पाठ्यक्रमों एवं व्यावसायिक-संस्थानों की, जड़ स्तर तक स्थापना एवं प्रसार संबंधी व्यवस्थापकीय

दायित्व।

- सरकारी व गैर सरकारी संगठनों के माध्यम से, ग्रामीण-महिलाओं की आर्थिक-उन्नति से संबंधित, विविध प्रकार के कार्यक्रमों का आयोजन करवाने का दायित्व।
- ग्रामीण-महिलाओं के आर्थिक-सबलीकरण के सभी सरोकारों को शिक्षा के माध्यम से प्रचारित व प्रसारित करवाने का दायित्व।
- ग्रामीण-शिक्षा की पृष्ठभूमि को समर्पित विद्यालयों, महाविद्यालयों एवं विश्वविद्यालयों में ग्रामीण-महिलाओं के सशक्तिकरण हेतु विशिष्ट वार्ताओं, रोजगार-मेलों, परामर्श कैम्पस के साथ-साथ संगोष्ठी-सम्मेलनों के अनिवार्य आयोजनों के प्रावधानों को सुनिश्चित् करने व करवाने के दायित्व।
- ग्रामीण-महिलाओं के कार्य अर्थात उनकी उत्पादकता को अकादमिक मान्यता दिलवाने का दायित्व।
- सभी शैक्षिक व प्रशैक्षिक संकायों के विषयों के पाठ्यक्रमों में ग्रामीण-महिलाओं की स्वावलम्बनता से जुड़े मुद्दों को विषय की प्रकृतिनुसार डिजायन कर, उन्हें समावेशित करवाने का दायित्व।
- स्वावलम्बी एवं उद्यमी ग्रामीण-महिलाओं के उदाहरणों को प्रेरक के रूप में शिक्षा के विविध पाठ्यक्रमों में रेखांकित करवाने का दायित्व।
- स्त्री-शिक्षा के विभिन्न स्तर के पाठ्यक्रमों को, जीवन व रोज़गार की चुनौतियों से जोड़ने का दायित्व।
- ग्रामीण-महिलाओं की शिक्षा-प्रक्रिया में व्यवसायिक निर्देशन एवं परामर्श की अवधारणाओं को समावेशित कर, उसके व्यवहारिक उपागमों को प्रबंधित करने का दायित्व।
- ग्रामीण-महिलाओं में स्व-रोज़गार जोखिम उठाने की क्षमता, वित्तीय-क्षेत्रों, उद्योग-परियोजनाओं एवं उनकी स्थापना-प्रक्रियाओं आदि का, ग्रामीण-महिलाओं की आर्थिक-उन्नति की दृष्टि से, अकादमिक-नेतृत्व करने का दायित्व।
- ग्रामीण-शिक्षा के वैशिष्ट्य व आवश्यकताओं के मद्देनज़र नयी शैक्षिक-सम्भावनाओं को तलाशने एवं प्रबंधित करने का दायित्व।

अतः प्रकट है कि उपर्युक्त दायित्व-निवर्हन से शिक्षा, ग्रामीण-महिलाओं के उत्थान सापेक्ष हो जाएगी। क्योंकि हम जानते है कि शिक्षा में प्रजातांत्रिक-भागीदारी, कमज़ोर व समाज के हाशिएं वाले लोगों के सशक्तिकरण का ज़रिया है। आज यदि ग्रामीण-महिलाओं को शिक्षा के क्षेत्र में सक्रिय भागीदारी मिल जाती है तो हमारी संस्कृति के समतामूलक मूल्यों को एक नयी जान मिल जाएगी, जिसकी आज महती आवश्यकता है।

निष्कर्ष

ग्रामीण-महिलाओं के आर्थिक-सबलीकरण की अवधारणा, अपने विकास के लिए शिक्षा व शिक्षा-जगत से किंचित भी परे नहीं हो सकती। ग्रामीण-महिलाएं ही क्यों ? किसी भी व्यक्ति या वर्ग के जीवन में उत्पादकीय-पक्षों के निर्माण में, शिक्षा की अहम भूमिका है। ग्रामीण जीवन के आर्थिक-उन्नयन में शिक्षा के ज्ञानात्मक, कौशलात्मक एवं अभिवृत्तियात्मक कार्य, अपने सनातन रूप में आज भी कारगर व इस दिशा के समाधानीय विकल्प है। शिक्षा तो विकास की वह वाहिनीका है, जिसे किसी भी मार्ग पर ले जाया जा सकता है। मार्ग तो हम और आप ही तय करते हैं, तो क्यों न हम शिक्षा को ग्रामीण-महिलाओं के अर्थो-पार्जन की राह दिखा दें।

संदर्भ ग्रंथ सूची

आदिशेषैया, मैल्कम एस., ''शिक्षा आर्थिक परिवर्तन का सशक्त माध्यम, योजना, भा.सू.प्र.म., नई दिल्ली, वर्ष-37, अंक 23-24, जनवरी-1994, पृ.सं. 11-16.

अग्रवाल जे.सी., ''रिसेन्ट डवलपमेन्ट एण्ड ट्रेन्डस इन एजूकेशन'', शिप्रा पब्लिकेशन, नई दिल्ली-2009, पृ.सं.-178.

अखण्ड-ज्योति, ''इक्कीसवीं सदी होगी नारी सदी'', मथुरा, उ.प्र., अंक-2, फरवरी-2011, पृ.सं. 56.

कुमार कृष्ण, ''बालिका-सशक्तिकरण में कमी क्या है'', शिक्षा-विमर्श, दिगन्तर, शिक्षा व खेलकूद समिति जयपुर, वर्ष-10, अंक-3, मई-जून-2008, पृ.सं.-17.

लोढ़ा जितेन्द्र, ''शिक्षा आर्थिक विकास का सशक्त माध्यम'', प्राथमिक-शिक्षक, एन.सी.ई.आर.टी. नई दिल्ली, जुलाई-2002, पृ.सं.-24

लोढ़ा जितेन्द्र, ''आर्थिक-सबलीकरण के स्त्री-विमर्श में शिक्षा की भूमिका एवं उत्तरदायित्व'', नया-शिक्षक, मा.शि. निदेशालय राज बीकानेर, वर्ष-53, अंक-4, अक्टू-दिस-2001, पृसं. 33-42.

राष्ट्रीय पाठ्यचर्या की रूपरेखा-2005,'' एन.सी.ई.आर.टी., नई दिल्ली, वर्ष-2006, पृसं. 10.

सिंह, रजनी रंजन, ''सामाजिक, आर्थिक एवं राजनैतिक परिप्रेक्ष्य में महिला सशक्तिकरण की वास्तविकताएं,'' परिप्रेक्ष्य, न्यूपा, नई दिल्ली, वर्ष 14, अंक-1, अप्रेल 2007, पृसं. 33.

सौरभ सुमित, ''स्त्री एक शब्द नहीं है सिर्फ', पुस्तक-वार्ता, मा.गाँ.अ.हि. विश्वविद्यालय वर्धा, महाराष्ट्र, वर्ष-5, अंक-19, जन-फर

श्रीवास्तव सुरेश लाल, ''विश्व मानवाधिकार और महिलाएं'', विद्या मेघ, मेरठ, वर्ष-12, अंक-113, दिस-2006, पृ.सं. 6-7.

Article Received on	**27.03.2016**	**Reviewed on**	**30.03.2016**
Observations reflected on	**31.03.2016**	**Modified on**	**05.04.2016**

* ***डॉ. जितेन्द्र लोढ़ा*** : व्याख्याता, शिक्षा संकाय, राजकीय स्नातकोत्तर महाविद्यालय, कालाडेरा,जयपुर राजस्थान। ***Email:*** *drjitendralodha@gmail.com*

** ***फूलचन्द महोलिया*** : व्याख्याता, अर्थशास्त्र संकाय, राजकीय स्नातकोत्तर महाविद्यालय, कालाडेरा, जयपुर राजस्थान।

HOW TO CONTRIBUTE RESEARCH ARTICLES & SUBSCRIBE

Researchers Organization Bilaspur, Chhattisgarh invites unpublished research articles in Education for publication in EDUSEARCH. Research Articles based on primary data shall be preferred.

You may send research articles in about 4000 words/8 printed pages (double space printing) including an abstract in about 150 words, either in Hindi or English. Every article should contain following essential elements-introduction, related study, research questions, objectives, hypotheses, methodology, sample, tools used, data analysis, findings, discussion and reference. Reference style to be used as -

Kapoor, J. N. (2003, May) : 'Raising the Standard of Ph. D. Programmes: Some Suggestions in Scientific Research in Indian Universities. New Delhi: AIU.

In order to save the environment and time, soft copy (CD) and e-mail service etc. are preferred.

Fonts to be used :

English- Times New Roman - size 12

Hindi - Krutidev 010 - size 14

e-mail : raobvramana@yahoo.com

: edusearch.jer@gmail.com

Please mention your e-mail id, Cell. No. and address on the top of the article.

Every article should bear with a certificate (signed hard copy) mentioning unpublished article for publication in EDUSEARCH along with membership/ subscription amount. Articles/Papers authored by two researchers, shall be treated as two individuals for the subscription point of view.

SUBSCRIPTION DETAILS

Category	Annual	For 3 Years	Life Membership	Advertisement Tariff
Individuals Rs.	800.00	2000.00	10000.00	Full Page Rs. 5000.00
Institutions Rs.	1000.00	2500.00	12000.00	Half Page Rs. 2500.00

SBI Bank Draft should be drawn in the name, Researchers Organization, Bilaspur (C.G) Payable at Bilaspur, (C.G.) along with subscription form may be sent to The Secretary, Flat H/2, Vaishali Nagar, Ward-13, Bilaspur. (C.G.) Pin. 495001.

Subscription may directly be deposited **SBI A/C No. 31577384568, Researchers Organization, Bilaspur.** (Intercity Collection Charges Rs. 50.00 must be added to the subscription).

Your response and valuable suggestions in this regard are highly solicited.

Address for communication

Dr. B.V.Ramana Rao,

Flat-H/2, Vaishali Nagar, Ward - 13

Bilaspur. Pin. 495001. Chhattisgarh

raobvramana@yahoo.com.

edusearch.jer@gmail.com

Published by Reseachers Organization, Bilaspur, (C.G.), Printed at Ankur Offset Printing Press, Brihaspati Bazar, Bilaspur. (C.G.)