INDEX

Elementary Education in Gujarat State

Prof. R. S. Patel

Director,

School of Psychology Education and Philosophy,

Gujarat University,

Navrangpura, Ahmedabad-9.

E-mail : rspatel918@yahoo.co.in

INTRODUCTION

Free and compulsory education to all children up to the age of fourteen is a Constitutional commitment in India. At the time of adoption of the Constitution in 1950, the aim was to achieve the goal of Universal Elementary Education (UEE) within the next ten years. Keeping in view the educational facilities available in the country, at that time, the goal was far too ambitious to be achieved within a short span of ten years. Hence, the target date has to be shifted a number of times.

Significant efforts have been made in the last fifty years to universalize elementary education. Since 1950, impressive progress has been made in all spheres of elementary education. The efforts have been made to increase the educational achievement level of children in Gujarat State since last ten years by state government and the Sarva Shiksha Abhiyan (SSA) mission under the impartment of quality education.

This paper will focus on all the recent innovative activities and initiatives in the field of primary education undertaken by the government of Gujarat for the development of the primary education. The present position of elementary education in Gujarat is very noticeable by the following innovative activities and initiatives which were taken by the Government of Gujarat.

1. **Gujarat Council of Elementary Education** (GCEE) is the state implementing agency for Sarva Shiksha Abhiyan Mission (SSAM) in all the 25 district and 4 Municipal Corporation in Gujarat. Under the umbrella of SSAM.

2. It is implementing National **Program for Education of Girls at Elementary level** (NEPEGEL) in 1105 clusters of 78 rural Educationally Backward Blocks (EBBs) and 39 cluster of 13 urban slums in 21 district (excluding Bharuch, Dang, Porbandar and Valsad) in the state.

3. It is also implementing Kasturba **Gandhi Balika Vidhyalay (KGBV)** Yojana, under which residential elementary school with boarding facilities are set up for girls belonging to the disadvantaged group of SC/ST/OBC/Minority and B.P.L. in difficult areas. Under KGBV, in 19 district of Gujarat, a total of 63 residential upper primary schools have been already opened, comprising 25 type A schools, 19 type B schools and 19 type C schools. In all these KGBV, total 4417 girls have been enrolled.

4. **Scheme of "Vidhyadeep" insurance:** The state government has introduced the scheme of **"Vidhyadeep"** insurance scheme to provide insurance coverage for accidental death of students studying in Primary schools vide resolution date 15/3/2002. Government has decided to provide insurance coverage under the scheme in accidental death except suicide or natural death. Death by any other means viz, earthquake, floods, cyclone, fire, poisonings, dog bite or any other beast or accidental death by any other means at any place during 24.hours of day Rs. 25000 to primary student is given as insurance is increase up to Rs.50000 from 1-4-08 aid. Approximately 85 lack students of primary schools/Ashram • schools are covered under the scheme Directorate of Insurance, Gandhinagar has been made and its premium Rs. 200 lack has been paid for elementary school children.

5. The scheme of **"Vidhyalaxmi Bond"** has been introduced to encourage the parents to send their girl child to school and provide education at least up to primary level. Under this scheme, the villages and cities here women literacy rate

is less than 35% are provided bond of Rs. 1000 at the time of admission in Std.1, receivable after completion of Std.Vll. This will lead to 100% enrolment and retention. During the year 2007-08, government has provided Rs. 1175.06 Lack to cover 147506 girl students. During the year 2008-09, government has planned Rs. 15060 lacks under the scheme expenditure incurred Rs.1450 lacks are also planned for 2009-10 under the scheme.

6. **Praveshotsav** programme was an effort to enroll the students in primary schools was arrange by every year in the month of June by the state government. Honorable Chief Minister, Education Minister and all Cabinet Ministers as well as State Minister were participate in all district of Gujarat State for the Praveshotsav Programme. All the Educational officers, local Grampanchayat Officers, TDO, DDO, Ass. Collector & Collector were also join in this programme. Each school of small village celebrate this Praveshotsav and encourage the parents to enroll their children who had completed five years . At the time of Praveshotsav School are decorated villages are decorated and a PRABHAT FERI was arrange to pick-up the enrolled the children from the village. All the children are the enter the school which pleasant, environment and each villagers participate in this programme. This programme has made a grand success in the enrollment ratio of primary school in. Gujarat State.

7. **Gunotsav 2009** Programme was an effort to enhance quality of education, to make teachers and people aware of quality education, to make education qualitative by using technology and to access infrastructural facilities provided to schools. Approximately 9000 primary schools were visited during 23, 24 and 25 November 2009 by all Ministers and High level officers of State Government.

8. **Supportive Schools:** Every year about 1 lacks families of salt-pan makers migrate for 6 to 8 month of a year to sea-shores and small desert of Kutch to reach their livelihood. State Government has implemented a new scheme to open supportive schools for 6 to 8 months of a year in radius of two kilometer nearby their residence for effort to enrolled 6 to 10 age-group children of salt-par makers. Children who have studied in such supportive schools are enrolled in their

respective village school when they return in their villages. 50 supportive schools were opened in the year 2006-07 and another 50 supportive schools were opened in the year 2007-08. Thus total 100 supportive schools are opened for children of salt-par makers.

9. **Seasonal Hostel:** As it is informed in above para, nearly 1 lacks families of salt-pan makers migrate for 6 to 8 month of a year to sea-shores and small desert of Kutch to reach their livelihood. Their 10 to 14 age-group children has to do without education for such long period. State government has implemented a new scheme in 2006-07 to open 50 Seasonal Hostel in such villages of affected persons, in which children of salt-par makers, sugarcane workers and other migrates can carry on their study by residing in these Seasonal Hostel in respective villages/groups. During the 2007-08 such another 50 new Seasonal Hostel have been opened. Thus children of such migrate people are benefited with total 100 Seasonal Hostels.

10. **Facilities Provide by State Government :** State Government has made special efforts for development of socio-economically backward 30 talukas. Government has provided educational facilities to all children of such backward 30 talukas villages 5774 schools have been opened. Facility of drinking water and mead day meal is provided in all these schools. Government has provided facility of latrines in 5417 schools, electrification in 5520 schools and compound wall in 3807 schools out of these 5774 schools.

11. **Drop-Out Ratio :** The dropout is one of the perennial problems inflicting at Elementary Education in all over India. Many children who enter schools are unable to complete even the primary level of education. Multiple factors are responsible for the children drop out of the school. The dropout rate of general category students was 25.1% in 2007-08 at primary level for India. The corresponding level for elementary level was 42.68% for India; As compare to other state the dropout ratio of the Gujarat State is significantly decreased by the good efforts of state Government. The following table shows the drop out ratio seven years of primary and upper primary levels.

Table- 1

Drop Out Rate in Primary Education of Gujarat State

Year	STD. I to V (Lower Primary)			STD. I to VII (Primary)		
	Boys	Girls	Total	Boys	Girls	Total
2003-04	17.79	17.84	17.83	36.59	31.49	33.73
2004-05	8.72	11.77	10.16	15.33	22.80	18.79
2005-06	4.53	5.79	5.13	9.97	14.02	11.82
2006-07	2.84	3.68	3.24	9.13	11.64	10.29
2007-08	2.77	3.25	2.98	8.81	11.08	9.87
2008-09	2.28	2.31	2.29	8.58	9.17	8.87
2009-10	2.18	2.23	2.20	8.33	8.97	8.66

The dropout rate for lower primary was decreased from 1783% in 2003-04 to 2.20% in 2009-10. The corresponding figure for primary classis is 33.73% for 2003-04 which decreased to around 8.66% for 2009-10.

The process of improving retention and decreasing drop-out rate from elementary level (Std. I-V) is encouraging. The dropout rate from elementary section decreased substantially from 35.40% in 1996-97 to 2.20% in 2009-10. Similarly the dropout rate for the std. I-VII has also decreased from 49.49% in 1996-97 to 8.66% in 2009-10. This is due to the significant efforts made by the state government by the different educational programme in Gujarat every year.

The reduction in dropout rate is quite significant at lower primary classis as well as primary classis. The issues of dropout is related to the quality in education and educational reforms at the schools as well as system level are significantly lower as compare to average dropout ratio in the total elementary education of India.

These are the results of good efforts made by the state government and implementation of SSA Project.

12. Educational Institutions in Gujarat State

Sr. No.	Item	2005-06	2006-07	2007-08	2008-09	2009-10
A	Total Institutions (Nos.)	39059	39064	41370	42035	42145
	Of which only girls	2575	2539	2539	2477	2334

The Educational Institutions in the Gujarat State in the primary level are significantly increased from 2005-06 to 2009-10 and growth of the increment of this year's 7.9%.

The number of the educational institution imparting in primary education in the state was 42035 in 2008-09 and 42145 in 2009-10. The numbers of the pupils enrolled in these schools were 85.72 lacks in 2008-09 and 86.01 lacks in 2009-10.

13. Enrolment of Students in Gujarat State.

Sr. No.	Item	2005-06	2006-07	2007-08	2008-09	2009-10
B	Total Students ('000)	8267	8276	8436	8572	86.01
	Of which girls	3592	3596	3912	3975	4046

The enrolment of the students in Gujarat State is gradually increase from 2005-06 to 2009-10 the growth rate of the increase of students is 4.4%.

14   **Enrolment of Teachers in Gujarat State.**

Sr. No.	Item	2005-06	2006-07	2007-08	2008-09	2009-10
C	Total Teachers (Nos.)	214877	221049	239073	242916	244331
	Out of which women	105408	118096	122404	123745	124426

The growth of the teachers in the primary schools was increase from 2005-06 to 2009-10 and the rate of increase is 13.70% of the teachers growth out of which 50% are the female teachers in primary education in Gujarat State.

15.   **Quality year:** The teacher self evaluation have-to utilize the receive training throughout the year to improvise, on the basis of his evaluation, the quality impartment in the educational achievement of the children after declaring the year 2009 as "Quality year".

16.   **Learning Enhancement Programme (LEP):** The Learning Enhancement Programme (LEP) has been implemented by GOl to improvise the educational quality of children and various educational facilities are also provided for students and teachers at the school level under this programme.

17.   **Girls Education:** The members of MTA, PTA,VEC were imparted with training of community mobilization to encourage girls educational under SSA and parents have been awakened thought at the Vidhyalaxmi Bond is given to the every girl child taking admission to the class-1, from a village having less than 35% of girl child literacy ratio to increase to stabilization ratio of the girls. A Qualitative improvement in the girl education rate is an outcome of the planning by the state Government.

18. **Teachers Training:** Every teacher from state has been imparted with a 20 days in-service teachers training under SSA. The objective of these training is to provide various methods, procedures and efforts with knowledge of new educational affairs to teacher as well as to practice such skills in the classroom teaching to make it more effective.

19. **In-Service Teacher Training:** The in-service training of Cluster Resource Group (CRG) experts were imparted though casket model to the teachers since last 3 years, mainly during summer vacation and before Diwali Vacation the subject were chosen for the training on the basis of hard sports decided by Gujarat Achievement Profile (GAP).

     Especially the training of specially included programmers in the SSA Project managerial subject were provided. At the end of the training-feedback from teachers-experts was taken and on their basis, necessary training strategies were improvised.

     The special types of 4 days training under the direct Guidance of 10,011 experts from the state, 1,94,000 teachers in more then 4000 classes from 3337 cluster across the state and the were awakened towards the teachers training. The feedback/responses received from all over the state revealed that the training in a distance-mod is very effective and result-oriented.

     The teacher from across the state was, very encouraged by receiving solution regarding their language confusions from the state experts directly.

     Normally, the teachers were given a 12 to 14 days of training before the summer vacation but in the current year, the teachers were imparted a training in two phases due to the parliamentary elections. The first phase held before four days of the summer vacation and in the second phase during 81h to 11th June Approximately 110,000 teachers from std. 1 to 4 given a training for the school readiness and activity based education. During 8th to 17th June, a training for 9 days to the teachers of std. 5 to 7 was held, where approx 84,000 teachers were provided a training of subjects like maths, science and English.

20. Mass Teachers Training and Feedback by BISAG Studio: A direct training was organized from a BISAG studio with the help of almost 50 expert from the state and 20,000 experts from cluster level, at more then 4000 training venues across the state and at covered 1,94,000 teachers. The proper guidance are solution was given by subject expert during training.

This was an innovative mass teachers training programme though distance mode, organized for the first time in the entire nation in Gujarat, which covers all the teachers across the state. To make this special programme more effective, it was started with a inspiring lecture of Hon'ble chief minister Shri Narendra Modi, on 8/06/09 at 11:00 am.

The Education minister Sh. Ramanbhai Vora and minister of state (Primary Education) Sh. Jaisinh Chauhan also deliver an inspirational -speech on the occasion.

The feedback/responses received during current year training programmes though fax/letter from all over the state, and during the 'on-air' tenure of the training are very encouraging. The teachers find it very effective and result oriented.

Sustained reforms are being made to fulfill the primary educational goal by the state government and the priorities are given to the primary education during last 10 years. This shows that the all innovative activities as discussed in Points 1 to 20 are shows the global picture of primary education in Gujarat State and this are call the reforms in the true sense for the betterment and quality improvement of primary education. Due to the qualitative efforts improve the facility of primary school for the children, -their by reducing gender gap in enrolments, retention and reduce dropout of primary school children and improving learning achievements.

This is evident for the number of the programmes and the schemes launched by Government of Gujarat to achieve the target of Universalisation of Elementary Education (UEE)

REFERENCES

Government of India. (1986). National Policy on Education, Ministry of Education, New Delhi. 1992: Programme of Action on the National Education Policy, Ministry of Human Resource Development, New Delhi.

Government of India (2005a). Report of the CABE Committee on Free and Compulsory Education Bill and Other Issues Related to Elementary Education, June 2005. Available at www.education.nic.

Government of India (2005b). Report of Committee on National Common Minimum Programmes Commitment of Six percent of GDP to Education, (Chairman: Prof. Tapas Majmudar) National Institute of Educational planning and Administration, New Delhi. Available at www.nuepa.org.

Government of India Selected educational statistics, for various years, Ministry of Human Resource Development, Department of Education, Planning Monitoring and Statistics division.

Govinda, R. and Biswal, K. (2007). Access to elementary education in India: Identifying Issues, Gaps and priorities, CREATE-NIJEPA, New Delhi, mimeo.

MHRD (2000). Sarva Shiksha Abhiyan A Programme for Universal Elementary Education; Framework for Implementation, Ministry of Human Resource Development, Government of India, New Delhi.

Annual Tables (2009). Elementary Education in Urban India. NUEPA, New Delhi.

Annual Tables (2009). Elementary Education in Rural India. NUEPA, New Delhi.

ICT Aided Pedagogy for Generating Scientific Knowledge

Dr. R. C. Patel
Associate Professor, CASE
The M.S. University of Baroda
Vadodara
Ramesh M
UGC Research Scholar, CASE

Abstract

Science is a process of searching knowledge in a systematic way. Scientific knowledge is tentative and can be verifiable. Science can teach the students to think in a clear and logical way. The objectives of teaching science especially in school is to construct scientific knowledge, attitude development, nurture the process skills, to study science education at higher level, and sensitise the pupil about application of science and technology. In this contemporary world computer technology penetrating in all fields, science teaching is no exception from that. Students and teachers have high expectation in using computers in their classroom because Information and communication Technology (ICT) make the learning easier, and versatile. ICT aided science teaching and learning can facilitate the teacher to teach the concepts and skills in a most meaningful way. National Knowledge Commission (2006-09) recommends that wherever feasible, ICT should be made more accessible to teachers, students and administration for learning. NCF (2005) also emphasised the use of ICT in teaching learning process. Hence there is a shift is needed from the conventional teaching to constructive learning. ICT aided pedagogy is one such a constructive approach for learning science among the school children, thus this paper focussing ICT based teaching learning for knowledge generation.

Key Words: ICT, scientific knowledge

Introduction

Education in India is provided by the public sector as well as the private sector, with control and funding coming from three levels: central, state and local. Education is a tool for acquiring knowledge and skills. Education has also been made free for children for 6 to 14 years of age or up to class VIII Under the Rights of the Children free and

compulsory Education Act 2009. Primary education is a stepping stone for every individual. In this age inculcation of scientific knowledge felt very essential therefore science introduced as one of the compulsory subjects in school education, Science is a way of knowing knowledge, Science is a systematic enterprise that builds and organizes knowledge in the form of testable explanations and predictions about the universe. Science Education helps the learner to develop scientific attitude, scientific temper, knowledge and application of science and technology, logical thinking, critical thinking and environmental values etc. Quality of Science education in the school can be significantly influenced by teacher and teaching learning process. Science teachers are the key role to strengthen the science education; teachers of science should change their pedagogical approach based on the content presented in the book needs and demands of the learners and should use various educational resources to facilitate the leaning process much easier and understandable. One such a resource is Information and Communication Technologies' (ICT), teachers of science need to upgrade professional competencies continuously, in specific the pedagogical process should be modernised by infusing technology. ICT enrolled into the instructional to strengthen the science education especially teaching learning process. Various committees and reports NPE (1986,) NCF (2005) recommend integrating ICT in pedagogic process in schools at all levels. ICT can facilitate the learning process interesting and enthusiastic, science teacher need to use ICT effectively in such a way that students gets motivated to learn and understand the concepts thoroughly and comprehensively, ICT integration in science teaching learning process can broadly described it can be used in laboratory experiment, data storing retrieving, spread sheet preparation, internet, PowerPoint presentation, word processing, virtual demonstration, simulation etc, Science Teachers should identify the ICT components and it can be used effectively in teaching learning process in a contextual manner. This conceptual paper emerges to sensitise the teachers to use ICT in pedagogical process for the school's students.

Meaning of Information and Communication Technology (ICT)

The term ICT embraces a range of technologies broadly concerned with information and communication. The popular idea of ICT hardware in the classroom or computer suite includes one or more multimedia desktop computers or laptops and a combination of the

following: digital camera, printer, scanner, CD writer, data projector, interactive whiteboard, robot and, data loggers and perhaps a digital microscope.

Importance of ICT in Science Education

Scientific knowledge is tentative and based on empirical evidence, socially and culturally embedded, it is also based on observations that may leads to formulate laws and theories. Science helps the leaner to understand the world around them, children in school tends to perform experiment and construct scientific knowledge and skills; science teachers are should be very committed and have more responsibility towards learner and teaching process, learners are heterogeneous and teaching is in a diversity manner. Learning takes place when the learners are actively involved in the process of learning and teachers have prime role to facilitate the learner in different learning situation where students construct scientific concepts and skills through direct experiences. The teacher plays a crucial role in creating the conditions conducive for learning through selecting and evaluating appropriate technological resources and designing, structuring, sequencing, supporting and monitoring learning activities using ICT (Scrimshaw 1993; Selinger 2001). Teachers should possess enough skills and competencies to integrate ICT in classroom teaching. It is well known that teaching science through ICT can make the learning process more effective and students' get motivate intrinsically to learn and understand scientific concepts in a comprehensive manner. It is important that the teachers needs to aware and familiarise about ICT Integration in teaching learning process but in realities most of schools the computer facility is not satisfactory level and many of the teachers do not have adequate computer knowledge and techno pedagogic skills. Considering this NCERT provide training/ orientation programme for teacher in all the states to familiarise ICT skills and ICT based learning materials for the classroom. Recent document NCF (2005) and UNSECO (2002) recommend that ICT should be integrate into the pedagogical process. Teacher needs to understand the maximum utility of ICT in science teaching learning process. Teachers are currently working to integrate ICT in science teaching but it should be expands both institutional and procedural level for better science education.

Integration of ICT in Teaching Learning Process

In the 1990s the use of ICT was increasingly analysed from a pedagogical point of view

and ICT use was typically divided into IT assisted learning, tool applications, and computer science (Moursund & Bielefedt, 1990). ICT can be used in different ways in science teaching, some of them are given below.

➢ A teacher can use PowerPoint presentation or a whiteboard and explains scientific concepts for thorough understanding of scientific knowledge.

➢ Student can use computer assisted instruction for their learning.

➢ Student can use computer assisted inquiry in the use of ICT as an aid in collecting information and data from various sources to support scientific reasoning such as by employing internet make students to access meaningful information, example electronic book, hypertext and hypermedia.

➢ Student can use internet to access various information through electronic mail, newsgroups, chat rooms, blogs, wiki, and videoconferencing used to share the information on science.

➢ A microphone, digital camera, web cam, computer controlled microscope, video camera, scanner and printer also can be used to record data, to modify data, to retrieve data and to save the data for future use.

➢ Under the assistance of science teacher, students can use interactive whiteboards (White board, smart board) white boards operate analogously to chalkboards in that they allow markings to temporarily adhere to the surface of the board.

➢ Touch sensitive displays connects computer and digital projector and computer application can be controlled directly from the display, students write notes in digital ink and save work to share later.

➢ During the science practical micro computer based laboratory is a combination of the hardware and software that are used for collecting data using sensor/ probes (Example: temperature of pH sensors) connected to a microcomputer through an interface.

➢ CAI is any interaction between a student and a computer system designed to help the students to learn. CAI includes drills, tutorials, simulation including applets in the internet and virtual reality environment.

➢ Spreadsheets enable complex calculations to be carried out quickly and accurately, Student can test a range of predictions and can explore possible relationships

between variables, and derive inference based on the relevant data. Students can store data in the spread sheet and it can be represent by graphs so that one can compare, analyse, differentiate etc and able to infer.

➢ Some of the CDs are designed to be enormous information storage and retrieval systems, Other CDs are designed to simulate experiments and explain key scientific concepts, such type of CDs used for various purposes related to science knowledge construction.

➢ Certain experiments are very hazardous, not readily accessible or take a long time or expensive equipment in that situation teacher can use simulation or the virtual experiment for clarifying the concept.

➢ Teacher and students can use Search engines such as Yahoo, Google, AltaVista and Ask Jives to retrieve information related to science.

➢ Molecular modelling and chemical structure, diagrams etc can be explained thoroughly by the teacher with the help of projector.

➢ Simulations of experiments – often ones which are difficult to carry out in the laboratory, or unable to demonstrate at all in such cases computer simulations help the teachers to explain the concept.

➢ Impressive technologies have been developed such as three dimensional visualisation features, it can be used in science teaching and learning.

➢ There are many other excellent examples of freeware available from the internet that will support and enrich science teaching. There are for example, many versions of the periodic table.

➢ Science teachers place information on their institution web site it is support material for students to retrieve anytime vary quickly, also students create assignments, projects, observation etc that can be published and show cased.

➢ E-mail can be used for the exchange of information such as experimental data, presentations and assessments between teachers and students within a school or outside the school.

➢ Discussion and data sharing can be possible between teachers and students in different places using video conferencing.

➢ Camcorders can be used by one group of students during a class practical to record their experiment.

➢ During science practical the camera can be fixed on a tripod stand, so that experiment can be recorded and it can be used later also.

➢ The electronic microscope can be used to observe very minute picture, diagram for observation and the same images can store and display on the computer. The image tends to be of a higher resolution than that viewed with a flexible neck video camera, and the on-screen measuring facility also is useful.

Advantages of ICT Aided Teaching

ICT has an important part to play in enriching science education (Heppell, 2001; Walton 2000) since it can be used as instructional and supportive tool in science teaching and learning (marsh, 1994). Teaching with the help of ICT has more advantages for the school students learning, some of the advantages given below

➢ Students may physically and cognitively engage in learning process, they show interest and they can pay longer attention span and students able to retain for long time.

➢ Huge range of resources related to science made accessible for everyone, such learning materials effectively used in the pedagogic process, it can help the learner to understand complex or abstract concepts into much easier.

➢ ICT widens the range of material that can be used in teaching and learning to include text, still and moving images and sound all can be used for whole class and individual learning.

➢ ICT allows the learner to learn according to their learning style.

➢ ICT facilitate the learner to learn not only in the classroom but students can learn outside the classroom using CD, internet etc.

➢ Students get opportunity to work independently and collaborately.

➢ Students develop conceptual, procedural, technical knowledge of science.

Conclusion

In this 21st century knowledge of ICT is very essential among school students. They are future citizens and every individual have a responsible to build the nations strong socially

culturally technologically, scientifically and economically. Teachers are in a position to raise the quality of school education in general and in specifically science teachers are the responsible persons to raise standard of science education. Teaching is one of the main aspects to improve the quality of science education. Shift is compulsorily required from conventional method of teaching to constructive way of learning. ICT is one of the constructivist approaches for knowledge construction therefore Science teachers integrate ICT optimally during the teaching learning process so that learners become more active and get interesting.

Bibliography

Chrisostomou and Savvidou (   ) ICT in science teaching investigating the spreadsheetsintegration into science teaching to promote both curriculum aims and science skills via ICT strands.

Future lab (2003) Literature reviews in science education and role of ICT: Promise, problems and future directions, Bristol, United Kingdom.www.futurelab.org.uk.

Government of India (1986), "National policy of education", New Delhi: Ministry of Human Resources and Development.

Kalra.R.M(2007) Teaching of science for primary and secondary pre and in service Teacher. New Delhi: Shipra Publication.

Marsh, E.G. (1994) computers: literacy and learning. A primer for Administrator, the Practising Administrator,s Leadership series. UK Roadmaps to success.

National Curriculum Framework for School Education (2005), NCERT. Government of India

National Knowledge Commission(2006-09) Report to the Nation, Published by National Knowledge Commission, Government of India. New Delhi.

National Research Council. (1996). *National science education standards.* National Committee on Science Education Standards and Assessment. Washington, D.C.: National Academy Press.

Peter Demkanin et al(2005) effective use of ICT in Science education, published by Bob kibble, school of education, University of Edinburgh.

University of York Science Education Group(2002) ICT in Support of science education: Published by York publishing services, York. www.yps-pulishing.co.uk

UNESCO (2002) Information and communication Technologies in teacher eduation. Dision of higher education: UNESCO.

Walton,R.(2000) Heidegger in the Hands on science and technology centre: Philosophical reflections on learning in informal settings. Journal of technology Education, 12,1.

WOMEN EMPOWERMENT AND GANDHI

Dr. Hiralkumar M. Barot

Assistant Professor,

Dabhoi College Of Education

Gujarat

Introduction

Both men and women are of equal rank, but they are not identical. They are peerless pair, being supplementary to one another, each helping the other so that without the one the existence of the other cannot be conceived. The concept of self is the most important factor affecting the behaviour of women. Self-realization of the potential of women was severely restricted in the pre-independence period due to various socio-cultural conditions and conditioning**.**

To become Self reliant in different areas

There was an urgent need to make special efforts to enable women to become self-reliant, by positive and active interventions in the direction of confidence building in the cognitive, psychological, economic and political areas. woman is the companion of man, gifted with equal mental capacities. She has the right to participate to the very minutest detail in the activities of man and she has an equal right of freedom and liberty with him. She is entitled to a supreme place in her own sphere of activity as a man is in his.

To bring change in attitude

This ought to be a natural condition of things and not as a result only of learning to read and write. Just by the sheer force of a vicious custom, even the most ignorant and worthless men have been enjoying his superiority over women, which they do not deserve and ought not leave. Men have to be teachers to their wives, and that not merely to make them literate, gradually, it should be possible to introduce women to the subjects

of politics and social reform. The men in such a case will have to change their attitude towards their wives.

Status of Women in Pre Independence India

To understand in depth the role that Gandhi played in improving the position of women in society, it is essential to look at women's status, prevalent at that time. When Gandhi emerged on to the political scenario, social evils like child marriage and dowry system were rampant. Indian women had an average life span of only twenty seven years.

 Death of women in labor was a common phenomenon. The percentage of women with basic education was as low as two percent. The patriarchal nature of the society confined women to the status of an inferior sex subordinate to their male counterparts. The purdah system was in full vogue in Northern India. Unless accompanied by their male guardians, the women were not permitted to venture out on their own. Only a handful few could avail of education and attend schools. It was in such a dismal milieu that Gandhi took the responsibility of shouldering a social crusade that led to a major reorientation of the common notion of women in the Indian society.

Gandhi's Voice Against the Social Evils

According to the Mahatma, social reforms were essential for the restructuring of the societal values that had so far dominated the perception of Indian women. Although, he had great reverence for the traditions of the country, he also realized that certain customs and traditions of the Indian society were antithetical to the spirit of development of the women of the nation.

To quote Gandhi, "It is good to swim in the waters of tradition, but to sink in them is suicide".

The custom of child marriage became a target of his criticisms. In his opinion, child marriage is a source of physical degeneration as much as a moral evil. The system of dowry could not pass unnoticed from his critical eyes.

He was also against dowry marriages as 'heartless'. He opined that girls should never marry men who demand dowry, at the cost of their self respect and dignity. As Gandhi believed that the basis of marriage is mutual love and respect, he urged people to solemnize inter communal marriages between the Harijans and caste Hindus. Gandhi was extremely perturbed by the plight of the widows, particularly child widows.

Believe in practical life

He put forth an earnest appeal to the young generation of the country to marry the widows. He was also quite hopeful about the immense potentials of the widows in furthering national issues. The system of purdah also came under Gandhi's attacks and he questioned the very foundation of this practice. For him, the purdah system was no less than a "vicious, brutal and barbarous" practice. The predicaments of the devadasis, a part of the lower, untouchable segment of the society, had an indelible effect on the sensitive mind of the Mahatma. The pathetic conditions of the child prostitutes disturbed him immensely. He left no stone unturned for rehabilitating this segment of the society, as for him guarding the honor of women was no less than protecting cows. According to Gandhi, one of the first tasks that need to be accomplished as soon as the country won freedom was to abolish the system of devzdasis or temple women and brothels.

Gandhi's new Perception of Women; women can never be considered to be the weaker sex.

There was a marked departure of Gandhi's perception of women from that of other reformers. The stance taken by other social reformers and leaders, prior to Gandhi created a helpless image of the Indian women. With the emergence of Gandhi, a new conception of women gradually gained currency. For Gandhi, women were not mere toys in the hands of men, neither their competitors. Men and women are essentially endowed with the same spirit and therefore have similar problems. Women are at par with men, one complementing the other. According to Gandhi, education for women was the need of the time that would ensure their moral development and make them capable of occupying the same platform as that of men. In Gandhi's views, women can never be considered to be the weaker sex. In fact, women for Gandhi were embodiments of virtues like knowledge,

humility, tolerance, sacrifice and faith. These qualities were essential prerequisites for imbibing the virtue of satyagraha. The capability of enduring endless suffering can be witnessed only in the women, according to the Mahatma. The doctrine of ahimsa as preached by Gandhi incorporates the virtue of suffering as is evident in the women. Therefore, Gandhi envisaged a critical role for women in establishing non-violence. Gandhi invoked the instances of ancient role models who were epitomes of Indian womanhood, like Draupadi, Savitri, Sita and Damayanti, to show that Indian women could never be feeble. Women have equal mental abilities as that of men an an equal right to freedom. To sum up in Gandhi's words; "The wife is not the husband's slave but his companion and his help-mate and an equal partner in all his joys and sorrows - as free as the husband to choose her own path."

Role of Women as Envisaged by Gandhi

According to Gandhi, the role of women in the political, economic and social emancipation of the country was of overriding importance. Gandhi had immense faith in the capability of women to carry on a non violent crusade. Under his guidance and leadership, women shouldered critical responsibilities in India's struggle for freedom. Women held public meetings, organized picketing of shops selling foreign alcohol and articles, sold Khadi and actively participated in National Movements. They bravely faced the baton of the police and even went behind the bars. Gandhi's urge to women to join India's struggle for independence was instrumental in transforming the outlook of women. Swaraj uprooted age old taboos and restrictive customs. Through their participation in Indian struggle for freedom, women of India broke down the shackles of oppression that had relegated them to a secondary position from time immemorial.

As far as the economic emancipation of women was concerned, Gandhi felt that men and women had different spheres of work. In his opinion, women could take to economic activities to supplement the income of her families like spinning, which he believed to be a good option available to the women. In the social realm, Gandhi envisaged a critical role for women in doing away with the forces of communalism, caste system and untouchability.

so it is easy to say that Mahatma Gandhi was indeed one of the greatest advocates of women's liberty and all throughout his life toiled relentlessly to improve the status of women in his country. His faith in their immense capabilities found expression in his decisions to bestow leadership to them in various nationalistic endeavors.

Gandhi's role will remain unchallenged.

THE milestone of the 50th year of Republic urges India to examine its problem, progress and paradoxes. Mahatma Gandhi's vision of Swaraj in all its facets and from different perspectives has permeated the discourse on India's contemporary history. Gandhi's role will remain unchallenged. All over the world the imprint of his moral philosophy as a workable political ideology has been particularly indelible. Yet Mahatma Gandhi's positions on social, political and economic matters are transparently evolutionary, a continuing examination of reality, the human condition and truth. Gandhi's attitudes towards women were as much shaped by his innate sense of comparison and justice as they were by the patriarchal albeit benevolent conservatism that was the sheet anchor of his cultural and social discourse. The contradiction between his liberal feminist pronouncements, his egalitarian, loving and respectful concern for women, his belief in their role in politics and in society are sometimes difficult to reconcile. Yet Gandhi, more than anyone else, struggled with these paradoxes in the existing social milieu. Comparing his vision of women with the current status of women and the ongoing struggle for women's empowerment will provide a measure of what has been achieved.

To build a wholly new society

While adopting a high moral and often conservative position Gandhi could the next moment seemingly abandon if for a more fruitful and dynamic postulation that brings him to the forefront of extreme liberalism. Typically, Gandhi was able to step out of his traditional attitudes through the medium of education. When asked to write a primer for school children by Kakasaheb Kalelkar, Gandhi did it in the form of a mother teaching her child in which she explains to her son that housework was good for both mind and body and helped in character building. "Men and women need to be

educated equally in housework because the home belongs to both", he wrote. This was part of his efforts to build a wholly new society, without which he believed it was not possible to make an appreciable difference to improve the lot of mankind with the cultural discourse of society as it was, and he never shied from providing direct and practical methodologies to achieve his goals. From feminist ideas in a text book to spinning the charkha for swaraj he always came up with a constructive proposal to bring women out of their traditional mental fetters and into a better more dignified life.

Today face of woman

Today's liberated woman would find his position almost totally unacceptable. They would argue that while women's special calling may be child nurturing, peace loving and preservationist they are capable of performing all tasks hitherto left to men.

But Gandhi revealed a deep understanding of the pulse of society, and reflected its rhythm. He offered spinning and the salt agitation as nonviolent ways for women to join the political movement for swaraj. He saw it as right as well as possible for women at that time in history. By 1940, he had provided modifications to his earlier more generalized approach to women's contribution to public life. In an issue of the Harijan of that year there are questions about the rising participation of women in activities outside the home:

Despite a change in attitude he seems to have the middle class woman rather than the poor one in mind, and adheres to the position that a woman should be able to order her household duties in such a manner as to complete them and yet have enough time for public work were she to abjure vanities. The onus is still on the woman. However Gandhi was always willing to modify his own stated positions. He simply resolved his contradictions by responding instinctively and practically to a situation as he saw it. For instance, in the second set of questions and answers he tackles the male offenders thus:

Liberation of woman as Gandhi saw it, was linked to a deep-seated malaise. Dr. S. Muthulakshmi Reddy wrote a long letter to Mahatma Gandhi as far back as 1929, in which she raised some fundamental issues concerning social reform. She also questioned him as to why the Congress, which was fighting for the freedom of every

nation and the individual should not first liberate their women from the evil customs and conventions that restricted their healthy all-round growth. She considered it a specific instance of social tyranny. Indian women, with a few exceptions, have lost the spirit of strength and courage, the power of independent thinking and initiative which actuated the women of ancient India, such as **Maitreyi, Gargi, Savitri** and even today activate a large number of our own women belonging to the liberal creeds like the **Brahmo Samaj, Arya Samaj,** Theosophy, which is only Hinduism freed of all its meaningless customs, rites and rituals? Although Gandhi agreed with her in a rather perfunctory way, he was not prepared to tackle the issues of social and religious customs so directly at that point of time and centred his response thus, "Men are undoubtedly to blame for their neglect, nay their ill use of women, and they have to do adequate penance, but those women who have shed superstition and have become conscious of the wrong have to do the constructive work of reform. Liberation of India, removal of untouchability, amelioration of the economic condition of the masses and the like, resolve themselves by penetration into the villages, reconstruction or rather reformation of the village life." To achieve one's goal of liberation from the various shackles of society he believed that had to work for total change starting in the villages.

Advocate of women

The late Kamaladevi Chattopadhyay, a well known freedom fighter, political and social activist, an effective constructive worker, and motivator of India's cultural renaissance asserted that while the progressive status of women in the freedom movement was amply propelled by male social reformers and Gandhi, it was actually the advocacy of women which influenced many male leaders including Gandhi.

In 1983 the women's movement in India in its currently known phase, was just beginning to mobilize itself. Kamaladevi was witness to and part of valiant efforts by women to "not only push forward their own progress but act as levers to help other oppressed sections, while facing fierce hostility....there were no grants to feed such activities; no awards, titles, national recognition, no press publicity instead a lot of

abuse." She defines women's actions of that time to be for equal rights which could not be described as feminist. "

Women's problems were never sought to be treated on a sex basis but as social maladies of a common society, men and alike. What is indeed significant is the danger signals she saw at this time. "Habit, complacency and consequent lack of vigilance which fast undermined women and eventually deprived them of whatever gain they have been able to secure over the years. There are numerous subtle ways of ignoring women and abridging their rights.. Kamaladevi's concerns for the gains achieved during the freedom movement were well founded if we view the almost regressive situation in rural and urban society with increasing violence against women, and the decreasing number of women in the population ratio.

Believe in styagraha

Modern technology, consumerism and lack of effective instruments have allowed, women no real progress even while allowing greater mobility and visibility to women from the middle and elite classes. Visibility alone is not empowerment in the real sense.

Mahatma Gandhi believed that satyagraha was the most powerful weapon in a nonviolent struggle. Satyagraha involves defiance. It involves the willful, peaceful, breaking of laws that are unjust. It means picketing, protesting, squatting, obstructing, challenging and publicly resisting wrongs. Since women were the most nonviolent and ardent lovers of peace, it could be sharpened and extended as a weapon in women's struggles for justice and equality. To him the ultimate ahimsa and satyagraha was when women, in vast numbers, rose up to put an end to the destructive aspects of male dominance in society. Had the momentum of freedom struggle not been slowed down, such mobilization could have attracted many more women into public life. Political activity geared towards the transformation of society into the holistic, integrated entity as Gandhi had visualized has not yet crystallized. Satyagraha is now just a word, a mere symbol, that serves no purpose for the academic or the elite, or even the middle class feminist whose dialectic emerges from a theoretical background far removed from Gandhi's poor women who act because they have no use for words to explain

themselves. Among those women who today have made satyagraha a mode of struggle for a better world are the meira peibi of Manipur who stand in clusters on the roadside outside their village with flaming torches to protest against men who indulge in drugs and alcohol which are jointly ruining the youth of north-eastern India. These women also raise their voices against the excesses the security forces and form a protective shield around their villages against them. They do not quote Gandhi nor term their struggle as satyagraha but their steadfast, powerful and peaceful picketing has all the elements of struggle in the manner, Gandhi himself would have wished.

Women who became part of the power structure

Somewhere along the way, however, the issues close to Gandhi's heart have been largely left by the wayside by women who became part of the power structure as well as by the emancipated women's groups. Organizations involved in trade union work, social reform and development issues have in part or in whole addressed the issue of prohibition, but neither have women as a group in parliament nor through institutional structures raised this demand loudly and effectively. Prohibition is not accepted when it is presented as a moral issue alone and therefore the argument has to include developmental priorities, revenue collection, and budgetary allocations to social welfare, health and other sectors which rural women are unable to do.

Role of organizations

Many institutions and organizations representing women's rights have a high visibility in the cosmopolitan arena and have effectively expressed their concerns. Not only that, their members have decisively moved far ahead of Gandhi's vision of fearless women. Alert, active and bold, they engage in constant discussion and introspection for genuine equality.

While all women's agendas prescribe peace and nonviolence, the feminisation of the military and police and, the expanding membership of women in militant groups that do not abjure the use of arms are all a sad cry away from what Gandhi viewed to be a woman's special role.

While middle class women were visibly active side by side with Mahatma Gandhi, wearing khadi, going to jail, organising resistance on the British in some creative and selfless way, the socially conscious middle class woman of today has largely shunned direct political activity, preferring to seek more secure ground in funded social work through voluntary organisations. A growing number of emancipated, educated, young women are being diverted by market oriented consumerism in the name of modernity and liberation.

Compared to the momentous work of stalwarts like Sarojini Naidu, Rajkumari Amrit Kaur, Dr Muthulakshi Reddy, Lakshmi N. Menon and Annie Besant and organisations like the All India Women's conference, the Arya Samaj and many others during Mahatma Gandhi's time, the collective or individual work of women in the political arena in the post independence era has been unremarkable. This clearly does not take into account the phenomenon of an Indira Gandhi or the many successful efforts of various women's organisations in bringing about legislation to improve the status of women. Self Employed Women's Association of Ahmedabad is a fine example of Gandhi's ideas put into practice but it lacks of political power to influence change in the society around it. The fact that women have never held more than 10 percent of the seats in parliament or jobs in the decision making levels of the administration shows that there is a long way to go before gender parity is achieved.

Conclusion

India is far ahead in policies and legislation favouring women. It adopted universal franchise before many other nations. Yet men in the political structure refuse to acknowledge the relationships between social justice and gender justice while women outside the political system are unable to effectively implement and integrate these two most powerful national and international agendas. The increasing criminalization of politics and the use of vast sums of unaccounted money and ugly muscle power by caste and criminal gangs present an entire hostile environment for women who wish to pursue a political vocation. With both caste and gender groups perpetuating traditional and modern divisions and indigenous human resources being replaced by western technologies the mission of Gandhi and the dreams of women are yet to be fulfilled.

References:

Brown, Judith M. "Gandhi, Mohandas Karamchand [Mahatma Gandhi] (1869–1948)",
Oxford Dictionary of National Biography, Oxford University.

Brown, Judith M. (25 October 1974).. Retrieved 25 February 2012.

Chadha, Yogesh (1997). *Gandhi: a life* (Illustrated, reprint ed.). John Wiley. ISBN 978-0-471-24378-6.

Harold G. Coward (2003). *Indian critiques of Gandhi*. SUNY Press. ISBN 978-0-7914-5910-2.

Desai, Mahadev Haribhai (1930). "Preface". *Day-to-day with Gandhi: secretary's diary*. Hemantkumar Nilkanth (translation).

Easwaran, Eknath (1 August 1997). *Gandhi, the man: the story of his transformation*.

Fischer, Louis (4 August 1997). *The life of Mahatma Gandhi*. HarperCollins.

Gandhi, Rajmohan (2006). *Gandhi: the man, his people, and the empire*.

Gangrade, K.D. (1 January 2004). "Role of Shanti Sainiks in the Global Race for Armaments". *Moral Lessons From Gandhi S Autobiography And Other Essays.*

Hardiman, David (2003). *Gandhi in his time and ours: the global legacy of his ideas*. C. Hurst & Co.. ISBN 978-1-85065-711-8. http://books.google.com/books?id=UWYV5qYZ3-oC. Retrieved 8 February 2012.

Hatt, Christine (12 April 2002). *Mahatma Gandhi*. Evans Brothers. ISBN 978-0-237-52308-4. http://books.google.com/books?id=f6vvy-J7vhcC. Retrieved 26 February 2012.

Herman, Arthur (2008). *Gandhi and Churchill: the epic rivalry that destroyed an empire and forged our age*. Random House Digital, Inc.. ISBN 978-0-553-80463-8. http://books. google.com/books?id=tquxD6dk914C. Retrieved 11 February 2012.

Jai, Janak Raj (1996). *Commissions and Omissions by Indian Prime Ministers: 1947-1980*. Regency Publications. ISBN 978-81-86030-23-3. http://books.google.com/books?id =5Wrc1K0uJTgC. Retrieved 26 February 2012.

Jones, Constance; Ryan, James D. (28 February 2007). *Encyclopedia of Hinduism*. Infobase Publishing. p. 160. ISBN 978-0-8160-5458-9. http://books.google.com /books?id=hZET2 sSUVsgC. Retrieved 13 January 2012.

Kumar, Shanti (2006). *Gandhi meets primetime: globalization and nationalism in Indian television*. University of Illinois Press. p. 170. ISBN 978-0-252-07244-4. http:// books. google.com/books?id=abPsWgqrmMMC&pg=PA170. Retrieved 14 January 2012.

Miller, Jake C. (2002). *Prophets of a just society*. Nova.

Tendulkar, D. G. (1951). Delhi: Ministry of Information and Broadcasting, Government of India.

Thacker, Dhirubhai (1 January 2006). ""Gandhi, Mohandas Karamchand" (entry)". In Amaresh Datta. *The Encyclopaedia of Indian Literature* .

Todd, Anne M. (2004). *Mohandas Gandhi*. Infobase

A STUDY OF ENVIRONMENTAL AWARENESS AND ECOLOGICAL BEHAVIOUR AMONG FEMALE STUDENT TEACHER IN B.Ed. COURSE

Dr. Jayanta Mete

Department of Education, Faculty of Education,

University of Kalyani, Kalyani, Nadia-741235,

West Bengal,

E-mail : jayanta_135@yahoo.co.in

Introduction :

Today the environment degradation is a matter of agent concern before human society. Both developing as well as developed countries are facing severe environmental problems. In the developmental process man has been ruthlessly extracting natural resources and polluting natural environment. Various environmental problems pose a threat to environmental sustainability, among which the increasing level of wastes and air pollution, destruction of ozone hole, acid rain global warming etc. are same of the common issues. The earth is fast losing its treasure (Baliga, 1996). General plant and animal species have already abolished from the earth & many more are of in one verge of extinction. Forests are gradually decreasing an alarming rate, land masses are getting crowded and the climate change in different parts of the world is mainly due to global warming. The recent sunami bears testimony to it. (Chidambaram, 2005, Swaminatnam, 2005). Over the last five decades the delicate ecosystem of our planet is facing the danger of destruction of natural environment due to intervention of human beings. Many of these problems are rooted in human behaviour (Du Nann; Winter koger, 2004 ; Gardner & Stern, 2002, Vleg & Stck 2007).

Related Literature :

Duroy, Q. M. (2008) revealed that economic affluence has at least a marginal direct influence on environment awareness and no indirect effect an environmental behaviour.

Yenice, N. Seda, A, Saracaloglu & Karacaoglu, C. (2008) observed that environmental sensibilities of the classroom Teacher Programme students shows discrepancies with

regard to their follow up status for the programme and articles about environment an media.

Mostata M.M. (2007) investigates the influence of theme cognitive & attitudinal factors an gender differences in green purchase behaviour then study found that men shows more environmental concern and more positive outlook towards green purchased compared with woman.

Budak, D.B. Budak, F. Zaimoglu, Z, Kesec S., I Sucu M. Y. (2005) found that rural students were more concerned about environmental issues than urban ones while male students were more reluctant to environmental issues than female students.

Erdogen. M, Ozsoy. A.M. (2004) indicates that almost all the participants i.e. graduate students agreed that human beings were not adequately aware of the environment have been using environment resources by only considering this own needs.

Eama (2003) revealed that the environment attitudes of the students differed regarding their gender, the programmes they were enrolled, their living styles and settlement types, fathers education & occupation and their family in one, however did not noticeable change in accordance with their clauses and geographical region any lived.

Statement of the problem :

The main objective of this investigation was to find out the relationship among the different variables like environmental awareness ecological behaviour.

An attempt has been made in the present investigation into "A study of environmental awareness and ecological behaviour among female student of B.Ed. Course."

Significance of the Study:

Student teachers of today especially women are much more concerned with helping the students to from right knowledge about the knowledge. Very often large majority of students teachers frankly confess that they do not know how to behave ecologically this study on attempt has been mode to measure the environmental awareness and ecological behaviour of females student of B.Ed. course.

In every society at any place, at any time and at any stage of cultural social or religious development, there is reasonably some average percentage of good female student teachers who possessors relatively good concern about the environment. The question is whatever a high environmental awareness student teacher behave ecologically or not ? It is hoped that the findings of this study would have some values to the student in general and their teachers in particular.

Variable:

In this study pro social behaviour and ecological behaviour is the dependent variable and environmental awareness is independent variable.

Tools :

The following tools were used to collect data from the field investigation.

a)   General information scheduled.

b)   Environmental awareness scale.

c)   General Ecological behaviour scale.

Sample :

In the present study incidental sampling technique was deployed to collect the data from 200 female B.Ed student studying and semi urban areas of Nadia and North 24 Parganas in West Bengal.

Objective of the study :

The following objectives were laid down for the study :

1)   To study the relationship between ecological behaviour and female B.Ed students in terms of (i) medium of instruction, (ii) status and (iii) place of residence.

2)   To study the relation between ecological behaviour and medium of instruction of female B.Ed students.

3)   To study the relation between ecological behaviour and status of female B.Ed students.

4) To study the relationship between ecological behaviour and residence of female B.Ed students.

5) To study the relationship between pro-social behavior and ecological behaviour among female B.Ed students.

Hypothesis:

The following null hypothesis were formulated for the study.

H_{O1} – There is no significant difference between the level of environmental awareness of English medium & Bengali medium B.Ed students.

H_{O2} – There is no significant difference between environmental awareness of B.Ed student residing in urban and semi urban rural areas.

H_{O3} – There is no significant difference between the level of environmental awareness and status of B.Ed female students.

H_{O4} – There is no significant difference between the land of ecological behaviour of English and Bengali medium B.Ed female student.

H_{O5} – There is significant difference between ecological behaviour and female B.Ed student residing in urban or semi urban rural areas.

H_{O6} – There is significant difference between ecological behaviour of B.Ed students with regard to their status.

H_{O7} – There is a positive correlation between environmental awareness and ecological behaviour of female B.Ed student.

H_{O8} – This is a positive correlation between pro-social behaviour and ecological behaviours of B.Ed student.

Statistical Technique :

The following statistical techniques were used in the study :

One way Anova and co-efficient of correlation.

Result and Discussion

Hypothesis – No. 1. There is no significant difference between the level of environmental awareness of English medium and Bengali medium students.

Table: 1. Environmental awareness score of B.Ed students according to medium of instruction.

Variables	Sub-variables	Source of Variation	Source of Squares	Df	Mean	F	.0
Medium of Instruction	1) English 2) Bengali	Between groups within groups Total	353.780 4116.300 4470.08	1 198 199	353.780 20.789	17.97	.000

The table no.- 1 shows that the obtained f-value is significant at 0.01 level it is thus interpreted that English medium B.Ed students (M – 54.47) differ significantly from Bengali medium students (M-51.81) in the criterion of environmental awareness. So the hypotheses Ho1 is thus rejected.

Hypotheses Ho2 – There is significant difference between environmental awareness of B.Ed students residing in urban & rural areas.

Table No.- 2 – Environmental awareness score of B.Ed students in according to place of residence.

Variables	Sub-variables	Source of Variation	Source of Squares	Df	Mean	F	.0
Place of residence	Urban Rural	Between within Total	87.120 4382.960 4470.080	1 4382.960 4470.080	87.120 22.136	3.936	.049

Table – 2 shows that urban B.Ed students difference significantly from rural area B.Ed students on the criterion of environmental awareness (f = 3.936, P< 0.05).

Thus the hypothenses Ho_2 in rejected. The urban B.Ed students (M – 53.50) are more aware of environmental issues than these of residing in rural areas (M – 52.48).

Hypothesis No.- Ho_3 – There is no significant difference between the level of environmental awareness and status of B.Ed students.

Table – 3. Environmental awareness score of B.Ed. students regarding their status.

Variables	Sub-variables	Source of Variation	Source of Squares	Df	Mean	F	.0
Status of students	Fresher Deputed	Between Within Total	19.220 4450.960 4470.080	1 198 199	19.220 22.479	0.855	.356

Table – 3. Shows that the obtained f-value is not significant. It is thus interpreted that the status of B.Ed students i.e. fresher B.Ed students do not significantly differ from deputed B.Ed Student on the criterion of environmental awareness.

So the Hypothesis No. 3 is thus retained.

Hypothesis Ho4 – There is no significant difference between the level of ecological behaviour of English and Bengali medium students.

Table No. – 4. Ecological behaviour score of B.Ed students in according to medium of instruction.

Variables	Sub-variables	Source of Variation	Source of Squares	Df	Mean	F	.0
Medium of Instruction	English Bengali	Between With Total	2.880 2464.240 2467.120	1 198 199	2.880 12.446	.231	.631

Interpretation –

Table 4 shows that English medium student do not differ significantly from Bengali students on the criteria of ecological behaviour. So the hypotheses ……… is

retained. So it can be said that the medium of instruction is not a factors for change of ecological behaviour.

The pertaining to hypotheses H04 There is no significant differences between ecological behaviour of the female B.Ed students residing in urban or rural areas.

Table No. 5 : Ecological behaviour and source of B.Ed students according to place of residence.

Variables	Sub-variables	Source of Variation	Source of Squares	Df	Mean	F	Fig
Place of residence	Urban Rural	Between within Total	0.980 2466.14 2467.12	1 198 199	0.980 12.45	0.79	0.77

Interpretation – It is observed that the urban B.Ed students do not differ from rural students in terms of ecological behaviour. So the hypotheses Ho5 is thus retained. Acceptance of Ho5 leads to conclude that B.Ed students residing in any area having same type of ecological behaviour because place is not a factor for change of ecological behaviour.

Pertaining to Hypotheses No. 6. There is no significant difference between ecological behaviour of B.Ed students with regard to their status.

Table No. – 6. Ecological behaviour score of B.Ed students regarding category / status of B.Ed students.

Variables	Sub-variables	Source of Variation	Source of Squares	Df	Mean	F	Sig
Status of students	Fresher Deputed	Between within Total	23.120 2444.00 2467.12	1 198 199	23.120 12.343	1.87	0.173

Interpretation :   There is no statistically meaningful difference between the ecological behaviour of the B.Ed students according to their status. This indicates that ecological behaviour of the students is independent of the variable status. Although ecological behaviour scores of the students are relatively higher, it does not create an ecological friendly behaviour towards environment. So the Hypotheses Ho6 is retained.

Pertaining to Hypotheses No. 7.

There is a positive correlation between environmental awareness and ecological behaviour of female B.Ed Students.

Table No. 7 : Correlation between environmental awareness and ecological behaviour.

			Environmental awareness	Ecological behaviour		
Environmental awareness	Pearson correlation Sig (2 tailed) N Pearson Correlation Sig. (2 tailed) N	Between With Total	1 200 0.170 0.016 200		0.170 0.016 200 1 200	
Ecological behavior						

* Significant at 0.05 level.

Interpretation :   The table-7 indicates that environmental awareness and ecological behaviour of B.Ed students is significant at 0.05 level and 'r' value clearly shows that the H7 is accepted. The implication of the fact is that the two variables are moderately correlated. This environmental awareness will enable the student teacher to behave ecologically in most of the situation as there is no moderate relationship between the two variables.

Pertaining to hypotheses No. 8.

There is a positive correlation between pro social behaviour and ecological behaviour of the B.Ed students.

Tab No.- 8. Correlation between pro- social behaviour and ecological behaviour.

		Pro social behaviour	Ecological behaviour
Prosocial behaviour score	Pearson correlation Sig (2 tailed) N	1 200	0.183 ** 0.009 200
Ecological behaviour score	Pearson correlation Sig (2 tailed) N	0.183 * 0.009 200	.1 200

Interpretation : The table above indicates that there is a positive correlation between pro social behaviour ecological behaviour (r 0.183, p < 0.01) proves that B.Ed students who scored high on prosocial leads to high score of ecological behaviour. This implies that pro social nature of an individual well reflect in their environmental friendly manner. Thus Hypotheses Ho8 is accepted.

Findings :

1. English medium students differ significantly from Bengali medium student on the criterion and environmental awareness because they are urbanized modern and more exposed to environmental degradation. So they are more aware about environmental issues problems, and more familiar with the crisis of environment.

2. The B.Ed student of urban areas are more conscious about environmental issues than rural B.Ed students. This finding is parallel and supporting with the research findings of Duroy, Q.M. 2008, Sebartion, S. I Nima, D, 2005. It may be inferred that urban areas the influence of media in quite high and environmental problems are highlighted. Therefore it can be asserted that

these programmes make students more sensitive towards the environment.
(Hoeish, 2002)

3.   Either fresher or deputed student teacher do not aid in possessing more
      knowledge about environmental issue. Therefore environmental awareness is
      dependent of the variable 'status' of an individual. This facts Leads to
      conclude that the status of B.Ed students i.e. fresher or deputed both have
      same patterns of environmental sensibilities.

4.   It has been found that English and Bengali medium B.Ed students are alike
      in their ecological behaviour. Because the awareness do not necessarily lead
      to action. This leads us to the fact that creating awareness does not mean
      change in behaviour or environmental friendly behaviour.

5.   It has been found that there is no difference between ecological behaviour
      and type of B.Ed student (fresher & deputed) they possess almost equal
      ecological behaviour.

6.   The research finds that same type of ecological behaviour are found from
      urban and rural B.Ed students. It could be explained by the fact that in
      metropolitan society both the groups are constantly receiving exposure to
      mass media and thereby receiving same orientation about the importance of
      eco friends nature. The student teacher receive equal amount of theoretical
      knowledge from these modern communication system. This is the reasons
      why both the groups have shown performance in the measure of ecological
      behaviour.

7.   There is a positive correlation between environmental awareness S
      ecological behaviour. This generalization is the awareness is no guarantee to
      ecological behaviour. It means that simply becoming aware about the plight
      of the environmental does not mean that a person will act in an
      environmental friendly manner.

8.   The 'r' is positive so there is a positive correlation between pro-social
      behaviour and ecological behaviour.Which is significant and leads to

conclude that ecological behaviour is dependent upon pro serial behaviour of an individual. If one is not concern about oneself and always engaged in sharing and helping other, then definitely are will sacrifice at a personal cost, to protect and conserve the environment.

References :

Bapat, M. N. and Nagaraja Rao, N. R. (2004). Environmental education at Printing level – Why Now ? The primary Teacher, NCERT. Publication, New Delhi, Vol. XXIX, No.- 2, pp. 10-19.

Ajzen, I and Fisben, M. (1960). Understand attitude and predicting social behaviour, Englewood cliffs, Practice Hall, England.

Ernst, A. M. (1994). Social knowledge as a basis of a person's action in conflict situation, Franful, M. Lang.

Ernst, T. (2009). Influence an US middle school teachers use of environment Based Education, Environmental Education Research, Vol.- 15, NO – I, pp. 71-92.

Fisman, L. (2005): The effects of Local Learning an Environmental Awareness 14 Children : An Empirical Investigation, The Journal of Environmental Education Vol.- 36, No.- 36, pp. 39-50.

Heberlein, T. A. Environmental A Hituede (retained from http//www.drs.wise-Edu/herberlein/document/Public/Environmental attitudes) Pdf.

Ozden, O. (2008). Environmental awareness and attitude of student teachers. International Research in Geographycal and Environmental Education, Vol.- 17, No.- 1, January – 2008, pp. 40-55.

Sama, E. (2003). Teacher Candidates attitudes towards environmental problems, Gazi University Journal of Gazi Educational Faculty, 23 (2) pp. 99-110, Gazi University, Ankara.

Stern,P.C. (2000). Towards a Coherent theory of environmentally significant behaviour, Journal of Social Sciences, 56 (3), Pp. 407-424.

NEED FOR VALUE EDUCATION

Dr. Vinodbhai G. Patel
Principal,
V. T. Chokshi College of Education,
Surat

Dr. Hiralkumar M. Barot
Dabhoi College of Education,
Gujarat

Introduction:

Value education is ingrained in every tradition of lndia culture. Yet it is a matter of great regret that gradually we are lasing our values with the result that we tend to become cornet and hypocrite. This trend must be checked urgently. Perhaps a major responsibility for the corrective action lies on our leaders in different walks of life. Nevertheless educational institutions can also play a significant role in die promotion of values.

The ultimate good of human society is the good of all. The idea has been beautifully expressed in one of our ancient prayers "Let all be happy free from diseases, let men sec well of one-another, let there be no sorrow or unhappiness in this world". Value education is rooted in Indian philosophy and culture.

The Vedas and Upanishads which are the source of inspiration are full of value education. Value education is important at every point of life. In the Vedic period when a Shishya completed his education in Aashram at the feet of his Gum, he was exhorted by his Guru to follow certain values throughout his life, like

"Speak truth; fulfil your duties, never lax in self- study". The central task of value based education is to develop men of goodwill who do not cheat, or steal, or kill; universal individuals who value as one both self and mankind.

Students are led to believe that by developing the ability to gather, store, and retrieve vast information, they stand educated. But, Swami Vivekananda points out, "Education is not the amount of information that is put into your brain and runs riot there, undigested

all your life. We must have life-building, man-making and character-making assimilation of ideas."

Mere academic knowledge without deep rooting in moral and spiritual values will only fashion lop-sided personalities who may become rich in material possessions, but will remain poor in self-understanding, peace, and social concern. Emphasizing this fact, Swami Vivekananda said, "Excess of knowledge and power, without holiness, makes human beings devils."

As a humble step towards achieving the goal of exposing and sensitizing our children to the educational vision of national heritage, Ramakrishna Mission has undertaken a project 'Be and Make – Education for manifesting Perfection'.

The concept is to reach school children with a series of books which will be books with a difference. The main aim of these books will be to help our children to imbibe certain fundamental values and internalize them in their daily life and interpersonal interaction.

Meaning of Term Value

Value means primarily to prize, to esteem, to appraise, to estimate, it means the act of cherishing something, holding it dear and also the act of passing judgment upon the nature and amounts of values as compared with something else. A value stands for ideas men live for. They are the part and parcel of the philosophy of a nation and that of its educational system. They are the guiding principles of life.

Various Values

The ideals contained in the constitution are: - socialist, secular, democratic, justice, liberty, equality, fraternity, dignity of the individual and integrity of the nation. Naturally, therefore, our values in life must draw their inspiration from these ideals. Earlier die University Education Commission 1948-49 mentioned the various aspects of morality as: loyalty, courage, discipline, self- sacrifice and spirituality.

The Secondary Education Commission 1952-53 laid special emphasis on the following values in the formation of character of the students:

1. Efficiency

2. Integrity

3. Discipline

4. Co-operation

5. Good Temper.

The Committee of Religious and Moral Instruction headed by Shri Prakash made a special mention of dignity of labour, love of humanity, patriotism and self-discipline. Moral values particularly refer, to the conduct of man towards man in various situations good manners.

The Committee of Emotional Integration referred to the mutual appreciation of the various religions in the country spiritual values, national unity and the unity of mankind.

The Education Commission emphasised the inculcation of the values of cooperation and mutual regard, honesty and integrity, discipline and social responsibility. It also stressed the development of scientific temper of mind, respect for manual labour, capacity to put in hard and responsible work, respect for an proper pride in the past faith and confidence in the future, national consciousness, spirit of social service for promoting social and national integration, equally essentials are values which help to make democracy a way of life and thereby strengthen it as a form of government, readiness to appreciate other's point of view and patience.

In its 44th session of the International Conference on Education, held in 1995, the Ministers of Education adopted a declaration and invited the Director General of UNESCO to present, in November 1995, to the General Conference, a "Framework of Action" that would allow Member States and UNESCO to integrate within a coherent policy, education for peace, human rights and democracy in the perspective of sustainable development.

The "Integrated Framework of Action" (see item iv above) emphasised the development in every individual of a sense of universal values and types of behaviour on which a culture of peace can be predicated. Education, it was emphasised, must develop the

ability to value freedom and the skills to meet its challenges; it must develop the ability to recognise and accept the values which exist in the diversity of individuals, genders, peoples and cultures and develop the ability to communicate, share and co-operate with others; it must develop the ability of non-violent conflict resolution and promote the development of inner peace in the minds of students so that they can establish firmly the qualities of tolerance, compassion, sharing and caring; it must cultivate in citizens the ability to make informal choices; it must teach citizens to respect the cultural heritage, protect the environment, adopt methods of production and consumption leading to sustainable development with harmony between individuals and collective values and between immediate basic needs and long-term interests. And finally it must cultivate feelings of solidarity and equity at the national and international levels. (13) Strategies to achieve these aims and the lines of action in respect of the content, teaching materials and resources, programmes of reading, expression and the promotion of foreign languages, educational establishments, training of teachers, action on behalf of vulnerable groups, research and development, higher education, co-ordination between the education sector and other agents of socialisation, regional and international co-operation, have been designed for the use of the Member States of UNESCO to promote education for peace, human rights and democracy. Linkage has also been established between UNESCO and the United Nations in delineating common goals and strategies for action to build a culture of peace with education used as the leading modality. UNESCO is acting at the global level and at the national level. A unit has been created for education and training to inculcate values for peace, human rights, democracy, tolerance and international understanding with activities in the areas of elaboration and dissemination of teaching materials and pedagogical aids in different languages.

Need for Value Education:

The following are some reasons that may be mentioned in this connection:

(1) The progress in science and technology without simultaneous development of moral values could have serious repercussion in many areas of life. It is very essential that moral awareness is promoted to orient the progress in science and technology towards the welfare of mankind.

(2) With the general decline of traditional values, some common values should be re-discovered to unite human beings.

(3) Schools can remain hardly neutral so far value education is concerned. Teachers are always passing on some values to their students whether they are conscious of it or not through their conduct in and out of classrooms, through their selection of books to be read, through dicir choice of instructional strategic and so on. The need for a consciously planned value education programme, therefore is obvious.

(4) There is an increasing moral complexity in the contemporary world, and pupils are expected to face more complicated decision-making situations about issues involving values. They should be helped in developing the ability to make proper choices in such situations.

(5) It cannot be ignored that the rate of juvenile delinquency is increasing everywhere. It is a definite symptom of a crisis which today's youth undergoes in the process of his personal growth. In such a situation value education assumes a special significance.

Inculcation of Values:

Broadly these types of approaches have been suggested:

1. Suggestions/Including care elements in various subjects.

2. Participation/Experience/Activities.

3. Examples.

It is possible to adopt all the three methods but more reliance should be placed on participation of the students in various activities and gaining experiences in value education and care elements. Value development should be integrated through the day-to-day activities of the school.

Direct Participation in Activities:

We attach great importance to the role of indirect influence in building up good character. The school atmosphere, the personality and behaviour of the teachers, the facilities provided in the school, will have a large say in developing a sense of values. We would

like to emphasize that the consciousness of values must permeate the whole curriculum and the programme of activities in the school.

It is not only the teacher's in charge of moral instruction who are responsible for building character. Every teacher, whatever is the subject he teaches must necessarily accept this responsibility. He must ensure that in the teaching of his particular subject and in his dealings with his pupils, fundamental values such as integrity and social responsibility are brought out.

The teachers need not, we can even say that he should not try to draw out the moral all the time but if lie has given some thought to the values underlying the scope of his subjects and his work as a teacher, they will imperceptibly pass into his teaching and make an impact on the minds of his students.

The school assembly the curricular and co curricular activities, the celebration of religious festivals of all religions, work experience, team, games and sports, subject clubs, social service programmes all these can help in calculating the values of cooperation and mutual regard, honesty and integrity, discipline and social responsibility. These values have a special significance in Indian society today when young men and women are passing through a crisis of character.

Relation between Moral Values and Religion :

There will be natural points of co-relation between the moral values sought to be inculcated and the teachings of the great religions. Starics drawn from the great religions of the world will be most appropriate in a discussion of moral values and of problems in life, All religions stress certain fundamental qualities of character, such as honesty and truthfulness, consideration for others, reverence for old age, kindness to animals and compassion for the needy and the suffering. In the literature or every religion, the story of parable figures prominently as a means of impressing an ethical value on the followers. The narration of such stories by the teachers at the right moment in the programme of moral education would be most effective, particularly in the lower classes.

References:

Pravananda, S. and Frederick Manchester(1947). The Upanishads, Vedanta Press, Hollywood, California, pp. 81-82.

Lokeswarananda, S. (1972). Education, Theory and Practice. Ramakrishna Mission Ashrama, Narendrapur, India, p.52

Rolland, Romain. (1994). The Life of Ramakrishna, translated into English by E-F. Malcolm Smith, Advaita Ashram, Calcutta.

Eitzen, D.S. and Zinn, M.B. (1991). In Conflict and Order, Understanding Society, Allyn and Bacon, London, pp. 111-118.

UNESCO (November 1945). Constitution of the United Nations Scientific and Cultural Organization, Preamble, UNESCO, Paris.

United Nations: General Assembly Fifty Second Session. Agenda Item 156. Note by the Secretary General, 19 September, 1997. United Nations, New York.

CIDREE: Volume 6. A Sense of Belonging, Guidelines for Values for the Humanistic and International Dimension of Education, Scotland, 1994

United Nations: General Assembly Fifty Second Session. Agenda Item 156. Note by the Secretary General, 19 September, 1997. United Nations, New York.

Brahma Kumaris Spiritual University: Living values, a guide book, Global Co-operation House, London, 1995.

Federico Mayor: Address at the opening of the "International Consultation of Governmental Experts on the Human Right to Peace", delivered on 5 March 1998, UNESCO, Paris.

'Third Party Evaluation': An Experiment of Institutional Appraisal in Gujarat at Secondary level

Dr. Satish P. Pathak

Associate Professor,

Department of Education (CASE),

Faculty of Education and Psychology,

The M.S.University of Baroda,

Vadodara. Gujarat

E-mail: Pathaksatish13@gmail.com

Abstract

The present school education system is one of the biggest systems of education looking to the total number of schools at different levels (i.e. primary, secondary and higher secondary). But it is a fact that, only the expansion of the education system will not serve the purpose. There is utmost need of providing quality assurance at all the levels. Although the commissions and committees have reported different modifications and suggestions for qualitative improvement in education and up-gradation of the education system, the development of system requires a better appraisal system for the close monitoring and evaluation by the different bodies and authorities at institutional level, district level, state level and national level. Keeping in mind the above, the present paper focuses on an experiment of institutional appraisal named as, 'Third Party Evaluation' implemented by the Gujarat Secondary and Higher Secondary Education Board (GSHEB), Gandhinagar in Gujarat during the academic year 2006-2008. Since the author was one of the team members of the third party evaluation team for the district Surat in Gujarat, it has also highlighted some observations in this regard.

Keywords: Third party Evaluation, Institutional Appraisal, School Matrix Grid

Introduction:

Looking to the importance of education for the social, cultural, economical, political, and human development the nation has created a diversified system of education. It is evident that after independence, to achieve the goal of Universalisation of Elementary Education (UEE) for strengthening the social fabric of democracy the framers of the Constitution chose to include education in the directive principles of State Policy. And now the intended efforts in this regard have been reached up to the effective implementation of Right to Free and Compulsory Education Act (RTE-2009). Also realizing the need of strengthening the higher education, timely the Secondary education commission (1952) and Education for national development commission (1964) were established to overhaul the education in the country.

Now, our school education system is one of the biggest systems of education looking to the total number of schools at different levels (i.e. primary, secondary and higher secondary). But it is a fact that, only the expansion of the education system will not serve the purpose. There is utmost need of providing quality assurance at all the levels. Although the commissions and committees have reported different modifications and suggestions for qualitative improvement in education and up-gradation of the education system, the development of system requires a better appraisal system for the close monitoring and evaluation by the different bodies and authorities at institutional level, district level, state level and national level. Keeping in mind the above, the present paper focuses on an experiment of institutional appraisal named as, 'Third Party Evaluation' implemented by the Gujarat Secondary and Higher Secondary Education Board (GSHEB), Gandhinagar in Gujarat during the academic year 2006-2008. Since the author was one of the team members of the third party evaluation team for the district Surat, it has also highlighted some observations in this regard.

'Third Party Evaluation' (TPE) : An Experiment in Gujarat :

It is to be noted that a variety of practices are going on for institutional evaluation in the country. Mainly in case of Gujarat, the schools are being evaluated by the officials of District Education Office (DEO) once or twice in a year. The main aspects appraised by

them during their visit are; administration, accounts, infrastructure and academics. But due to the inadequate staff of education inspectors in the said offices, this regular appraisal of all schools in the districts becomes irregular and ineffective. Also, the increasing numbers of schools have created more problems for them. The detail of management wise secondary and higher secondary schools and standard wise total number of students can be seen from the tables given below;

Table no. 1   Management wise secondary and higher secondary schools

Sr. No.	Management	Schools		
		Secondary	High. secondary	Total
1.	State Govt.	196	107	303
2.	Local bodies	184	84	268
3.	Private aided	3304	1812	5116
4.	Private unaided	1510	457	1967
	Total	**5194**	**2460**	**7654**

Table no. 2   Standard wise secondary and higher secondary students

Sr. No.	Standard	Number of students		
		Boys	Girls	Total
1.	8th	472986	304239	777225
2.	9th	383086	254595	637681
3.	10th	333716	220342	554058
4.	11th	187566	125162	312728
5.	12th	151611	103849	255460
	Total	**1528965**	**1008187**	**2537152**

The detail given in the Table no. 1 and 2 shows the wide functioning of the system stated above. It definitely needs a careful monitoring and evaluation of this system for its effective functioning. Also a kind of positive reinforcement is very much necessary to encourage the human resources and students associated with this system. That would be a

stimulus for raising the number of good schools in the state. Looking to this, the Hon. Chief Minister of Gujarat suggested in his speech of budget (2005-2006) about giving an award to the best school in each district every month. This best school should be selected by 'Third Party Inspection' of the schools in each district and in the entire state. Based on this suggestion, the Gujarat Secondary and Higher Secondary Education Board (GSHEB) (with reference to its circular no. gsheb/research/26250 dated 17/01/2007) had followed the steps given below for the implementation of TPE in the state.

The objectives of TPE were decided as under;

(i)   To identify the best schools in each district.

(ii)   To encourage the best schools by giving an award (Prize of Rs. 10,000/-) and a certificate.

(iii) To create a climate for healthy competition among the schools.

(iv) To motivate other schools to become the best schools.

(v)   To give emphasis on scholastic and co-curricular activities in the schools.

(vi) To create an awareness about the development of human resources in the schools.

(vii) To put emphasis on effective management of schools.

(viii) To encourage all the schools towards quality improvement.

(ix) To increase the number of best schools in the district/ state.

A tool for Third Party Evaluation was developed based on the four major parts/areas viz. (i) Human Resources, (ii) School Management and Economical Resources, (iii) Physical facilities and their usability and (iv) School Matrix Grid and opinion of Evaluators.

Third Party Evaluation Tool:

The weight age of each part was 25 per cent of its total marks i.e.200. The tool was consisting of close ended questions and rating scales.

Part – I : Human Resources : It was based on the information like qualifications, competencies and skills of the teachers, some welfare scheme for the employees, participation of teachers in in-service programmes, academic/literary contribution of the teachers, innovative/creative practices of the teachers, researches done by the teachers,

organization of workshop/seminars/counseling programme for the students in the school, Working as a resource person by teachers/principal, administration of any psychological test on students for measurement of any psychological construct, other activities and classes for that, state /national level achievement of teachers/principal, classroom interaction and co-curricular activities etc.

Part – II : School Management and Economical Resources: It was based on the information like formation of various school committees, visit of some well-known personalities, welfare activities for the students, committees for school development, school contribution for social welfare, use of grant for educational purpose, formation of associations of students, parents, mentors, old students, Educational climate, community participation etc.

Part – III : Physical facilities and their usability: It was based on information related to infrastructural facilities, play ground, various rooms for educational purposes, laboratory, library, assembly hall, drawing room, music hall, sanitation blocks, fire safety, sound system and other electronic devices, school website, safe drinking water availability and other facilities and their usability.

Part – IV : School Matrix Grid and opinion of Evaluators: It was related to information of average achievement level of school in std. x (2005-06), co-curricular activities, yoga and personality development programmes, cultural activities, celebration of special days, fairs and festivals, other out side examination and rate of students' participation and overall impression of expert about the school.

It had been instructed the District Education Officers (DEOs) of all the districts with regard to the following aspects;

(a) To prepare a list of ten external experts (Teacher educators / Ex. Principals / Educationists etc.) from the district.

(b) To depute them officially for participating in the orientation programme at Ahmedabad (on 22-01-2007).

(c) To prepare a list of ten schools to be evaluated on the basis of high score on *school matrix grid* and to send it to GSHEB.

(d)   To intimate the selected schools to be ready for inspection and for giving better cooperation to the team.

(e)   To prepare the schedule for inspection and a root map of the schools to be inspected by the team of experts coming from nearby other district. Also to provide the same to the team of experts.

(f)   To submit the summarized report of the inspection team along with a special note/remarks about the selected best school in the form of a hard and a soft copy to GSHEB, as per the schedule.(i.e. before 7/02/2007)

(g)   To pay the T.A. and D.A. to the team of experts as per the rules of GSHEB.

Procedure for implementation:

The procedure followed for implementation of TPE, includes following major steps:

➢   Firstly, the ten selected team members of experts from each district were oriented about the tool for evaluation.

➢   Then they had been sent to evaluate the selected schools as per the prepared schedule and root map of the schools in another district. Each team was made up of five members and had visited five schools during five days.

➢   Each expert of the team had prepared an individual evaluation report for the school according to the instructions given in the tool. Then a summarized report had been submitted by the convener of the team to the GSHEB.

Some observations:

➢   The main objective of this initiative was to motivate the schools, was fulfilled with the positive attitude of the team of experts.

➢   For two years this programme was implemented. During this period every month the best school was selected out of the ten schools in each district. The selected best schools were given a prize of Rs. 10000/- and a certificate of appreciation for their best efforts.

➢   The selection of the schools for TPE on the basis of the score on 'School Matrix Grid' has created problems for some good schools. Some weak schools (having low

achievement at S.S.C level) had been selected as they were organizing a good number of various other activities.

➤ Some of the selected schools were not very much interested or ready for such type of TPE because of certain reasons like conflicts with the administrator, inadequate financial support/ grant, time consuming process of TPE etc.

➤ A common tool prepared for the all types of schools was not found suitable mainly for the schools in remote areas.

➤ To judge validity of the collected information through the tool was a major problem in case of some schools, because the schools did not have some authentic evidences.

➤ It was difficult for the team of experts to go for TPE continuously for five days in another district.

➤ It was felt that the rigorous exercise should be done for the preparation and standardization of the tool for evaluation of the schools.

Conclusion:

The programme of Third party evaluation of the secondary schools in Gujarat was really a successful programme, if one considers the healthy competition seen in the system. Also compared to the inspection done by DEO offices, it was more flexible and focused with reference to enhancement of quality aspects. Experts having academic vision had made a difference mainly by encouraging the schools. It has been realized that this experiment should be continued for more years for qualitative change in the school system.

References:

GCERT, (2007). *Educational Statistics Yaer : 2007*. Gujarat Council of Educational Resaerch and Training, Gandhinagar.

GSHEB, (2007). *Third Party Evaluation Tool.* Gujarat Secondary and Higher Secondary Education Board, Gandhinagar.

GSHEB, (2007). *Third Party Evaluation ,Orientation Circular.* Gujarat Secondary and Higher Secondary Education Board, Gandhinagar.

Global Cooperative Network In Teacher Education; Total Quality Management (TQM)

Monica Puri
Assistant Professor,
IIMT College of Science and Technology,
Greater Noida, UP

Dr. Hiralkumar M. Barot
Assistant Professor,
Dabhoi College of Education,
Gujarat

Introduction

Total Quality Management (TQM) is a comprehensive and structured approach to organizational management that seeks to improve the quality of products and services through ongoing refinements in response to continuous feedback.

 TQM requirements may be defined separately for a particular organization or may be in adherence to established standards, such as **the International Organization for Standardization series.** TQM can be applied to any type of organization; it originated in the manufacturing sector and has since been adapted for use in almost every type of organization imaginable, **including schools, highway maintenance, hotel management, and churches.** As a current focus of TQM is based on quality management from the customer's point of view.

TQM processes are divided into four sequential categories: plan, do, check, and act (the *PDCA cycle*). In the *planning* phase, people define the problem to be addressed, collect relevant data, and ascertain the problem's root cause; in the *doing* phase, people develop and implement a solution, and decide upon a measurement to gauge its effectiveness; in the *checking* phase, people confirm the results through before-and-after data comparison; in the *acting* phase, people document their results, inform others about process changes, and make recommendations for the problem to be addressed in the next PDCA cycle

Importance of TQM in education

With changing patterns of education delivery **from face-to-face to online, course content, nature of learner, and organizational structures, the concept of quality has become an inherent component of the educational process for its success**. Globally various bodies have been established to develop guidelines for quality products and services; and their maintenance**.** The globalization of education, migration of students from one community to other, one country to another, provides adequate causes for concerns to the educationists and administrators. Total Quality Management (TQM) in Education is a timely tool, which must be clearly understood, adopted and implemented as soon as possible. After discusses there are various concepts, issues, processes, models and implementation strategies for TQM in educational settings.

Internal and External kind

Systems approach in education occupies important place. Different components of a system and educational institution as a system have been examined and focuses on customer or client orientation towards TQM. There may **be two kinds of clients when applying TQM in education, internal and external. Parents, employer, community, the state government, and the society at large constitute the external clients whereas teacher, non-academic staff, principal, manager and managing committee form the internal clients.** Students in this concept occupy a unique position of belonging to both internal and external clients. The author goes on to explain certain input and process specifications for schools, built around client education and awareness

HOW DOES TQM CREATE AN ENVIRONMENT THAT PROMOTES QUALITY?

TQM is more than just a philosophy. In addition to proposing new theories about the workplace, it advocates specific changes that managers need to make if they want to improve the system. These changes are best described in Deming's "14 Points," which are condensed under the four categories below:

- Customer Relationships: Customers can be either internal or external to an organization. Just as a customer is the person buying a product in a store, an employee is the customer of management. Managers need to realize that quality work will not be done unless they provide employees with quality products to work with

- Employee Empowerment: TQM starts at the top but should permeate the workplace; it fact, it will fail without employee involvement. Since workers know more about their jobs than management does, their input is vital to improving the system. It is a manager's responsibility to continually train employees in the methods of TQM, involve them in management decisions, listen to their suggestions for system changes, and work to implement those changes (Schmoker 1992).

- Continual Gathering and Use of Statistical Data: Most companies monitor the quality of their products by doing mass inspections that determine how many low-quality items are being produced, but Deming calls for monitoring of the production process by continually gathering statistical data so that problems can be identified as they are happening instead of when it is too late to solve them. When problems are identified, they should be the focus of discussion, and the groups discussing them should rely on the data to institute change instead of randomly assigning blame to individuals or departments

HOW DOES TQM TRANSLATE TO EDUCATION?

Considerable effort has gone into translating ideas generated by TQM to education, and adaptations of Deming's fourteen points pepper recent educational journals. Most of the points, such as the dissolving of barriers between departments, are essentially the same in education as they are in the business world. Some TQM advocates, however, call for changes in education that may seem radical to educators.

- The Role of Students: TQM recognizes students as both customers and employees of the educational system. Administrators need to involve students in their own education by training them to question the learning process, and once the students

have questioned it, administrators need to seriously consider student proposals for change.

- The Role of Teachers: TQM calls for changes in teachers' relationships with both students and administrators; teachers need to view education through students' eyes, and they need to work with administrators as a team. This teamwork is largely the responsibility of administrators, who need to delegate some of their responsibility and power to teachers.

- Testing and Evaluation: Instead of using standardized tests and grades to measure students' progress, schools that embrace TQM often try to assess student progress regularly throughout the school year. By doing so, they avoid bringing problems to students' attention at the end of the year, when it is too late to do anything about them.

WHERE IS TQM USED IN EDUCATION?

If there is a comprehensive, **well-documented, and relatively longstanding educational TQM program,** it is the program at Mt. Edgecumbe High School in Sitka, Alaska, where it has been a way of life since 1988. Mt. Edgecumbe has involved students to the same degree that it involves teachers. Students at the school track their own progress, have input into the education they receive (in one instance, the class schedule was altered in response to students' evaluations of how teachers spent class time), and operate their own salmon smoking business, which brings in thousands of dollars each year from east Asian countries also downplays grades and standardized tests in favor of continuous evaluation, which makes comparisons to other schools difficult.

Other schools have been slower to adopt programs that are as comprehensive as Mt. Edgecumbe's. Educational TQM is so new that most efforts to institute it are still in their infancy. In the words of Olson **"while TQM has generated a lot of talk in schools, it has produced less action."** If schools do use TQM, they usually implement it in areas that most closely resemble TQM in business, such as contracting out custodial services and processing purchase orders. Another common practice is to use TQM methods to

solve a specific problem, such as student absenteeism, instead of attempting to apply TQM principles to the school or district as a whole.

Role of TQM in college and university

(a)Colleges and Universities using TQM

Some major universities in the United States are starting to **use principles of quality improvement in daily operations and customer service to students; among those are Georgia Tech, Maryland, North Dakota, Oregon State, Penn State, Purdue, Rochester Institute of Technology, and Wisconsin.** For example, "Penn State University's Integrated Model adopts Deming's systematic view of organizations, in which quality stems from the comprehensive interface between suppliers, design, processes, output, and customers: By improving the competencies of incoming students, by developing curricula more responsive to customer needs, by improving the effectiveness and efficiency of instruction and administrative operations, and by developing an effective feedback loop from customers to process, Penn State University will be institutionalizing the continuous improvement of the entire educational process."
Two-year colleges have also done some ground-breaking work in the implementation of TQM processes throughout their organizations. Fox Valley Technical College (FVTC) in Appleton, Wisconsin has been the leader in this effort. FVTC has pursued TQM for more than seven years. Their "Total Quality Leadership Council" is a multi-level team that makes decisions affecting the entire college. The TQM program at FVTC is truly an institution wide system of organizational change, much of which can be attributed originally to the ideas and paradigm-shifting vision of the former President of FVTC To read further about specific case studies (including Boston College, the Maricopa Community College system, and the University of Wisconsin-Madison) in TQM efforts, examine the May June.

References

Angelo, T. & Cross, K.P. (1993). *Classroom Assessment Techniques: A Handbook for College Teachers.* San Francisco, CA: Jossey-Bass Publishers.

Berwick, D.M., Godfrey, A.B. & Roessner, J. (1990). *Curing Health Care: New Strategies for Quality Improvement.* San Francisco, CA: Jossey-Ball Publishers.

ChafFee, E.E. & Sherr, L.A. (1992). *Quality: Transforming Postsecondary Education.* ASHE-ERIC by The George Washington University, Washington, D.C.

Change (May-June 1993). Special Issue on TQM in Higher Education. *Change,* 25, No. 3,3-70. Coate, E.L. (1993). The Introduction of Total Quality Management to Oregon State University.

Higher Education, 25, 303-320. Deming, W.E. (1986). *Out of the Crisis.* Cambridge, MA. Massachusetts Institute of Technology Center for Advanced Engineering Study.

Hammer, M. & Champy, J. (1993). *Re-Engineering the Corporation: A Manifesto for Business Revolution.* New York, NY: Harper Collins Publishers.

Hau, I. (1991). Teaching Quality Improvement by Quality improvement in Teaching. *Report No.* 59, *Center for Quality Productivity Improvement.* Madison, WI: University of Wisconsin.

Roberts H.V & Sergesketter, B.F. (1993). *Quality is Personal: A Foundation for Total Quality Management.* New York, NY: The Free Press.

Scholtes, P.R. et. al. (1991). *The Team Handbook.* Madison, WI: Joiner Associates.

Seymour, D. (1993). *The IBM-TQM Partnership with Colleges and Universities: A Report.* Washington, D.C.: American Association for Higher Education.

Seymour, D. (1992). *On Q: Causing Quality in Higher Education.* New York, NY Macmillan.

Spanbauer, S. (1992). *A Quality System for Education.* Milwaukee, WI: ASQC Press.

Walton, M. (1986). *The Deming Management Method.* New York, NY G.P. Puham's Sons.

Walton, M. (1990). *Deming Management at Work.* New York,

TRY OUT OF DEVELOPED INSTRUCTIONAL STRATEGY TO TEACH CREATIVE AND CRITICAL THINKING

Dr. Rupesh Patel

Assistant Professor,

H.N.G.U., Patan

Introduction

Thinking is the ultimate human resource. The quality of our future will depend entirely on the quality of our thinking. This applies on a personal to a professional level, as well as on community level to the global level. In a rapidly changing world very often we find that our thinking is inadequate to meet the demands and challenges put upon it.

Mayer (2002) reported our schools have different educational and developmental objectives distributed in various branches of subjects. Various curricular, co curricular and extra curricular activities are carried out in order to meet these objectives. The central organizing force to all these activities is to nurture the creative and critical thinking in the minds of the students so that they become productive and responsible citizen of the future. In the days of technology it should be realized that teaching is not merely imparting the content rather how to think with the content and that has to be the focus. Our system of education is been criticized because of undue emphasis on the rote memory. John (2007) advocated that educators should realize that there is a dire need to shift our practices of teaching and evaluation from memorization of content to development of foundational skills of learning which is independent thinking and decision making.

With the advancement of Science and Technology, the world we live in becomes very narrow. Uses of internet and communication devices have broken all the boundaries and geographical limitations. Rapid development of multimedia made is very easy to access any information. Use of internet and communication devices made storage, retrieve and processing of information so friendly that we have to be very conscious while using

internet and other related gadgets. This paradigm shift demands citizens with high creative and critical thinking skills in order to survive and progress in this dynamic world.

Statement of the study

Try out of developed instructional strategy to teach creative and critical thinking

Objectives of the study

1. To select appropriate thinking tools for enhancing creative and critical thinking.
2. To develop an instructional strategy using selected combination of thinking tools using appropriate content to enhance creative and critical thinking.
3. To study the impact of the instructional strategy in enhancing creative and critical thinking.

Explanation of the terms

Instructional strategy in this study refers to the lesson plans incorporating thinking tools and thinking strategies using appropriate content which is to be practised for developing creative and critical thinking in sampled group of teachers. It consisted of thinking tools, thinking strategies and lesson plans incorporating these thinking skills and strategies.

Buzan (2001) defined **Creative thinking** is the ability to come up with new ideas, to solve problems in original ways, one's imagination, creative behavior in productivity. Following are some of the dimensions of creativity which the investigator had included in this study

1. Fluency- the speed and ease with which one comes up with new idea/s
2. Flexibility- ones' ability to perceive things differently
3. Originality- an ability to produce ideas that are unique and unusual

Paul (1995) defined **Critical thinking** as thinking that determines the authenticity, accuracy and worth of information or knowledge claims. A few dimensions of critical

thinking that would be considered for the study are comparing analogous situations; evaluating or examining actions; abilities of reasoning or decision making and ability of solving complex problems.

Effectiveness the mean difference of scores obtained by sampled teachers on test measuring creative and critical thinking.

Hypotheses of the study

Ho1 : There will be no significant difference in the mean awareness scores of the sampled teachers on the pre test and post test.

Ho2 : There will be no significant difference in the mean fluency scores of the sampled teachers on the pre test and post test.

Ho3 : There will be no significant difference in the mean flexibility scores of the sampled teachers on the pre test and post test.

Ho4 : There will be no significant difference in the mean originality scores of the sampled teachers on the pre test and post test.

Ho5 : There will be no significant difference in the mean critical thinking scores of the sampled teachers on the pre test and post test.

Delimitation of the study

Study was delimited to the content of standard I to VII appropriate to selected tools during the instructional process.

Study was delimited to the Gujarati medium primary school teachers following syllabus of Gujarat State Board of School Textbooks.

Test to measure creative and critical thinking into the teachers is validated through the comments of experts and not the standardized one.

Methodology of the study

Population

All primary teachers of Visnagar taluka of Mehasana district following text books of Gujarat State Board of School Textbooks, Gandhinagar constituted the population for the present study.

Sample

All teachers of Visnagar taluka were selected on the basis of their willingness to participate throughout the study. In all 153 teachers have shown their interest and school authorities have permitted them. 153 seemed to be a large number for conducting the present study so finally twenty five teachers were randomly selected for present study.

Tool

The investigator had reviewed the available tools developed by other researches in order to study creative and critical thinking for their respective study and developed creative and critical thinking tool in order to study the impact of intervention on sampled teachers.

Procedure of data collection

The present investigation was an intervention study carried out for twelve weeks and was of developmental in nature. The study aimed at evaluating the changes in the teachers as a result of intervention strategies employed to enhance creative and critical thinking skills using suitable content matter. To conduct this experiment investigator had selected pre experimental design, though it provide little control over extraneous variables. The research design selected for the present investigation was **one-group pretest posttest design**. Considering the administrative difficulties on the part of the schools and teachers, feasibility of commuting, expenditure involved in the process of experiment and many such constraints led to the said design.

Summary of the results of the study

The results of the present study with respect to stated objectives and formulated hypotheses Ho1: Sampled group of teachers will have no significant difference in the means scores on pre test and post test on awareness of creative and critical thinking is summarized below.

Awareness of sampled teachers on creative and critical thinking was studies by implementing developed tool by the investigator before and after intervention. Chart using their respective scores on pre test and post test were represented in the figure-1.

Figure-1 Comparative analysis of teacher's performance on awarenesss
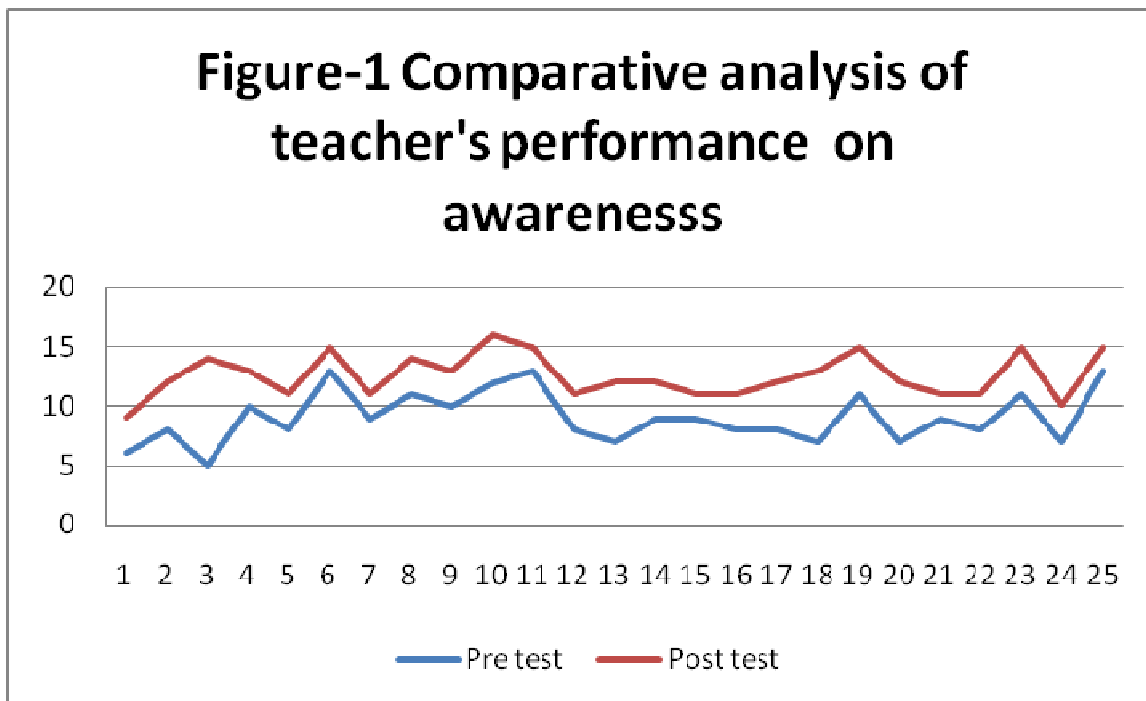
There was significant difference between the mean scores on the awareness regarding creative and critical thinking of the sampled teachers on pre test and post test. The relative higher mean score on post test showed that the teachers have improved on the awareness of creative and critical thinking.

The results of the present study with respect to stated objectives and formulated hypotheses Ho2: There will be no significant difference in the mean fluency score of the sampled group of teachers on the pre test and post test is summarized below.

Fluency scores of sampled teachers on creativity have been studied by implementing developed tool by the investigator before and after intervention. Chart using their respective scores on pre test and post test were represented in the figure-2.

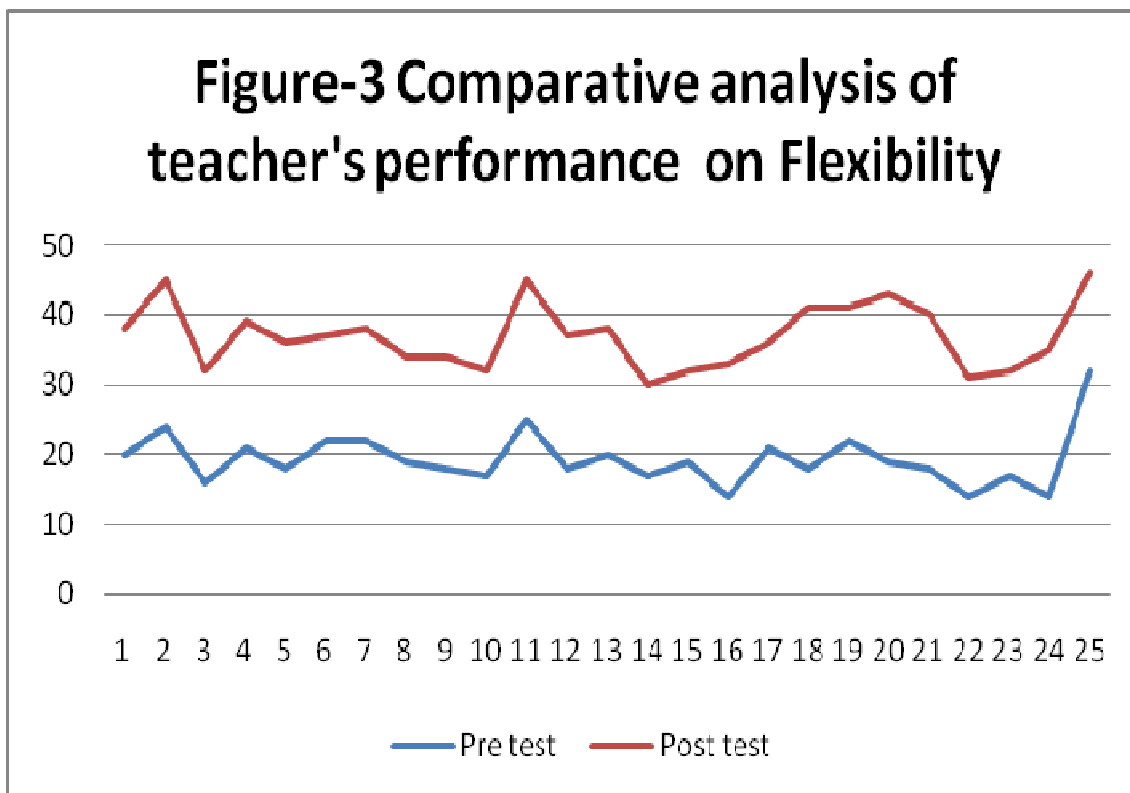Figure-2 Comparative analysis of teacher's performance on Fluency
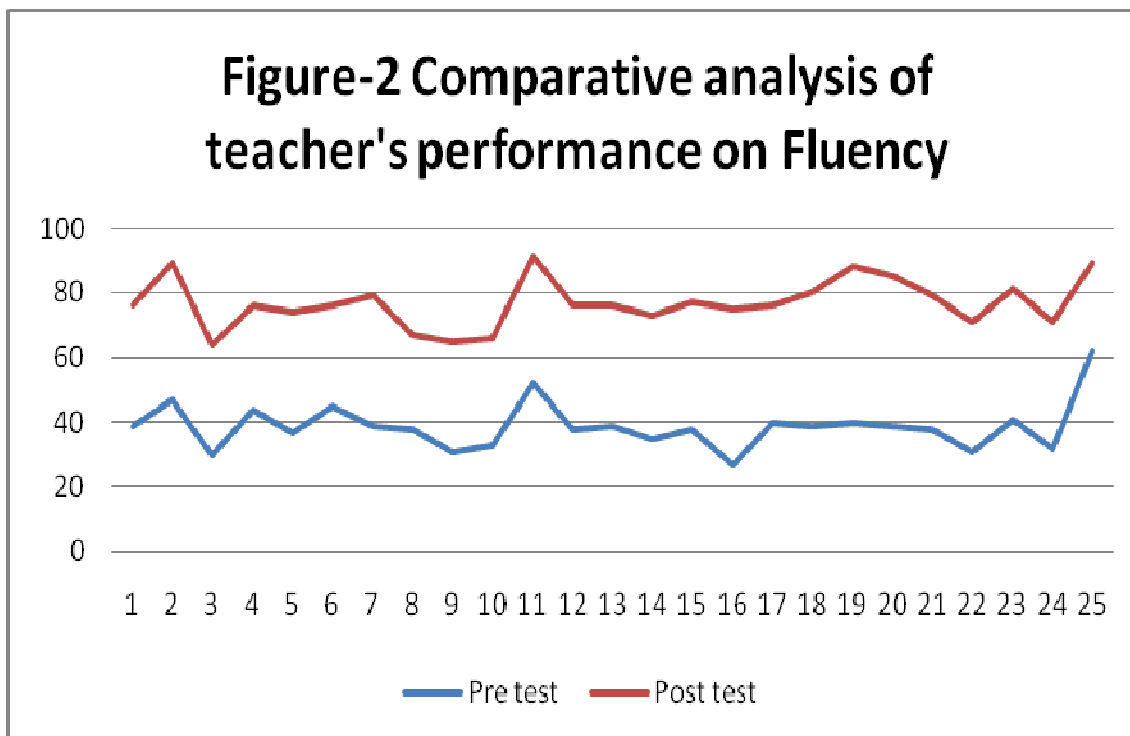
There was significant difference between the fluency scores of the sampled teachers on pre test and post test. The relative higher mean scores on post test showed that the teachers have improved on the fluency dimension of creative thinking.

All the teachers have improved their post test score at the end of the intervention indicating that the developed instructional strategy proved effective in order to improve their fluency component of creative thinking.

The results of the present study with respect to stated objectives and formulated hypotheses Ho3: There will be no significant difference in the mean flexibility score of the sampled group of teachers on the pre test and post test is summarized below.

Flexibility scores of sampled teachers on creativity have been studied by implementing developed tool by the investigator before and after intervention. Chart using their respective scores on pre test and post test are represented in the figure-3.

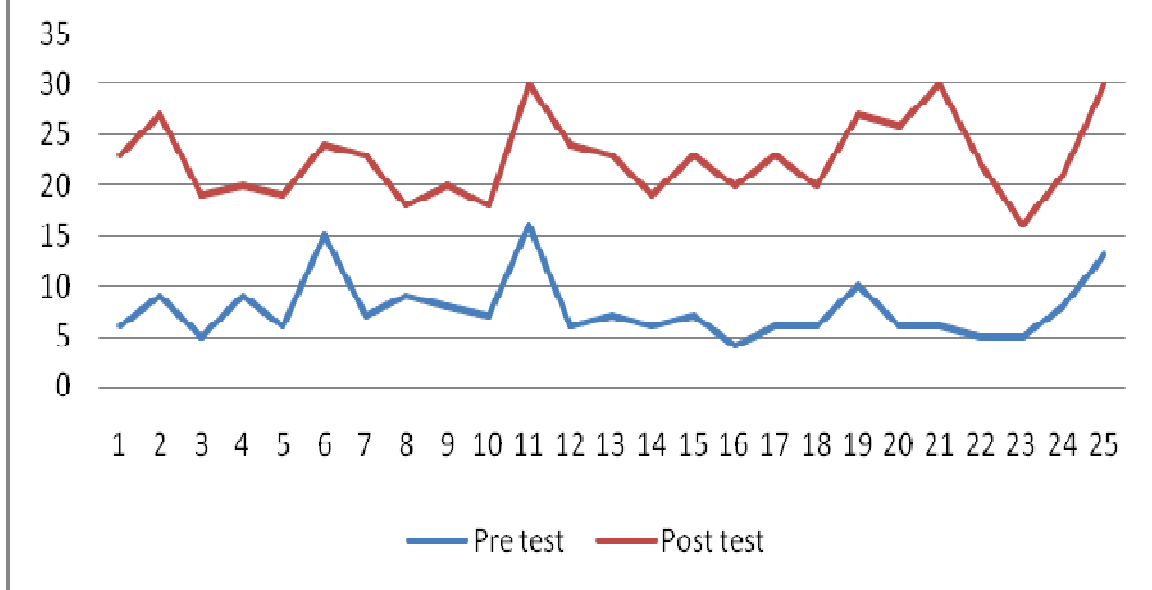Figure-3 Comparative analysis of teacher's performance on Flexibility

There was significant difference between the mean flexibility scores of the sampled teachers on pre test and post test. The relative higher mean scores on post test showed that the teachers have improved on the flexibility dimension of creative thinking.

All the teachers have improved their post test score at the end of the intervention indicating that the developed instructional strategy proved effective in order to improve the flexibility component of creative thinking.

The results of the present study with respect to stated objectives and formulated hypotheses Ho4: There will be no significant difference in the mean originality scores of the sampled group of teachers on the pre test and post test is summarized below.

Originality scores of sampled teachers on creativity have been studied by implementing developed tool by the investigator before and after intervention. Chart using their respective scores on pre test and post test were represented in the figure-4.

Figure-4 Comparative analysis of teacher's performance on Originality

There was significant difference between the originality scores of the sampled teachers on pre test and post test. The relative higher mean scores on post test showed that the teachers have improved on the originality dimension of creative thinking.

All the teachers have improved their post test score at the end of the intervention indicating that the developed instructional strategy proved effective in order to improve their originality component of creative thinking.

The results of the present study with respect to stated objectives and formulated hypotheses Ho5: Sampled group of teachers will have no significant difference in the means scores on pre test and post test on critical thinking is summarized below.

Critical thinking of sampled teachers had been studied by implementing the developed tool by the investigator before and after intervention. Chart using their respective scores on pre test and post test were represented in the figure-5.

Figure-5 Comparative analysis of teacher's performance on Critical Thinking
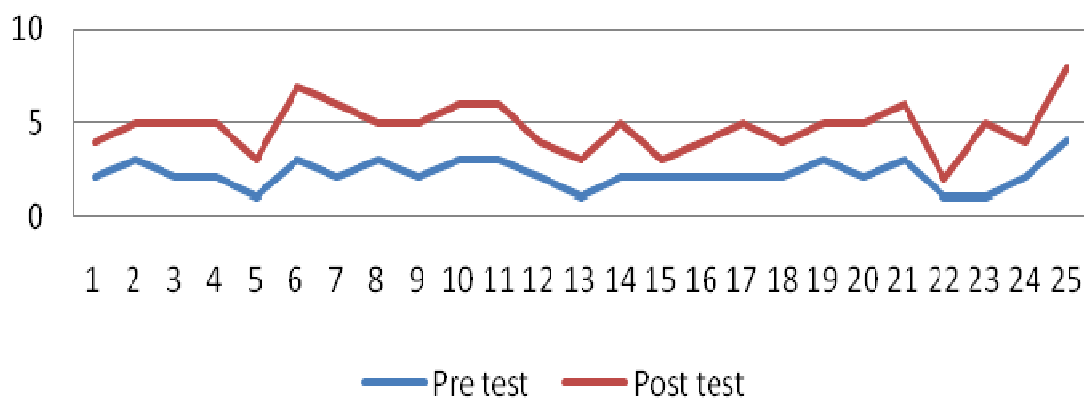
There was significant difference between the scores on critical thinking of the sampled teachers on pre test and post test. The relative higher scores on post test showed that the teachers have improved on the critical thinking.

All the teachers have improved their post test score at the end of the intervention indicating that the developed instructional strategy proved effective in order to improve their critical thinking.

Bibliography

Best, J, W. (1978). Research in Education. New Jersey: Prentice Hall Inc.

Buzan, T. (2001). Power of Creative Intelligence. London: Harper Collins Publishers.

John, P, T. (2007). Quantum Learning Instructional Leadership in Practice. Thousand Oaks, CA: Corwin press.

Mayer, R. (2002). Rote versus Meaningful Learning in "Theory into Practice" Vol.41, No.4

Paul, R. (1995). The Logic of Creative and Critical Thinking, Foundation for Critical Thinking, CA, USA: Santa Rosa.

PROFESSIONAL ETHICS IN TEACHER EDUCATION

Mr. Rajeshkumar V. Parmar

*Mr. Arvindbhai P. Makwana

Assistant Professor,

*Dabhoi College Of Education

Gujarat University, Gujarat

A teacher is more than a teacher. Because a teacher is entrusted not only with educating students but also with helping them grow and develop as human beings, the effective teacher must be not only skillful at promoting learning, but also a model of ethical behavior.

In social studies education there is a concept called the hidden curriculum, referring to the unintended learning that is fostered by a teacher's actions that are not part of his conscious teaching. Students learn from more than the teacher's prepared lessons; they also learn from observing a teacher's behavior. For example, if the teacher believes he is fostering democratic values in the classroom but unintentionally allows students no voice in decision-making, the hidden curriculum is actually teaching the values of an autocracy. If a teacher stresses the importance of ethical behavior to students then engages in unethical behavior, this is another example of the hidden curriculum, of unintended teaching.

Teachers are observed very intently—scrutinized—by students for many hours each day. And for all students, teachers may be revered and seem larger than life. A teacher is more than just a teacher, and as long as this is so, ethics education should be part of teacher education.

Professional ethics has become more important over the years. As we become more specialized in our occupation, the issues become that much more complex – and hard. Professional bodies have increasingly been at work developing, revising and refining

professional codes of ethics. Professionals themselves ask for more detailed codes so as to have greater guidance. There is no longer a deference to the authority of experts on the part of the public or of the client group. The standards for professional conduct keep drifting higher. Where safety and health are at issue, the regulators are under more pressure to act when professional groups do not act. Frankly, it is a sign of maturity, and of professional pride, when a professional group is operating under a code of ethics.

Statement on Professional Ethics was first adopted by the Association in 1966. .2 For example, ethical controversies in recent years have involved research on cloning and genetic engineering, informed consent of human subjects in social science research, potential conflicts of interest due to the greater role corporations now play in university research, the use of the Internet for research and distance education, procedures for reviewing and mediating ethics complaints by disciplinary associations, sexual harassment and racial discrimination, and the necessity of training graduate students in research ethics.

What is Professional Ethics?

Professional Ethics concerns one's conduct of behaviour and practice when carrying out professional work. Such work may include consulting, researching, teaching and writing. The institutionalisation of Codes of Conduct and Codes of Practice is common with many professional bodies for their members to observe.

Any code may be considered to be a formalisation of experience into a set of rules. A code is adopted by a community because its members accept the adherence to these rules, including the restrictions that apply.

It must be noted that there is a distinction between a profession such as Information Systems, and controlled professions such as Medicine and Law, where the loss of membership may also imply the loss of the right to practice.

Apart from codes of ethics, professional ethics also concerns matters such as professional indemnity. Furthermore, as will readily be appreciated, no two codes of ethics are identical. They vary by cultural group, by profession and by discipline. The former of

these three variations is one of the most interesting, as well as controversial, since it challenges the assumption that universal ethical principles exist. In some cultures, certain behaviours are certainly frowned upon, but in other cultures the opposite may be true. Software piracy is a good case in point, in that attitudes towards software piracy vary from strong opposition to strong support - attitudes that are supportable within a particular culture. At the end of these pages is a section called Cultural Perspectives, where we hope to point you to alternative perspectives of ethical standards, attitudes and behaviours.

Issues

Codes of Ethics are concerned with a range of issues, including:

- ➢ Academic honesty
- ➢ Adherence to confidentiality agreements
- ➢ Data privacy
- ➢ Handling of human subjects
- ➢ Impartiality in data analysis and professional consulting
- ➢ Professional accountability
- ➢ Resolution of conflicts of interest
- ➢ Software piracy

The Advantages and Disadvantages of a Code of Ethics

A Code of Ethics enables us to:

- ➢ Set out the ideals and responsibilities of the profession
- ➢ Exert a de facto regulatory effect, protecting both clients and professionals
- ➢ Improve the profile of the profession
- ➢ Motivate and inspire practitioners, by attempting to define their raison d'être
- ➢ Provide guidance on acceptable conduct
- ➢ Raise awareness and consciousness of issues
- ➢ Improve quality and consistency

On the other hand, we must also consider:

> ➢ Whether the so-called standards are obligatory, or are merely an aspiration
>
> ➢ Whether such a code is desirable or feasible
>
> ➢ Whether ethical values are universal or culturally relativistic
>
> ➢ The difficulty of providing universal guidance given the heterogeneous nature of the profession
>
> ➢ What the point is of specifying responsibilities, given the limited regulatory function of a code.

Following are a few thoughts on several other issues of professional ethics, some more critical than others. They may not be as newsworthy as scientific misconduct, sexual harassment, or lying to students, but they are issues of the type that concern almost every faculty member on a daily basis. This is not intended as an exhaustive list of issues within the profession, nor does it reflect the views of the Committee on Professional Ethics. I simply want to highlight some of the ethical considerations that underlie our daily interactions with students and colleagues.

Another aspect of professional ethics that challenges us on a daily basis is the fair and equitable treatment of others within the academic community. As full-time tenure-track jobs have become scarcer and standards for gaining tenure and promotions have grown more demanding, the pressure to produce research, win grants, and publish has increased accordingly. This puts tremendous strain on faculty, especially those just entering the profession. If we believe that faculty should set standards for tenure and promotion, then we must set realistic goals for our peers. It may not be unethical to have higher expectations for a new generation of scholars, but we shouldn't apply higher standards or a lengthened timetable just for their own sake or because administrations demand it. Similarly, when faculty review the work of other faculty for publication, promotion, merit pay, grants, fellowships, or post-tenure reviews, the highest standards of professional ethics and responsibility should prevail. As internal and external reviews multiply and accountability continues to be a requirement for much of what we do, the necessity for responsible and fair reviews by peers and department chairs assumes even more importance. The contentious subject of "collegiality" has become another minefield

of potential abuse, yet we should remember that the word "collegial" literally means shared authority among equals, among colleagues. The real question is: who are our colleagues?

Much the same can be said for graduate students, especially those who take on responsibilities as teachers and research assistants, trying to make a living while they prepare for future careers. Many disciplinary associations, including the Modern Language Association and the American Historical Association, are grappling with the problems that confront graduate students. Is their training really preparing them for the reality of the jobs they seek? Is it ethical to allow students to believe there will be jobs for them when they complete their degrees? Should we provide counseling in alternative careers or reduce the number of graduate students in our institutions? Are faculty exploiting graduate student labor so that professors can devote themselves to research or travel to conferences instead of spending time in the lab or the classroom? We must be responsible mentors, supporting graduate students in their roles as apprentice scholars and employees and upholding their right to organize for purposes of collective bargaining. We could also ask the tough question of academic institutions: is it ethical to charge full tuition when students are actually taught by cut-rate teachers?

One sentence in the Statement on Professional Ethics warrants special attention: "Professors accept their share of faculty responsibilities for the governance of their institutions." This critically important responsibility is too often dismissed as taking time away from important research or classroom duties. But if professors want to safeguard academic freedom and tenure and maintain faculty authority for setting academic standards, then they have an obligation to participate actively in shared governance. Service on a faculty senate or committee should never be dismissed as a waste of time; responsible professional service is crucial to the functioning of our institutions and to upholding the highest standards of our profession.

REFERENCES:

Beyer, L. (1997). The moral contours of teacher education. *Journal of Teacher Education*, 48, 4, pp. 245-254.

Caetano, A. P. (1997). Dilemas dos professores. *In* M. T. Estrela (org.), *Viver e construir a profissão docente*. Porto: Porto Editora, pp. 191-221.

Caetano, A. P. (1998). Dilemas dos professores, decisão e complexidade de pensamento. *Revista de Educação*, VII, 1, pp. 75-90.

Caetano, A. P. (2002). Tensões na investigação-acção e processos de mudança. *Actas do 5º Colóquio da Sociedade Portuguesa de Ciências da Educação de 2000*. Porto: Sociedade Portuguesa de Ciências da Educação.

Colnerud, G. (2006). Teacher ethics as a research problem: syntheses achieved and new issues. *Teachers and Teaching: theory and practice*, 12, 3, pp. 365-385.

Estrela, M. T. (1999). Ética e formação profissional dos educadores de infância. *Cadernos de Educação de Infância*, 52, pp. 27-32.

Estrela, M. T. (2003). O pensamento ético-deontológico de professores em estudos portugueses. *Cadernos de Educação FaE/UFPEL*, Pelotas, 21, 9-20 (Jul-Dez), pp. 9-20.

Estrela, M. T. (2008). Reflexões preliminares a uma intervenção no domínio de uma formação ética de professores para o amanhã. *In* J. J. Boavida & A. Del Dujo, *Sociedade sem Fronteiras — os limites da educação* (em publicação).

Estrela, M. T. & Marques, J. (2008). Vers une formation éthico-déontologique des enseignants. Paper presented at the *Paris International Conference on Education, Economy and Society* (18 July).

Hansen, D. T. (2001). Teaching as a moral activity. *In* V. Richardson, *Handbook of Research on Teaching*. Washingon: American Educational Research Association, pp. 826-857.

Reis Monteiro, A. (2006). Deontologia ou ética profissional: a excepção das profissões da educação. *Seminário Ser Professor Hoje*, organizado pelo Sindicato dos Professores da Grande Lisboa.

Seiça, A. (2003). *A docência como praxis ética e deontológica*. Lisboa: Ministério da Educação/DEB.

Silva, M. L. (1994). *A profissão docente. Ética e deontologia profissional*. Master's dissertation. Lisboa: Faculty of Psychology and Educational Sciences of the University of Lisbon.

Willemse, M.; Lunenberg, M. & Korthagen, F. (2005). Values in education: a challenge for teachers educators. *Teaching and Teacher Education*, 21, pp. 205-217.

Woods, P.; Jeffrey, B.; Troman, G. & Boyle, M. (1997). *Reestructuring schools, reconstructing teachers*. Buckingham: Open University Press.

"Effectiveness of Teacher Training Program with Reference to Teacher Education"

Dr. S. L. Solanki

Associate Professor

A.G. Teachers College,

Navrangpura, Ahmedabad.

INTRODUCTION:

Teacher Education During British Government:

Education of the teachers was not on the main agenda of the British Government. However it extended financial support for the preparation of teachers to private societies in the presidencies engaged in education as early in 1819 and 1924, and thus recognized its importance. But the government support to teacher education formally came as a consequence of woods dispatch of 1854 which acknowledged the deficiencies of teacher training program and suggested some remedial measures. The Indian Education Commission 1882 gave definite directions for taking teacher education seriously. In the resolution for policy of education 1904, Lord Curzon made several concrete suggestions for the improvement of teacher education programs. But it was the Sadler Commission which recommended the establishment of the department of education in universities and suggested its inclusion in the courses of higher learning.

NEED OF THE STUDY:

A dynamic and progressive society has to find ways and means to resolve the issues and solve the problems which it faces in many spheres of life. Educational development has always been a forerunner of social change and development. Therefore, we have been striving hard to find appropriate responses to the challenges in the field of education so as to make it a powerful vehicle of social change. The success of an educational system largely depends upon the quality and the effectiveness of teacher training program with reference to teacher education.

This is with the objective to produce among them commitment to society, trainees and increase competency and performance skills and empower them to face new challenges and meet the goals of secularism, socialism and professional ethics for the same, the present study was decided. The result may be carried out & hope it will be helpful to enhance the teacher training program.

OBJECTIVES:

(1)   To study the responses of trainee teachers regarding the principal for the effectiveness of teacher training program with reference to Teacher Education.

(2)   To study the responses of trainee teachers regarding the professors for the effectiveness of teacher training program with reference to Teacher Education.

(3)   To study the responses of trainee teachers regarding the trainees for the effectiveness of teacher training program with reference to Teacher Education.

(4)   To study the responses of trainee teachers regarding the administrative department for the effectiveness of teacher training program with reference to Teacher Education.

(5)   To study the responses of trainee teachers regarding the infrastructure for the effectiveness of teacher training program with reference to Teacher Education.

SAMPLE:

The sample of the present study is Three Hundred (300) trainee teachers from the different granted B.Ed. Colleges of Ahmedabad.

TOOL:

Selection of proper tool is the important aspect of the study of the various tools; with 100 statements; with five point scale answer was prepared. After the necessary changes 100 statements were selected and the final opinionnaire was prepared.

METHOD:

The survey method, being best applicable for the opinionnaire survey method was used. Moreover, it saves time, energy and money.

COLLECTION OF DATA:

The opinionaire as given to the sample, i.e. the all granted B.Ed, colleges of the Ahmedabad city was distributed among the trainee teachers. The necessary instructions were given and thus, the filled opinionnaire was then collected.

ANALYSIS:

The analysis and interpretation of the data is the most important aspect of any study because it is due to the proper use of statistical method. The path towards the conclusion is derived. The analysis of the data was done with the help of scoring. Against each statement to record their reaction, respondents were allowed five alternatives as : SA (Strongly Agree), A (Agree), UD (Undecided), D (Disagree) and SD (Strongly Disagree). For positively illustrated statements, scoring scheme was followed as 5, 4, 3, 2, 1 and this order was reversed while scoring the responses against negative statements. The maximum score on the inventory amounts to 500 which is equally spread-over as 80 for each of the five generators of teacher training college climate. It sets the range of score in between 1-100 for each dimension and 1 - 500 as a whole on the inventory. The highest scored statements was then converted into the percentile, a statistical method and the result thus obtained; was then interpreted.

INTERPRETATION:

From the analysis of the data, the following has been interpreted.

TABLE-1

'PRINCIPAL' FOR THE EFFECTIVENESS OF TEACHER TRAINING PROGRAM WITH REFERENCE TO TEACHER EDUCATION

No.	Statement	%	Opinion
5	The principal does not follow the policy of divide & rule	80	SD
7	The principal does not have a desired grip over college administration	49 39	DA SD
9	The principal has no interest in the B.Ed, program at all	78	SD
14	The principal has no insight into the administration of the Teachers Colleges	65	SD
17	The principal does not like to meet trainees	67	SD
20	The principal is a moral booster for the trainees	36 41	SA A

From the analysis of the data, the following has been interpreted :

5   It is clear from the table 1 and the responses of 80% trainee teachers is strongly disagreed that the principal does not follow the policy of divide & rule.

7   Responses of 49% trainee teachers disagree and 39% of the same is strongly disagree for that the principal does not have a desired grip over college administration.

9   Responses of 78% trainee teachers is strongly disagree for that the principal has no interest in the B.Ed, program at all.

14   Responses of 65% trainee teachers is strongly disagree for that the principal has no insight into the administration of the Teachers Colleges.

17   Responses of 67% trainee teachers is strongly disagree for that the principal does not like to meet trainees.

20   Responses of 36% trainee teachers is strongly agree and 41% trainee teachers is agree for that the principal is a morale booster for the trainees.

TABLE-2

'TEACHER EDUCATORS' FOR THE EFFECTIVENESS OF TEACHER TRAINING PROGRAM WITH REFERENCE TO TEACHER EDUCATION

No.	Statement	%	Opinion
3	The professor of the teacher training college deliver their classes regularly	61 28	SA A
5	The professors of the teacher training college are found gossiping.	60 35	SD DA
9	The professors of the teacher training college make no effort to develop desired teaching culture.	46 34	DA SD
11	The professors of the teacher training college is a team of dedicated teacher educators.	46 42	S SA
16	The professors of the teacher training college do their best to develop an inspiring climate in the college.	54 41	SA A

From the analysis of the data, the following has been interpreted:

3   It is clear from the table 2 that the responses of 61% trainee teachers is strongly agreed where as 28% of the same is agree for that the Teacher Educators of the teacher training college deliver their classes regularly.

5   Responses of 60% trainee teachers is strongly disagree & 35% of the same is disagree for that the Teacher Educator of the teacher training college are found gossiping.

9   Responses of 46% trainee teachers is disagree & 34% of the same is strongly disagree for that the Teacher Educator of the teacher training college make no effort to develop desired teaching culture.

11   Responses of 46% trainee teachers is agree & 42% of the same is strongly agree for that the Teacher Educator of the teacher training college is a team of dedicated teacher educators.

16   Responses of 54% of the trainee teachers is strongly disagree for that the Teacher Educator of the teacher training college do their best to develop an inspiring climate in the college.

TABLE-3

'TRAINEE TEACHERS' FOR THE EFFECTIVENESS OF TEACHER TRAINING PROGRAM WITH REFERNECE TO TEACHER EDUCATION

No.	Statement	%	Opinion
2	The trainee teachers of the teachers training college play an important role in organization of the college curricular activities.	52 37	A SA
10	They attend the classes only for the sake of completing one's presence.	55 18	DA SD
12	They do not participate in college activities enthusiastically.	60	DA
14	They take the training to be a good teacher very seriously.	44 35	A SD
19	They who fail to get admission any where else, join our college.	61	SD

From the analysis of the data, the following has been interpreted :

2   It is clear from the table 3 that the responses of 52% trainee teachers is agreed where as 37% of the same is strongly agree for that the trainee teachers of the teacher training college play an important role in organization of the college curricular.

10   The responses of 55% trainee teachers is disagreed and 18% of the same is strongly disagree for that the trainee teachers of the teacher training college attend the classes only for the sake of completing one's presence

12   The responses of 60% trainee teachers is disagreed for that the trainee teachers of the teacher training college do not participate in college activities enthusiastically.

14   The responses of 44% trainee teachers is agree and 35% of the same is strongly agree for that the trainee teachers of the teacher training college take the training to be a good teacher very seriously

19   The responses of 67% of the trainee teachers disagree for that the trainee teachers of the teacher training college who fail to get admission any where else, join our college.

TABLE-4

'ADMINISTRATIVE DEPARTMENT' FOR THE EFFECTIVENESS OF TEACHER TRAINING PROGRAM WITH REFERENCE TO TEACHER EDUCATION

No.	Statement	%	Opinion
8	The administrative department of the teacher training college hold different kinds of opinions about administration.	23 17	DA SD
9	There is not a systematical admission procedure in the college.	58 34	DA SD
18	The schedule of the time table is followed very strictly.	61 20	A SA
20	The healthy work culture is the salient feature of the college.	59 32	SA A

From the analysis of the data, the following has been interpreted :

8   It is clear from the table 4 that the responses of 23% trainee teachers is disagreed where as 17% of the same is strongly disagree for that the administrative department of the teacher training college hold different kinds of opinions about administration.

9   The responses of 58% trainee teachers is disagreed and 34% of the same is strongly disagree for that there is not a systematical admission procedure in the college.

11   The responses of 61% trainee teachers is agree and 20% of the same is strongly agree for that the schedule of the time table is followed very strictly.

20   The responses of 59% trainee teachers is strongly agree and 32% of the same is agree for that the healthy work culture is the salient feature of the college.

TABLE-5

'INFRASTRUCTURE' FOR THE EFFECTIVENESS OF TEACHER TRAINING PROGRAM WITH REFERENCE TO TEACHER EDUCATION

No.	Statement	%	Opinion
3	There are not required no. of classrooms in the teachers training college.	48 27	DA SD
7	Essential facilities for co-curricular activities are not available in the teachers training college.	51 24	DA SD
10	The teachers training college library services the purpose very well.	56 34	SA A
14	Adequate guidance services are not available in the teachers training college.	63 18	DA SD
20	A good no. of the teaching aids are available in the teachers training college.	55 26	A SA

From the analysis of the data, the following has been interpreted:

3   It is clear from the table 5 that the responses of 48% trainee teachers is disagree where as 27% of the same is strongly disagree for that there are not required no. of classrooms in the teachers training college.

7   The responses of 51% trainee teachers is disagree and 24% of the same is strongly disagree for that essential facilities for co curricular activities are not available in the teachers training college.

10   The responses of 56% trainee teachers is strongly agree and 34% of the same is agree for that the teachers training college library services the purpose very well.

14   The responses of 63% trainee teachers is disagree and 18% of the same is strongly disagree for that adequate guidance services are not available in the teachers training college.

20   The responses of 55% trainee teachers is agree and 26% of the same is strongly agree for that a good no. of the teaching aids are available in the teachers training college.

CONCLUSIONS:

1.   'Principal' for the effectiveness of teacher training program with reference to teacher education

    1.   The principal does not follow the policy of divide & rule.

    2.   The principals have a desired grip over college administration.

    3.   The principal has interest in the B.Ed, program at all.

    4.   The principal has insight into the administration of the Teachers Colleges.

    5.   The principal like to meet trainees.

    6.   The principal is a morale booster for the trainees.

2.   The Teacher-Educators for the effectiveness of teacher training program with reference to teacher education.

    1.   The professors of the teacher training college deliver their classes regularly.

    2.   The Teacher-Educators of the teacher training college are not found gossiping.

3. The Teacher-Educators of the teacher training college make efforts to develop desired teaching culture.

4. The Teacher-Educators of the teacher training college is a team of dedicated teacher educators.

5. The Teacher-Educators of the teacher training college do their best to develop an inspiring climate in the college.

3. 'Trainee Teachers' for the effectiveness of teacher training program with reference to teacher education.

1. The trainees of the teacher training college play an important role in organization of the college curricular.

2. The trainees of the teacher training college attend the classes only for the sake of completing one's presence.

3. The trainees of the teacher training college participate in college activities enthusiastically.

4. The trainees of the teacher training college take the training to be a good teacher very seriously.

5. The trainees always expect to get admission in our college as a first choice.

❖ The trainees had a word to say about B.Ed. program informally; with the help of observation; as follows below.

- Majority of the trainees do not like the semester mode of studying at B.Ed. program.
- Theory papers are not taught in detail due to crisis of time.
- Much time is devoted to practice teaching.
- Some of the self-financed education colleges do not extend the B.Ed. program seriously.
- 'Educational unemployment' becomes a worry since after having a professional degree.

4. 'Administration Department' for the effectiveness of teacher training program with reference to teacher education

1. The trainees do not hold different kinds of opinions about administration.

2.   There is a systematical admission procedure in the college.

3.   The schedule of the time table is followed very strictly in the college.

4.   The healthy work culture is the salient feature of the college.

5   'Infrastructure' for the effectiveness of teacher training program with reference to teacher education

1.   There are required no. of classrooms in the teachers training college.

2.   Essential facilities for co curricular activities are available in the teachers training college.

3.   The teachers training college library services the purpose very well.

4.   Adequate guidance services are available in the teachers training college.

5.   A good no. of the teaching aids are available in the teachers training college.

BIBLIOGRAPHY

Aggarwal, J.C. (1983). **'Educational Research – An Introduction'**, New Delhi; Arya Book Depot.

Halpin, H.W. & B.B. Croft (1963), **'The organizational Climate of Schools Administration'**, Note Book 11 (7).

Mohan, K. (1980) **'Effectiveness of Teacher Education Programme'**, Ph.D. in Education, Avadh University.

NCTE Document 2004 / 77, (2004), **'Some Specific Issues and Concerns of Teacher Education'**, NCTE, New Delhi.

R.A. Sharma, (2010) **'Teacher Education & Pedagogical Training'**, Meerut. (U.P.)

R.S. Trivedi, **'Prashikshan – Aek Nutan Abhigam'**, Gurjar Granth Ratna, Ahmedabad.

Construction Of Setting Objectives Through Modules In Actual Learning At Class-Room Environment As A Part Of Internal Quality Assessment

Dr.Tejal Pandit

Lecturer, Prakash College of Education

Thaltej, Ahmedabad

E-mail: drtejalpandit1408@gmail.com

Introduction:-

Setting learning objectives is a central activity for clinical teachers and the concept of pre-determined intended outcomes underpins most formal teaching, learning and assessment activities. Opportunities for setting learning objectives arise in formal, planned educational activities as well as in more informal 'moment-to-moment' situations. Clinical teachers can optimise teaching and learning opportunities that arise in daily practice, and support learners' professional development, through an in-depth understanding of the programme of study in which the learner is engaged, effective lesson planning and a continuous monitoring of learners' needs.

Setting learning outcomes: maximising opportunities

There are many opportunities for setting learning outcomes with learners on a day-to-day basis. Spencer's article 'Learning and teaching in the clinical environment' (2003) describes a range of aspects and activities concerned with helping clinical teachers to optimise teaching and learning opportunities that arise in daily practice, such as planning, using appropriate questioning techniques and teaching in different clinical contexts. Such techniques often involve discussing learners' performance or understanding, but the techniques are built into everyday practice.

LESSON PLANNING CHECKLIST

Aim

General aim of the lesson. What generally do you as a teacher want to achieve from the lesson? Does this fit with what the learners have previously been learning and what they are going on to do?

Learning outcomes

What is to be learned as a result of this lesson?

Be specific, be simple, and be realistic. Learning outcomes should be able to be assessed.

By the end of the lesson the learners should be able to:

> Have knowledge of…
>
> State that…..
>
> Demonstrate understanding of….
>
> Explain….
>
> Describe…..
>
> Recall…..
>
> Record…..
>
> Reflect upon…..

Methodology

Approach. How are you going to structure the session?

Teaching and learning strategies? Types of activity? Sequence of activities? Role of students and teacher?

Produce as a programme with times and activities (who is doing what) and resources required.

Resources

What resources will you use? List them:

Books ;journal articles; worksheets/handouts; TV/Video; CD-ROM/Internet resources; PCs; slides/OHTs

Assessment

Pre lesson – What methods are you going to use, informal/formal?

Post lesson – Were learning outcomes achieved? By whom?

Evaluation

Lesson Evaluation

Did the lesson flow? Did it fit into the unit/module/course/programme?

Was the lesson paced well? Good activities? Why? Were activities in logical and effective sequence? Good variety of resources? Good use of resources? What have you learned about teaching and learning? How would you approach this lesson the next time? How could you improve the lesson?

Student evaluation

Who achieved? Why? Why not? Did they find it too difficult? Or too easy? Why? Were learners motivated? Why? Why not? Did they appear to enjoy lesson? Mitigating circumstances? Distracted? Badly behaved? What have you learned? How would you respond next time?

Teacher evaluation

Your input. Clearly structured lesson? Teaching strategies? Student behaviour managed? In what ways? How well? Student interest contained? How? Effective questioning/discussion? What have you learned? How would you amend/improve your input?

This module explores some key educational concepts and applies them to clinical teaching and learning situations. Education uses a range of terms – aims, learning outcomes, learning objectives, competencies – to describe what learners should achieve as a result of educational interventions. This can be confusing, but it is often important that end points are clearly defined before the learning takes place. It is like planning a journey, if you don't know where you intend to go before you start, you may end up where you don't want to be .The term **aim** is usually used to define what the programme or teacher is trying to achieve overall. It tells participants what the programme or session is about. For example: 'the aim of this session is to revise the principles of resuscitation and test your learning with a quiz'. Distinctions between the terms '**learning objectives'** and **'learning outcomes'** have been under debate in medical education for more than 20 years. Learning objectives state the observable and measurable behaviours that learners should exhibit as a result of participating in a learning programme. An example of a learning (or instructional objective) would be: 'on completion of this course, the learner should be able to describe the common causes of a unilateral headache in an adult'; or'by the end of this teaching session the trainee should be able to aspirate a knee joint without undue discomfort to the patient'. Latterly, there has been a shift from defining such specific instructional objectives to providing more broad-based learning outcomes that are intended to arise as a result of the programme.

Harden suggests that learning outcomes (which underpin the 'outcome-based education' model) are essentially more 'intuitive and user-friendly' than objectives, that they are 'broad statements… that recognise the authentic interaction and integration in clinical practice of knowledge, skills and attitudes and the artificiality of separating these' (2002, p. 151). We can think of outcomes as 'learner goals'. For example: 'Graduates must know about biological variation, and have an understanding of scientific methods, including both the technical and ethical principles used when designing experiments' (GMC, 2003, p. 6). Increasingly, at postgraduate level, learners are required to demonstrate specific competencies. An example around history-taking at F1 level might be that the doctor: 'routinely undertakes structured interviews ensuring that the patient's concerns, expectations and understanding are identified and addressed' or 'demonstrates clear history taking and communication with patients' (Foundation

Curriculum, 2005). In practice, the terms 'objectives', 'outcomes' and 'competences' are often used interchangeably.

The diagram below shows how learning outcomes interrelate with teaching and learning methods, assessment, and evaluation and quality assurance. The teacher's role is to ensure that each session integrates with the whole curriculum by providing opportunities for learners to achieve the stated objectives and thus be capable of passing assessments. When writing objectives, always start with a 'stem' phrase, such as: We write this in the future tense. Then use a verb, that states specifically what the learners will be able to do (e.g. 'demonstrate') and which relates to the relevant domain described by Bloom (1956) (in terms of knowledge, skills or attitudes) followed by a clear statement of the topic of interest (e.g. that they can administer an intramuscular injection).
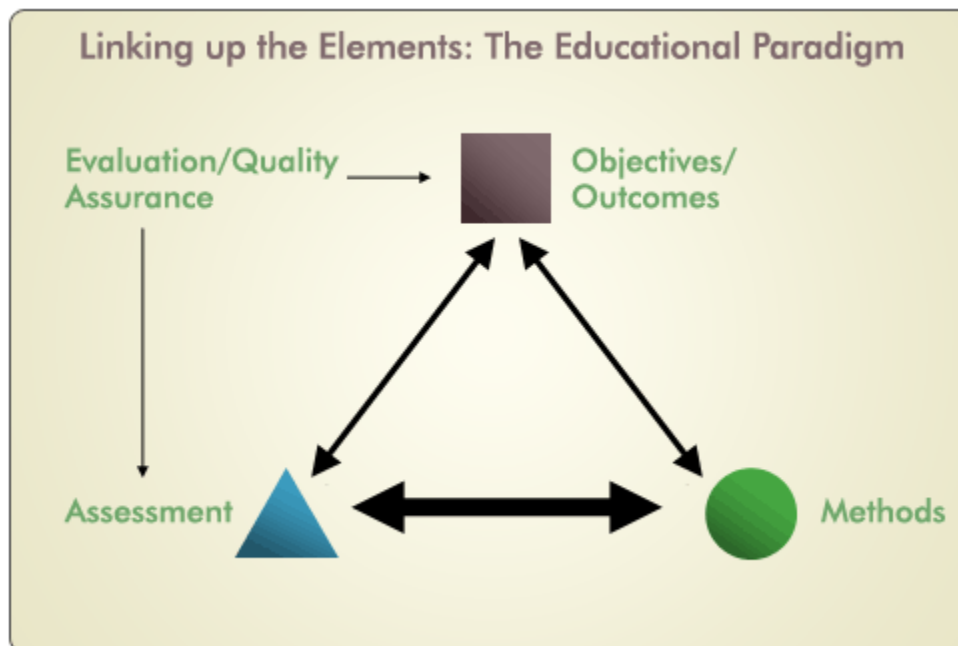
Common pitfalls and how to avoid them

Careful planning helps teachers avoid some common pitfalls when setting learning outcomes for teaching and learning activities. The Table below lists some ways that these might be avoided.

Some pitfalls	…and how to avoid them
Trying to achieve too much in one session	Plan the session carefully, and allow time for discussion, activities and reflection
Trying to cover too many learning outcomes	Stick to a small number of learning outcomes (fewer than five) and be as specific as you can in terms of exactly what you are expecting the learners to be able to do at the end of the session
Learning outcomes not linked to the programme or to learner needs (level, etc.)	Make sure you know and understand the programme outcomes, the assessments the learners are working towards and the expectations of you by course organisers, particularly the outcomes and assessments that relate specifically to your session(s) Include informal and formal activities that help you understand and identify the needs of the learners
Learning outcomes defined at the wrong level (re Bloom)	Think carefully about exactly what you are expecting the learners to be able to do, think about their 'learning journey': their prior learning and the stage they have reached
Learning outcomes in the wrong domain (re Bloom: cognitive, psychomotor, affective)	Map the learning outcomes on to the domains, split objectives that cover more than one domain and design the teaching to enable learners to achieve all the outcomes. If you are assuming that learners have the underpinning knowledge or earlier practice to carry out a complex skill,

	check it out, or break the skill down into sub-objectives
Learning outcomes not specific enough, don't define exactly what you want them to be able to do	Practise writing them and think about how you might assess the objective
Learning outcomes not linked to teaching and learning methods	Select the teaching and learning methods that help learners achieve the outcome (level, domain), e.g. if skills, need demonstration, practice (simulation – real), possibly broken down into steps, build in feedback, not just reading about it or watching a video
Learning outcomes not linked to assessment	Always link the learning outcomes to an assessment (formative or summative), i.e. how will you and the learner know that they have achieved the outcome satisfactorily? Make sure the assessment assesses the right domain so that skills are assessed by practical clinical assessments such as OSCEs
Learning outcomes not practical or feasible	Often there are too many learning outcomes specified to be covered in the time available or with the number or stage of learners. Check out equipment, rooms, other resources and facilities
Learning outcomes not linked to evaluation, little capacity to review and	If you are told what the outcomes are rather than setting them for yourself, be aware of the process by which you can feed back to course organisers about how the session has worked. Think about making the links between

change	learning outcomes, teaching and learning methods, assessment and evaluation transparent so that you can refresh the curriculum. Don't assume that the learning outcomes are set in stone. Update them according to external changes, research and medical advances

To sum up

Setting learning objectives is a central activity for clinical teachers and the concept of pre-determined intended outcomes underpins most formal teaching, learning and assessment activities. Opportunities for setting learning objectives arise in formal, planned educational activities as well as in more informal 'moment-to-moment' situations. Clinical teachers can optimise teaching and learning opportunities that arise in daily practice, and support learners' professional development, through an in-depth understanding of the programme of study in which the learner is engaged, effective lesson planning and a continuous monitoring of learners' needs. This is to conclude that above is one of the major activity which gives the new idea to established educational objectives in terms of the fundamental activity of inernal quality assessment activities.

References

www.gmc-**uk**.org/GMC_**quality_assurance**_of_Specialty_including

www.vit.ac.in/IQAC/index.htm

www.universitycollege.co.in/docs/iqac_report_2009-10

www.iqac.dauniv.ac.i

www.gmc-uk.org/GMC_quality_assurance_of_Specialty_including

Moroney, Jennifer D.P.; Gventer, Celeste Ward; Pezard, Stephanie. Lessons from U. S. Allies in Security Cooperation with Third Countries : The Cases of Australia, France, and the United Kingdom.