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Editorial

Reviewing, Evaluating and Reflecting on the things happened so far with respect to environmental care, health concerns, educational endeavours, classroom practices, introduction of computer education or any such make the functionary to set right the interventions. If the teacher reviews and evaluates not only what he has taught but also how he has taught he can turn into a reaching, touching and competent teacher. If the learner reviews and evaluates not just what he has learned but specifically how he has learned he becomes a self sufficient, independent and successful learner. If the researcher reviews and evaluates what studies went on so far, how they went on and what was brought forth in his or her field of research work he or she can decide what to search, where to search and how to search.

The one who reviews ones behaviour how one feels, thinks and does anything that one keeps improving and gains mastery over oneself. In all these situations there is scope for the identification of what went well? What did not go well? How did it happen so? and why was it so? Thus anybody can learn from review, evaluation and reflection that can guide the future action. This ability to know what we know and what we do not know is called 'meta cognitive behaviour'. It is being conscious of what steps we are taking during the act of learning or solving the problems either academic or non-academic. The simple truth is that we can not improve any process of which we are not conscious. The process of thinking, working and learning determine their fruits. Can we focus on the process than on the product? On the means than on the ends? Self-evaluation, self-criticism, self-monitoring are the key characteristics of the self-motivated learner. This is possible for the people of all ages. If possible who cannot remain as a life-long learner?

-- Aruna Mohan

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Contents

S. No.	Article	Author	P. No.
1.	Emotions Make and Break Relations	Dr. G. Aruna Mohan	1 - 4
2.	Mathematical Creativity of IX Class Pupils in Guntur Corporation	Dr. T. Swarupa Rani	5 - 14
3.	A Study of the Attitude of Rural Parents Towards Girls Education	Dr. L. Bhagya Lakshmi	15 - 20
4.	The Effect of Small Group Discussion on Learning Definitions in Physics	Dr. K. Jayasree	21 - 30
5.	A study of the "Counselling HIV / AIDS Patients	Dr. Maruthi Sarma Mannava, J. V. Rama Chandra Rao	31 - 35
6.	Environmental Geography Education for Sustainable National Development	Bhattacharya	36 - 44
7.	Effect of Yoga on the Stress Levels of Women	Dr. Aruna Mohan Smt. Lalitha Panguluri	45 - 52
8.	Attitude Towards Computer Education of Secondary School Teachers in Machilipatnam	Dr. Vanaja, M. M. Prem Santhi	53 - 60

EMOTIONS MAKE AND BREAK RELATIONS

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The life styles demand much of thought and planning leaving little space for building lively relationships. Building or breaking relationship is mostly the offshoot of emotional behaviour. The emotional appeals work better than rational arguments in influencing human behaviour. Experiences involving strong emotions are usually well remembered. The limbic system which controls emotions, hormones, thirst, hunger, sexuality, metabolism and immune system has developed in evolution before the invention of logic. Feeling has such a premier status. Emotionally rich environment is the actual necessity for better education and for better human relationship. But as of today competition in the field of education is generating mostly negative emotions leaving little scope for positive emotions that nourish relationships.

Man is racing towards acquiring wealth but at the cost of physical and mental health. Even the world is moving towards the knowledge societies amidst the flood of information. Hence man is indulged in restless thinking to achieve the projected excellences as goals. But the cultural aim of education is building the whole man. No doubt there is technological progress and production of varied things, but it is consequently making the rich richer and the poor poorer. Varied welfare schemes to bridge the gap between the richest and poorest seem to be the solution. But unless the hearts are rich any number of welfare schemes can have only immediate appeals but without long term good effects. Thus they are failing to pave the way for sustainable development. One does not have time to feel the other person, neighbour, and even the members of the family or of professional group. The simple want of the day is revival of the feeling component in man which is the most precious in quality living of the human kind. All kinds of emotions have their roles in the human lives. If some emotions are over lived and some other emotions are underlived, there is an imbalance in their total role in human life.

Education for Emotional Life

As physical education and yoga asanas are for a physically healthy development, so is emotional education for a mentally healthy development. In positive emotion the brain functions more efficiently. But the human brain has been damaged and deformed by the constant pressure of our ambitions, by our grief, anger, anxiety, resistance, violence, fears, pleasures and so on. Unless the brain has the capacity to renew itself there will be distortion. Thoughts are occupying the brain and limiting the space. Due to lack of space

there is resistance in the brain. The brain has to be brought back to its original quality of freshness, clarity, capability of instant decision and so on. Otherwise the prolonged stressful thoughts activate the adrenal cortex and increase the release of endorphines. Those changes tend to suppress the activity of immune system.

Some people are mostly preoccupied with themselves. They think of themselves so much that their little egos or big egos are the centres of their preoccupation and always feel sad and dissatisfied. Such people lose courage, turn anxious or aggressive or angry if their wishes are not fulfilled. Feelings of guilt, sadness thus colour each memory of the past events. Thus anger and pressure of the past may be connected with our current activity. These emotional charges that accompany our thoughts are our attachments. These attachments create stress.

We may think in rapid succession about what we need to do in the future or events of the past or what we are doing in the present. The mind becomes exhausted by running from topic to topic. The most crucial aspect is that there is an emotional charge coupled with each thought in this process of leaping from thought to thought. Mental activity always precedes and directs physiological activity. All thoughts create a physiological response. If we think about something that angers us, a subtle echo of this takes place throughout the muscles and nervous system, brain waves, blood chemistry and cardio vascular system.

Positive Emotions in Relationships

When a person is pleasant in his expressive disposition he is easily and immediately approached when needed by others. One's pleasantness inculcates pleasantness in the other. Curt look keeps the people at a far. Indifference disconnects the necessary dialogue too. If he cares to respond the other forms the association. If his response is adequate the other one is comforted. If he further adds what is required though not inquired by the other he infuses gratitude. The feeling of concern, affection, love, compassion, joy, happiness and other such are less experienced these days. We, the human beings must have great feeling. But to most of us it is very difficult to feel things greatly, deeply and penetratingly because of many problems and preoccupations. Feeling means the quality of perception, the quality of listening and the quality of observing. Feeling for all is compassion. That is the quality of love for anything - love of trees, love of skies, love of neighbour, love of rocks and love of learning. Without love one cannot have compassion. When there is compassion there is clarity. From that clarity comes out skillful action and skillful communication.

This is an accurate, non-judgemental sensitivity to people and other living beings skillful. A person of sensitivity and intelligence can have a deeper understanding of the actuality of life. Feeling makes a person to perform the necessary action. Though capacity

to judge is one aspect of intelligence when we judge headlessly compassion is excluded. Emotional intelligence is an appreciation of where the other person is. Analysis is not the essence of compassion. It is vital to recognise that there is a profound form of intelligence associated with the capacity to receive and empathise with the suffering of living beings. This recognition can bring into focus both the willfulness and limitations of discriminative understanding. The function of compassion is the adding of the feeling without explaining anything at all.

Negative Emotions in Relationships

Most of us do not mind being angry. We find an excuse for it. If we are ill treated we become righteously angry. We do not stop there. We go into justification or elaborate explanations of its cause. This explanation sustains anger. The anger of disappointment, of jealousy, of the urge to wound gives way to violent release like condemning others. We want to be praised or want something. If these wants do not happen we become bitter and disappointed and start blaming some one. Anger has a peculiar quality of isolating the angry person. It cuts one off all relationships.

Aggressive Feeling

We are aggressive, fighting with the other, all along the way of living, both psychologically and physically. Aggression is also due to imprinting in childhood by the mother, the father, the society, i.e. the aggressive peers around and by the media these days. It is also an inherited instinct from animal. But it is seen in animals only in certain seasons like in mating and while others approach their territory. But aggression in human beings is boundless due to comparison and competition. The destructive nature of competition and comparison is identified by the scientists also.

We don't like people to criticise us. We hold on to a particular belief or dogma. So we are aggressive and violent in our secret and private lives. We are aggressive because we are defensive. We are ambitious, greedy, acquisitive; so we are outwardly and collectively, aggressive, violent and destructive. We want to express ourselves at any cost. We want to exercise our will and individual freedom without examining it.

Fearfulness

Man has been living with fear since times immemorial. We experience fear of accidents, fear of disease, fear of death, fear of public opinion, fear of not fulfilling ambitions, fear of old age, loss of sight, loss of wife and so on, both consciously and unconsciously. Many of the fears are imaginary. For instance one is healthy now. He thinks that he might be ill. The thought of illness causes fear. Due to fear we don't participate in life spontaneously and fully. Thus fear, indirectly, gives no scope for positive feeling towards anything or anybody.

Educational Inference

If we have done something wrong and are told about it usually we feel hurt. Though we have done it we become angry without seeing that as wrong doing. Instead of having a self - concept or image about us as 'good and never go wrong' we need to understand by looking at our action. This is nothing but having an objective or scientific look at the facts about us.

If we suppress anger, as we usually try to do, it is transferred to a different level giving it a different name, but it is still part of it.

When another person is angry we also, turn angry to meet it. Then there is mounting of anger of both. One has to understand ones anger and another in anger to manage the situation.

It is possible by observing our thoughts and feelings without reacting. But we give no time to do so as our minds are very busy. The busier our minds are, the lesser we feel, the hearts natural impulse to awaken. No doubt that our environment also makes us so busy that we think, think and think all the time. Our senses are so stimulated that we go into automatic and lose a lot of sensitivity. Apart from all these if we are not self-centered we can be sensitive in our relationship.

Emotionally touching relationships between the teacher and students and between the students are precious as they charge the whole institutional ecology with the energetic participation and free expression of children of various stages. Education is to feel the situation, to perceive the fact and perform the right action. It is awareness of emotion, expression of emotion to the needed extent and freedom from emotion that build relationships.

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MATHEMATICAL CREATIVITY OF IX CLASS PUPILS IN GUNTUR CORPORATION

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The study is focussed mainly on the Mathematical problem creating ability of IX class students. An attempt was made to find the Mathematical creativity of the pupils with respect to the components of creativity such as fluency, flexibility, originality, elaboration and red definition. The study was designed to measure Mathematical creativity in terms of creation of as many mathematical problems as possible for the given solution or answer of the problem. It was also an effort to find the relationship between Mathematical creativity and the 'freedom' of the pupil's experience at home and school.

Introduction

Education is one of the ways and means of achieving goals of life and the highest form of education is creativity. Creativity is the unique characteristic of human beings. The importance of creativity has been stressed in the New Education Policy (1986). The purpose of education in a democratic country like India should be the development of divergent thinking in the students. Guilford (1959) stressed the importance of developing divergent thinking abilities in the children. The world in which we live and the world of the future demands new ideas, new processes, new methods and inventions. Creative thinking is the highest of mental abilities and creative production is the peak of human achievement. When a person is able to express himself and is able to contribute something which is unique, novel, recognised and appreciated by one and all, the satisfaction and delight received are immense and immeasurable. It gives the inventor a sense of thrill and joy. It serves as an impetus to the person to achieve greater things and reach greater heights. Darwin (1959) considered creativity as a cosmic life and Kohler (1964) as association and a restructure of patterns. Maslow (1958) felt that creativity is a self actualization ability. Apart from all this creativity in mathematics is unique and has a class of its own.

Mathematical Creativity - its Significance

Problem solving ability is one of the highest forms of Mathematical ability while creation of mathematical problem surpasses problem solving ability as argued by Einstein (1938). In his own words, "The formulation of a problem may be more important than its

solution, which may be merely a matter of mathematical or experimental skill". To raise new questions, new possibilities, to regard old questions from a new angle, requires creative imagination". Mathematical creativity also centers on the quality of the mathematical problem rather than the solution.

Mathematical creativity helps the pupils in developing creative imagination, analytical ability, reasoning power and problem solving ability to solve the difficult problems of real life and give original, real, unusual solutions in a very effective and easy manner. For children to become young mathematicians, they require creative thinking, an element of risk taking, imagination and invention. Creativity in mathematical education relates to the processes and product of observation, memorization, imagination, thinking, reasoning, problem solving, skills that children can develop, which will support deep levels of learning. Mathematical creativity enables pupils to generate and extend ideas, to suggest hypothesis, to apply imagination and to look for alternative outcomes, it also includes novel, unique and unusual solutions to the problems in mathematics and to the life.

Even though creativity is a natural endowment, it is necessary to stimulate and nurture, mathematical creativity in the students. Human development and national progress will reach maximum level if mathematical creativity is nurtured in the students.

It seems that very little effort is being made in our schools and colleges for the development of creativity in the divergent thinking in the students through the different academic subjects. Guilford measured creativity in terms of its components such as i) fluency, ii) flexibility, iii) originality, iv) elaboration and v) redefinition. Apart from his mode of measure there are many techniques to measure creativity in general. But there is no established criteria to look for a source to measure mathematical creativity. Basing on Guilford's measurement, mathematical creativity can also be measured, considering the components of creativity proposed by Guilford.

The researcher in this study has mainly concentrated on the mathematical creative ability of the students. In this mathematical problem creating ability of secondary school students was identified and estimated with the help of the components of creativity. Students have to create as many mathematical problems as they can for a given mathematical solution. The investigator also feels that creativity depends on the freedom of the individual in the school and at home. So the mathematical creativity was related with the factor "freedom the students experience at home and in school".

Title of the Study

Mathematical Creativity of Secondary School Pupils.

Objectives of the Study

1. To find the mathematical problem creative ability of the IX class pupils and to classify them according to problem creating abilities.
2. To find the mathematical creativity of the IX class pupils with respect to the following components.
 - (a) Fluency in creating mathematical problems to a given solution.
 - (b) Flexibility to create different possible mathematical problems.
 - (c) Originality or uniqueness in the created problems.
 - (d) Elaboration or unusual description of mathematical figures and concepts.
 - (e) Redefining the already known mathematical concepts in a novel manner.
3. To find the influence of the following variables on mathematical creativity of the IX class pupils.
 - (i) Gender; (ii) SES; (iii) Type of schools; (iv) Parental Education, (v) Freedom at home and at school.
4. To find the relationship between the mathematical creativity and the aspect freedom of the pupils at home and school.

Operational Definitions of the Key Terms

Mathematical Creativity : Mathematical creativity in this study was taken as the ability of the pupils to create and construct as many mathematical problems as possible for a given solution. It includes thinking and restructural abilities of the pupils measuring in terms of its components.

Fluency : Spontaneous expression in the creation and construction of mathematical problems relating to the central theme.

Flexibility : Adoption of new techniques to create mathematical problems and also taken as the maximum number of possible problems.

Originality : Expression and unique style in the created problems.

Elaboration : Description of figures, detailed steps, variety of implications.

Redefinition : Unusual way of perceiving and defining the problem and it is the ability to arrange mathematical ideas, concepts, figures and use them in a novel manner.

Hypotheses of the Study

1. There exists a significant difference in the mathematical creativity of boys and girls.

2. There exists a significant difference in the mathematical creativity of pupils having different socio-economic status.
3. There exists a significant difference in the mathematical creativity of pupils studying in different types of institutions.
4. There exists a significant difference in the mathematical creativity of pupils having different parental educational background.
5. There exists a significant relation between mathematical creativity and the aspect freedom at home and school.

Method of Investigation

Descriptive Survey Method was followed to conduct this study.

Sample

A stratified random sample of 200 secondary school students were drawn from the different schools of Guntur by considering the variables Type of School such as Government and Private, Residential and Non-residential and Gender i.e. Boys & Girls.

Tools Used in the Study

Two separate tools were used to carry out this study. One was the questionnaire used to measure the creativity of the IX class pupils which is called as "Questionnaire on Mathematical Creativity" (QMC). The second tool was to measure the freedom experienced by the pupils in the school and home.

Description of the Tool

i) *Questionnaire of Mathematical Creativity (QMC) :*

The tool QMC consists of 4 types of different mathematical data. First two items consist of the solutions of the two different problems. For these two solutions students have to write as many questions or problems as they can. Through this the components of creativity such as fluency, flexibility and originality, elaboration and redefinition are measured.

(ii) *Description of the tool of Questionnaire on Freedom experienced by pupils at Home and School (QFHS) :*

This questionnaire consists of 30 items. 14 items under the aspect Freedom at home. 16 items under the aspect Freedom at school. Under each aspect there are positive and negative items.

Scoring Criteria

In the second questionnaire (QFHS). There are 30 items with responses Yes/No. Maximum score for each question is 0 or 1 for negative items.

The first questionnaire was scored according to the components of creativity. Allotting 1 mark for each fluently created problems by the pupils. The component flexibility was measured by allotting one mark to each flexible solution. For originality marks are allotted for uniqueness of the solution. For each unique solution one mark is allotted. In elaboration and redefinition pupil has to answer 5 types of descriptions for each item.

Reliability and Validity

Reliability of the tools was measured by the formulae Chronaboch.

$$\frac{n}{n-1} \left(1 - \frac{\sum Si^2}{\sum St^2} \right)$$

Reliability coefficient for 1st questionnaire (QMC) is 0.691 and the second questionnaire (QFMS) is 0.71. The questionnaires are reliable. The validity is established by taking the opinions of the experts and educationists. Therefore these two tools are reliable and valid.

Data Analysis and Findings

Table 1 : Mean, S.D., Percentage Mean of Mathematical Creativity

S.No.	Sample	Mean	SD	% Mean
1	200	21.45	10.8	21.45

Table 2 : The Classification of Mathematical Creativity of IX Class Pupils

S.No.	Level of Mathematical creativity	No.of Creative Ability	Percentage Students
1	High (34-50)	20	10
2	Average (17-33)	106	53
3	Low (0-16)	74	37

Table 3 : Components of Creativity

S.No.	Components	Mean	Percentage of Mean	SD	Order of Merit
1.	Fluency	8.05	40.25	4.23	1
2.	Flexibility	4.38	21.9	2.78	3
3.	Originality	1.2	6.0	0.872	5
4.	Elaboration	6.44	32.2	3.789	2
5.	Redefinition	2.02	10.1	1.811	4

Findings

1. Pupils of Guntur Corporation are having the minimum level of creativity in mathematics.
2. High creative pupils are very minimum and low creative pupil are minimum. Most of the pupils are having average creativity.
3. The third component 'originality' takes the least place in the sample, i.e., only 6% of marks are scored in the component 'originality'.
4. 'Redefinition' component got the next least place in all the components. Only 10% of marks are scored in it.
5. Thirdly, the component 'flexibility' which scores nearly 22%.
6. In the component 'elaboration' the sample got the score of 32.2% and got second place in the hierarchy.
7. The component 'fluency' got the first place in the sample taken with a score of 40%.
8. Hence it can be concluded that in the components originality and redefinition, students expressed their minimum creative ability and in elaboration to some extent and in fluency the maximum creative abilities.

Hypotheses Testing

Table 4 : The Influence of Gender on Mathematical Creativity

S.No.	Gender	No. of Students	Mean & % of mean	SD	SED	't' value
1.	Boys	110	20.82	10.1	1.499	1.054 ^{NS}
2.	Girls	90	22.4	10.9		

Table 5 : Influence of Socio-Economic Status on Mathematical Creativity on SES

S.No.	Socio-Economic	No.of Status	Mean & Students	SD % of Mean	SED	't' value
1.	High	20	21.5	1.4	1.0621	0.2354 ^{NS}
2.	Moderate	106	21.25	10.45	1.66	0.4096 ^{NS}
3.	Low	74	21.93	11.3	1.351	0.3183 ^{NS}
4.	High	20	21.5	1.4		

The influence of mathematical creativity on type of schools

S.No.	Type of	Sample Schools	Mean &	SD % of Mean	SED	't' value
1.	Private	47	22.511	9.78	1.993	0.47717 ^{NS}
2.	Govt.	67	22.56	11.75	2.168	2.795**
3.	Residential	32	16.5	9.19	2.1935	2.635**
4.	Missionary	54	22.28	10.83	2.0511	0.6002 ^{NS}
5.	Private	47	22.511	9.78		

Table 6 : The influence of mathematical creativity on type of schools

S.No.	Type of	Sample	Mean &	SD	SED	't' value
		Schools	% of Mean			
1.	Private	47	22.511	9.78		
					1.993	0.47717 ^{NS}
2.	Govt.	67	22.56	11.75		
					2.168	2.795**
3.	Residential	32	16.5	9.19		
					2.1935	2.635**
4.	Missionary	54	22.28	10.83		
					2.0511	0.6002 ^{NS}
5.	Private	47	22.511	9.78		

Table 7 : To Compare the Mathematical Creativity on different types of schools

S.No.	Type of	Sample	df	SSM	SSW	'F' value
		Institution				
1.	Private	47				
2.	Govt.	67				
			196	2148.67	21187.05	6.565**
3.	Residential	32				
4.	Missionary	54				

Table 8 : Influence of mathematical creativity on Parental Education

S.No.	Variable	Sample	Mean	SD	SED	't' value
1.	Educated	180	22.028	10.654		
					2.677	0.083 ^{NS}
2.	Uneducated	20	22.25	11.432		

Findings

1. Therefore there is no significant difference between the mathematical creativity of boys and girls.
2. Even though there is difference in the mean values of boys and girls that difference is negligible and not significant.
3. Hence Boys and girls are expressed similar creative abilities in mathematics.
4. There is no significant difference in the mathematical creativity of the children whose parents do belong to high and moderate Socio-economic status.
5. Hence there is no significant difference between the mathematical creativity of children whose parents belong to moderate and low socio-economic status.
6. Hence there is no significant difference between the mathematical creativity of children whose parents belong to low and high socio-economic status.
7. 't' value of the scores of the pupils studying under Private and Government schools is not significant at both the levels. Therefore there is no significant difference in the mathematical creativity of the pupils studying in Private and Government schools.
8. Creativity was not influenced by the type of the school , i.e., Private or Government.
9. There exists a significant difference in the mathematical creativity of Government and Residential school pupils. From the mean values it is evident that pupils studying in the Government institutions are more creative than students studying under the Residential school.
10. There exists a significant difference in the mathematical creativity of Residential and Missionary school pupils. From the mean values it is evident that pupils studying in missionary institutions are more creative than students studying in Residential schools.
11. There exists a significant difference in the mathematical creativity of pupils studying under Private, Government Residential and Missionary.
12. There is a positive and low correlation between mathematical creativity and the freedom the pupils experience at home and school.
13. Education of the parents has no influence on the mathematical creativity of the pupils therefore Mathematical creativity is independent of the education of the parents.

Summary and Conclusions

The study reveals the important and interesting findings. The pupils of Guntur Corporation are having low mathematical creativity. The components of creativity such as originality and redefinition of the pupils is minimum. Pupils are not interested to do the

new problems and create new solutions. Boys and girls expressed equal levels of creativity and the significant difference is not found in their creative potentialities. Significant difference is not found in the creative abilities of the students with respect to the socio economic status of the parents. Government school pupils are more creative than the residential school pupils. Education and SES of the parents don't influence the Mathematical Creativity of children. This study gave satisfaction and a sense of achievement to the researcher of having contributed something to the field of Mathematical Creativity, which is lacking in the pupil's and teachers in the field of education.

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A STUDY OF THE ATTITUDE OF RURAL PARENTS TOWARDS GIRLS EDUCATION

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Education makes a man self-reliant and selfless. According to Aristotle, education means “Creation of a sound mind in a sound body”. Education is a science as well as an art. It develops man’s mind. Education is very important to every person. There is a proverb in Telugu “Vidya lenivadu vinta pasuvu” which means that man is a strange animal without education. It is the education which makes man a real and sensible human being, helpful and fitting in the society. Education is the right of all human beings, men and women.

Today, there is a realisation among the people about the importance of education. In spite of this realisation, education of the girls is not given its due place. Men continue to look down upon women. Women have been classed as the weaker sex and as such they are dependent on men. Despite many social barriers limiting the freedom of women in social life, history has recorded many women who were outstanding in their life and society.

In today’s society, the modern woman is not prepared to accept the view that marriage is a woman’s destiny. She would say that a woman has as much a right to be educated and become established in life as any man. Woman is in no way inferior to man and so she has equal right to be educated.

Woman in the past was not educated and was always kept under control and subjugated. Marriage was her only aim and devotion to her husband and his family was her sacred duty. There was no life for her outside the home. She did not enjoy any status in the society. At the turn of the century, the earlier opposition to woman’s education fizzled out. However, a number of obstacles remained in the way of women’s education. Most of these obstacles exist only in people’s minds in the form of prejudice, traditional beliefs and cultural practices.

However, as a result of the efforts of social reformers, the upper middle class women of the society had some sort of schooling. The rural and urban orthodox families still considered that educating a girl was unnecessary and even dangerous, because education led her to think independently. They felt that an educated and status - oriented women would refuse a submission role. This resulted in the wide illiteracy of women, child marriages and lack of higher education for girls.

The literate parents feel that education is compulsory for children whether they are boys or girls. Though the ultimate aim behind this is getting some job, most of the parents feel that children, both boys and girls, get knowledge and learn social behaviour like adjusting and understanding others, if they attend the school. Besides getting knowledge, the children learn good manners. The educated parents also feel that education of girls should be encouraged, as the percentage of results in public examinations is greater in case of girls than in boys. There is no field which a woman cannot enter equally as man.

The illiterate parents differ in their attitudes. Some are interested in sending the girls to schools. Others feel that education for girls is not needed because they have to do household work and help mothers in their work. They feel that if girls are educated, they may become proud and therefore cannot be subordinate to their husbands and in-laws. Due to this, many problems may arise. Even if girls are educated, dowry is demanded. So, it is waste to spend money on the education of girls. Some parents feel that, though they are interested in educating the girls, their neighbours keep discouraging them.

On the whole, the researcher feels that, generally, there is a negative attitude towards education of girls. In fact, some parents are indifferent towards the education of girls. Unless this attitude among parents changes, the literacy rate of girls cannot be improved and education of girls will not have any growth.

Girl's education is drawing greater attention of our educators, government, parents and public. According to statistics of the census of India, the graphs reveal to us that percentage of educated women is very low in our country when compared to that of men. So there is something fundamentally wrong or there may be some strong cause for more uneducated women in our country. These causes should be found and proper solutions should be worked out so that all women receive education. Hence this study on the attitudes of rural parents towards girls education.

Review of Related Research

Lakhar, B. (1976) studied the progress of Women's Education in Assam from 1874 to 1970 and found that separate schools for girls were opened after the advent of the British and Missionaries. The missionaries were the first to start the schools for girls in Assam. In the beginning, a few girls attended the schools. Teachers were given rewards for securing enrolment of girls. Fee were compulsory for girls in primary schools but in upper primary and middle schools fee were abolished. The gradual increase in the rate of enrolment of girls in colleges led to opening of the high schools for them. The missionaries

took a lead in the training of teachers. Training classes were opened at Nowgang and Silchar for vernacular teachers.

Das, R. (1979) studied the Women's Education in Assam in the Post Independence Period (1947 - 1971) and its impact on the social life of the state found that there was an increasing trend or positive rate of growth during the period of the study. Compared to the increase in the number of men's colleges, the women's colleges did not increase proportionately. There was a wide gap between the educational opportunities and facilities available to men in comparison to women.

Singh, V. (1998) investigated the extent and causes of dropouts among girls in rural schools of Chandigarh. He found that the drop-out rate of rural girls was higher at class I in the primary stage compared to other classes; with this rate going down in the higher grades the girls were weak in English and Mathematics. Parents were unwilling to send their daughters because of domestic reasons.

Jain, G. (1990) found that both rural and urban adolescent girls aspire to study science as their first preference and prefer government service as a first choice followed by banking, civil services and clerical work. The aspiration level of both rural and urban girls was found to be average.

Nayer, U. (1991) found that the provision of schooling / educational facilities for girls is low and its utilization is lower on account of social, economic, and attitudinal barriers and mere physical distance. The curriculum and its transaction remain sex-stereo types and biased. Poverty and hunger are listed as the chief causes of non-enrolment and non-attendance of girls.

Duggal, J. (1992) made a micro study of access of scheduled caste girls to elementary education in rural Haryana and found that physical facilities in sample schools were inadequate and their utilization was low.

Research Design

The problem chosen for this study was 'an investigation into the attitudes of the rural parents towards girls education' in relation to some variables. The variables considered in the study were sex and type of literacy. The hypotheses were formulated in null form.

A sample of one hundred rural parents was selected for the study using stratified random sampling technique. Out of the total sample, 50 were literate parents and 50 were illiterate parents. Out of 50 literates, 25 were male and 25 were female; and out of 50 illiterate parents, 25 were male and 25 were female.

The researcher constructed a tool consisting of 50 items with a three point rating scale and used it to find out the attitude of rural parents towards girls education.

Conclusions and Recommendations

The following are the conclusions drawn from the present study and these are followed by necessary discussions and recommendations.

1. Attitudes of Rural Parents towards Girls Education

Table 1 : Attitude of Rural Parents towards Girls Education

Sample Size	Mean	Standard Deviation
100	126.2	12.9

1. The Rural Parents are having high attitude towards Girls Education

It is a good sign to see most favourable attitude in rural parents towards girls education which mirrors the importance of girls education realised by them. Though the rural parents have most favourable attitudes towards girls education, the educational facilities that are available do not fulfil their ambitions and aspirations. Hence, it is the duty of the government to provide all the facilities keeping in view the girls and extend the necessary incentives to the concerned, to promote girls education to the expected levels.

2. Comparison of Attitudes of Male and Female Rural Parents

Variable	Sample Size	Mean	S.D.	Mean difference	C.R.
Male parents	50	125.2	14.2		
				2.4	0.93*
Female parents	50	127.6	11.3		

** Not Significant at 0.01 level*

2. Both the male and female rural parents are having most favourable attitude towards girls education without any significant difference between them.

This result reflects the ideas of both men and women parents about the need and importance of girls education. As the families are closely knitted, both men and women have abundant consciousness about the role of education in the lives of their girl children. Hence, it is the obligation of the concerned authorities to make the girls reach every level of education with ease.

Table 3 : Comparison of Attitudes of Literate and Illiterate Rural Parents towards Girls Education

Variable	Sample Size	Mean	S.D.	Mean Difference	C.R.
Male parents	50	125.6	11.9		
Female parents	50	127	14.6	1.4	0.53*

** Not Significant at 0.01 level*

3. Both the literate and illiterate rural parents are having most favourable attitude towards girls education without any significant difference.

Irrespective of the literacy status, both literate and illiterate rural parents are conscious about the values the girls derive from education. Because of this attitude only, all the rural folk are sending their girls to schools and colleges along with their boys without any discrimination. To support the efforts of the rural parents, the government and the concerned authorities need to extend all support to promote girls education.

1. More and more facilities should be provided for girls' education so that the position can improve since the attitudes are found favourable.
2. Parents should be induced in various ways to send their daughters to schools.
3. Appropriate incentives to attract more girls to educational institutions must be given.
4. Curriculum should be organised in such a way so as to suit the girls.
5. Schools exclusively for girls should be increased.
6. Teachers should treat the girl students with due dignity and respect.

Suggestions for Further Research

The following recommendations are worthy of consideration in view of the conclusions drawn.

1. Though the attitudes of people towards girls education are favourable as is proved by the present study, girls education is still lagging behind boys education for which there may be other strong reasons. Hence, a scientific probe into the other causes for back-log in girls education be taken up.
2. A study may be taken up on girls education in the tribal areas.
3. A study may be taken up in girls education in the urban areas.

4. A comparative study of girls education at different stages of education may be taken up.

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The Effect of Small Group Discussion on Learning Definitions in Physics

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Introduction

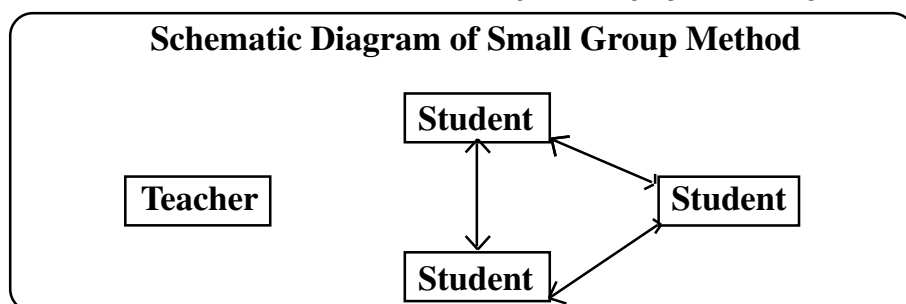
" By education, I mean an allround drawing out of the best in child and man - body, mind and spirit" . -- *Gandhiji*

Education is a process of increasingly intentional self optimization of individual and social life. It has almost revolutionized human life and proved indispensable for existence. Infact, so great is its impact on man and society, that we live in an 'age of science'. The purpose of physics teaching in secondary schools is to enable students to grasp systematically the basics of physics needed for the further study of modern science and technology and to understand their applications. Definitions are very important in physics because they are the principles of physics. Depending on the nature of the content, the teacher can select and use various models and techniques wherever required. These models and techniques of teaching provide and guide the teacher to make the teaching - learning process more effective. Lecture method and Lecture demonstration method are 'Teacher centered approaches' of teaching. Students' involvement and participation is nil or quite less in these methods.

Problem solving method, Laboratory method, Project method, Scientific method, Small group method are 'Pupil centered approaches'. There is an active participation of pupils in these methods. They are very slow, and time - consuming processes and limit the coverage of adequate amounts of knowledge and information to be imparted to the pupils in the face of external examination. Out of all these pupil centered approaches, the instructional strategy that has become increasingly important, as school goals move from strictly content orientation to one in which process assumes more significance is the small group method.

What is Small Group Learning ?

The concept of small group learning refers to instructional methods and techniques in which students work in small groups (four to six members) and are rewarded in some way for performance as a group. Small group learning is a method of teaching and learning in which students team together to explore a significant question or create a meaningful project. In this model, the teacher provides instruction to group leaders, who in turn present the information to their individual groups. The students have a shared responsibility for learning the material, and the instruction is evaluated and rewarded on the basis of group achievement.



According to Orlich and others the elements of the small group method are :

1. A small number (four to ten) of students meeting together.
2. Recognition of a common topic or problem.
3. Interaction, exchange and evaluation of information and ideas.
4. Direction towards some goal or objective.
5. Verbal interaction - both objective and emotional.

Goodsell, Maher and Tinto (1992), describe small group learning as working in groups of two or more, mutually searching for understanding, solutions or meanings or creating a product.

According to Johnson et. al. (1991), small group learning is not having students sit side - by - side at the same table and talk with each other as they do their individual assignments, but having students do a task individually with instructions, that, those who finish first are to help the slower students or assigning a report to a group where one student does all of the work and the others put their names on it. Discovery and contextual approaches are used to teach interpersonal skills. The group members perform one of two roles: leader, moderator and participant. The Kernel of this theory can be stated simply when individuals work together towards a common goal, they are dependent on one another's efforts to achieve that goal. This interdependence motivates the individuals to: a) encourage one another to do whatever helps the group to succeed; b) help one another to do whatever helps the group to succeed; and c) like one another because individuals like others who help them achieve their goals and co-operation typically increases positive contact among group members.

An argument for using small groups relates to the constructionist theory of learning on which much of the current reforms in science education is based. This theory describes learning as actively constructing one's own knowledge.

Need for Small Group Learning

Since the Vedic age it has been agreed that "education is the source of knowledge, which shows the real way in the various fields of life". In the vedic period, it was the teacher who occupies the primary place, but in the later period, it was the student who

occupied the central place in education. The educational method of the Buddhist period provided new standards in the sphere of morality and discipline. During the Muslim period, the prime objective of education was to create able employees for the political and administrative system. Missionaries made a good deal of attempt for the propagation of education in India. The methods of teaching changed from past and relationship between the teacher and the student was not as good as it was in past . Most of the methods, which are presently used are teacher - centered rather than child - centered. Now-a-days peer learning is used as an important instructional strategy because of its remarkable advantages in learning. This method of learning is followed in Rishi valley and other places also.

About a hundred years ago, it was believed that a child was a little man who was motivated by the same feelings, thoughts and desires as a grown up person but on a small scale. Education was based upon this idea. But physics is a highly activity oriented subject and the activities taken up by the students in learning physics help a lot to satisfy the basic human desire of knowledge about the wonders of nature. Thorough understanding of definitions in physics makes them master the concepts in physics. A science teacher has to search for new and innovative ideas, techniques and strategies to impart science education. But when small cooperative groups were formed and utilized for learning, it was found that almost all of the students took part in the activity for achieving the common goal. The interaction in an authoritative or teacher dominated whole class approach is basically a one - way process from teacher to students. The process of learning may create undesirable consequences which may increase student's dislike for schooling and student dissatisfaction with instruction. In small group learning emphasis is laid not only on academic achievement, but also upon social and psychological development. It can add a new dimension to the work the pupil enjoys and reduces the level of boredom. The students who take on a "teaching role" often find that teaching someone else leads to their own improved understanding of the material. Students teaching each other is an extremely effective way to increase student learning.

Just as "two heads are better than one", having students work together in a group often results in a higher level of learning and achievement that could be obtained individually. Low achieving students are especially benefited by the small group learning activities. Small groups facilitate dialogue, reflection, discovery, collaboration, active listening skills and skills in conflict resolution. Small group learning fosters the development of critical thinking through discussion, classification of ideas, and evaluation of other's ideas. The use of small group discussion in classroom should be promoted because it facilitates subject matter mastery, attitude change, moral development, problem solving and communication skills. In small group discussion each and every student in a group contributes to one's

own as well as other's learning.

Holt (1964) has said that : "*Only few children in school ever become good learners in the way teachers try to make them learn. Most of them get humiliated, frightened and discouraged. The students use their minds, not to learn, but to get out of doing the things teachers tell them to do and make them learn. In the long run, these strategies are self limiting and self - defeating, and destroy both character and intelligence. This is the real failure that takes place in school which; hardly any child can escape*".

The experts of the UNESCO Planning Mission have found that at present neither in the scope of involving the youth, nor in its content and methods, science education meets the requirements of the country.

Small group discussion is quite a recent attempt to improve the teaching learning process in the classrooms. So, the investigator felt that this method is very useful in teaching physical sciences. The researcher thinks that small group discussion has innumerable features and advantages, so that it can be widely used in pre-school through to graduate levels, in all subject areas, in all aspects of teaching and learning. Physics deals with nature and matter and gives opportunity for creative thinking, and constructive imagination. In addition, it also enables the learner to acquire problem solving and decision making skills and discover the relationship of physics with health, agriculture, industry, technology and other aspects of daily life. As physics starts as a separate subject only at the secondary level, the researcher has not taken primary level for the research. As this small group discussion technique takes a long time for the input programme, it is not possible to take up X class pupils, who will be appearing for public examinations. It has been observed in actual practice that the practical work is not done in three years VIII, IX and X in many schools. As a result of this, these standards suffer mostly from lack of practical work. So, there is a necessity of active and involved learning on the part of pupils in VIII, IX standards. The students who are acquainted with the small - group learning in VIII class, can continue the same in their higher classes also. So for this reason, the investigator has selected only VIII class pupils for the present study.

Though, Vijayawada is very famous for education, the latest methods of teaching are not followed by the teachers in the schools. So, the researcher has taken the present study in Vijayawada as she has personally observed the problems faced by the students in learning definitions in physics, which they memorize through rote memory, without thorough understanding.

Title

"The Effect of Small Group Discussion on Learning Definitions in Physics".

Objectives of the Study

1. To prepare the content material related to the definitions in the units 'Electricity' and 'Magnetism'.
2. To organize an experiment using small group discussion method to VIII pupils.
3. To find out whether there is any effect of small group discussion method on the academic achievement of VIII class pupils in experimental group.
4. To find out whether there is any difference between the pretest and post test scores on the academic achievement of the pupils in control group.
5. To find out whether there is any difference between the post test scores of control and experimental group.
6. To find out the effect of small group discussion method on the academic achievement of the different categories of pupils i.e. very poor, poor average and high and very high.

Hypotheses of the Study

1. There would be no significant gain in the academic achievement of VIII class pupils due to small group discussion method.
2. There would be no significant gain in the academic achievement of pupils in experimental group.
3. There would be no significant gain in the academic achievement of pupils in control group between pretest and post test.
4. There would be no significant gain in the academic achievement between the post test scores of the control and experimental groups.
5. There would be no significant effect of small group discussion method on the academic achievement under the different categories of pupils i.e., very poor, poor, average, above average, and high.

Method of Investigation

Experimental method was found to be suitable for this investigation.

Sample and Sampling

The sample consisted of 80, VIII class pupils drawn from two different schools which were selected at random, in Vijayawada. 40 pupils in one school were in experimental group and the remaining 40 pupils in the other school were control group. The two groups were equated in terms of the type of school, its locality, sex, IQ, age and the marks of the students, obtained in the pre-test.

Experimental Design

Quasi - experimental design was found suitable for the study.

Details of the Experimental Design

Tools	Experimental Group	Control Group
Pretest	Achievement test in the units electricity and magnetism of previous class	Achievement test in the units electricity and magnetism of previous class
Treatment	Teaching by small group discussion method	Teaching by traditional method
Post Test	Achievement test in the units electricity and magnetism of VIII class	Achievement test in the units electricity and magnetism of VIII class

Teaching Schedule

A teaching schedule for the experimenting days was also arrived at in consultation with the physical science teachers in the two schools. The experimental group was taught 25 definitions in the chapters Electricity and Magnetism by small group discussion method for 9 days and control group was taught by Traditional Method for the same period.

Tools Used

1) Material used for small group discussion, 2) Preparation of lesson plans to teach through traditional method, 3) Pre - Test, 4) Post - Test.

Design of the Experiment

Quasi Pretest and Post Test Design (Experimental Design)

Control Group (40 students) Experimental Group (40 Students)

Distribution of the content material	Distribution of the content material
Traditional method of teaching	Skill based method of teaching
Time given for reading the content material (duration 5 minutes)	Time given for reading the content material (duration 5 minutes)
Traditional Teaching	Discussion among students (10 minutes)
Random Questioning by Teacher (duration 15 min)	Random questioning by students among themselves (5minutes)
Time given for self preparation (Duration 10 minutes)	Time given for self preparation (Duration 10 minutes)
Achievement test (Post test)	Achievement test (Post test)

Scoring

The investigator conducted the pretest and post test for the maximum marks of '25' and the total items were 25. In the pretest all the test items were multiple choice questions. In the post test 15 were multiple choice questions and 10 fill in the blanks questions. For each right answer the score is '1' and for the wrong answer the score is '0'.

In order to analyze the data, the researcher applied the following statistical procedures like mean, S.D, S.E.D, 't' ratio, combined mean and combined S.D.

Testing of Hypotheses

S. No.	Hypothesis	't' Value	Test of Significance	Finding
1.	There would be no significant gain on the academic achievement of experimental group between pre test and post test scores	7.3698	Significant at both the levels	Hypothesis is rejected
2.	There would be no significant gain on the academic achievement of control group between pre test and post test scores	0.5223	Not significant at 0.01 level	Hypothesis is accepted
3.	There would be no significant gain on the academic achievement of VIII class pupils between control and experimental groups	7.7488	Significant at 0.05 and 0.01 levels	Hypothesis is rejected
4.	There would be no significant effect on the academic achievement under the different categories of VIII class pupils i.e., very poor, poor, average, above average and high	Percentages	Significant effects	Hypothesis is rejected

Findings of the Study

1. There was significant difference between pre-test and post-test scores on the academic achievement in experimental group at 0.01 level.
2. The mean value of achievement in post-test is higher than that of pre-test for experimental group.
3. There is no significant gain in the academic achievement of control group in pre and post tests.
4. There is a significant difference between control and experimental groups in the academic achievement at 0.01 level.

5. The mean value of achievement of experimental group is higher than the control group.
6. The treatment of small group discussion method has differential effects with very poor, poor, average, above average and high categories.
7. Of all the categories, small group discussion method was effective with respect to poor and very poor students.

Discussion

From the above findings, it is obvious that the Small Group Discussion method is successful in raising the academic achievement of the experimental group. The Experimental group might have paid more attention in learning the content material because the total learning was done by themselves and also with the help of their group members.

Here students motivation increased in small group learning because students feel more positive about being able to complete a task with others than while working individually. Democratic atmosphere interactive mode of working is unlike the rigid, monopolistic and traditional type of formal education as it involved the students in learning process more actively. Small - Group Discussion Method can add a new dimension to the work the pupil enjoys and reduce the level of boredom.

The pupils in control group might have felt bored as it is a routine way of teaching, which resulted in the less academic achievement. On the other hand, the less able students are unable to keep up with the pace of the average students and therefore are frustrated and have lost interest in learning the subject matter.

This Small - Group Discussion Method not only enhances the student's creative thinking, cognitive and manipulative skills, but also gives scope for the enrichment of values and reshaping of the students behaviour. It can be concluded that this Small - Group Discussion Method develops not only cognitive but also psycho - motor and affective domains. Self - learning means hard work and learning on their own by discussing with their group members. As a result of this, the students retain the content material for a longer time than they do in the traditional teaching. This method can be used in a class room as it facilitates mastery over the subject matter, change of attitude, moral development, problem solving and communication skills.

The above findings show that the Small Group Discussion Method is the most successful one in diagnosing the problems of the learners. In the usual classroom teaching the students under categories of poor and very poor may not understand the teacher's explanations at a time. But in this new method, there is every possibility for the students to

recall the subject matter since the students discuss well until they understand the concept with their group members. As a result of this, their retention is increased and so they perform well in the tests. The slow learners feel very comfortable to work with their group members. They are most benefitted from their peers. So the researcher felt that these factors might be the reasons for the enrichment of knowledge with respect to poor and very poor students. The average and above average students further raised their academic performance since this dynamic method of self learning provided extra motivation to the learners.

On the whole, it is clear that the Small - Group Discussion Method is superior than the other traditional methods in learning definitions in physics.

Educational Implications

The investigator is very much interested to give suggestions and recommend the Small - Group Discussion Method to the teachers.

- ☞ This approach is very helpful in single teacher schools, over crowded schools where the teacher feels difficult to handle all the classes. In such cases, the monitor can teach the lessons through Small - Group Discussion Method in which students learn by themselves and from their group members.
- ☞ Small - Group Discussion Method enables the teacher to work with small groups more comfortably and at leisure.
- ☞ The initial stages of this self and peer learning method may produce feeling of insecurity in both students and teachers, but eventually both may find it a rewarding experience.
- ☞ This method allows the teacher to know more about the progress of an individual student in each and every small group, than would normally be possible by a conventional teaching situation. With this knowledge, the teacher is in a position to enhance the effectiveness of the traditional forms of teaching.
- ☞ The Small - Group Discussion Method promotes the type of learning climate and the cognitive and affective outcomes that make teaching more effective and more functional.
- ☞ Individual courses are becoming more important in science teaching, amongst many other areas. It has been developed by people who may well have different skills and experiences. It is necessary for the teacher to examine closely what he is doing when he introduces a new style of course and be aware of the constraints and implications of his own setting.

Conclusion

From the present observations and findings, it could be concluded that the Small - Group Discussion Method is the most superior and successful one in teaching and learning situations. Also it is cleared that this new method has been effective for the students very poor and poor. They are very strongly affected by this programme. The higher ability group is influenced by this method differentially. They seem to take advantage of this method for their learning than traditional method.

The hidden potentialities, intellectual abilities of the students can be exploited properly resulting in higher level performance in Small - Group Discussion. Students who do not have any alternative except the traditional, dry, insipid and mechanical method continued to be performing at the same lower levels as there is no worthwhile motivation or excitement.

Thus, the Small - Group Discussion Method with all its functional implications and involves the students in active learning, due to questioning for thinking, reasoning, relating and verifying. It has really produced a genuine effect on the students, resulting in greater self confidence, self - esteem, empathy, more retention and better understanding and skills.

A study of the “COUNSELLING HIV/AIDS PATIENTS”

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ABSTRACT

This study Reports the problems of HIV/AIDS Patients in areas Physiological, Psychological, Financial, Family and Social. The types of problems in each area and where they require assistance were studied. The answers indicated that the role of counselling was more helpful. Fourteen cases were studied using the tool “Family study record” prepared by Professor Dr. Maruthi Sarma Mannava M.D. The Sample ranges from adolescent group to adults group of both the genders (married and Unmarried). It is found that all of the cases of HIV/AIDS patients were suffering with both Physiological and Psychological problems some are suffering with financial, family and social problems and some of them (both the genders) are suffering with all five problems.

INTRODUCTION

To day, Acquired Immunodeficiency Syndrome (AIDS) has become a security crisis. This is because HIV infection has a profound impact on social, economic and demographic underpinnings of development. These unprecedented impacts at macro-level are matched by intense burden of suffering of infected individual. Today, number of people living with HIV in the world has risen to 42 million, up from 40 million at the end of 2001 (NAIDS and world Health Organization up date on the global HIV/ AIDS epidemic).

However, there are some issues in life that we can not dodge and HIV/ AIDS just happens to be one of them. It is also becoming more and more obvious that there is quite a perceptible gap in knowledge and awareness among the youth of to day with regard to this pandemic with such a grave impact on life span of the effected people. The need of the day is a lot of Plain- speaking on the topic caring the old age that ‘Prevention is better than cure’. Ideally, this should start with interaction between adults and teenagers at the family level and supported by simple socio- culturally acceptable programme on family life education at school/college level, tapping the expertise of knowledgeable, mature, clear-

headed trained faculty. Although knowledge does not necessarily lead to change of habit things have to be put in the right perspective.

AIDS is the plague of this century. AIDS affected individuals have one thing in common, the depletion in their immune status. The disease destroys the immune system. This leaves the infected person vulnerable to other infectious diseases. Initially, the infected person may remain symptom free for years, but some people do suffer from illness with fever, malaise and skin rash as body responses against the infection.

Modes of HIV/AIDS Transmission

Sexual behavior : Nearly (87 – 92)% of Transmission of HIV through sex which is called the transverse transfer Chances of HIV infection are more through penile-vaginal inter course.

Mother to child : (30-40) % Pregnant women infected with HIV can transmit the virus to their unborn or newly born child. The spread can occur during pregnancy, childbirth or lactation.

Injections and tattooing : (0.3-1)% Transmission of HIV occurs when needles, syringes and other injection equipment is used by an infected person and shared with other injectors.

Blood transfusions : 0-1 % HIV can be transmitted through transfusion of infected blood.

Need of the Study

Report of the year 2006 on HIV/AIDS Epidemiological Surveillance & Estimation brought out the fact that 5,206 million people are having infection as on year 2005, This gives an adult prevalence of HIV infection in the country as 0.91%, and out of Total HIV infections 38.4% were females, 57% were in rural areas. Out of the total, 59,007 were estimated to be children. During this year the contribution of HIV infection from STD population group has been found to be 1.7 million in comparison to 1.3 million during 2004. According to the Report on an average 0.88% of antenatal mothers, 5.66% of SDT patients 8.44% of female sex workers and 10.16% of injecting Drug users were infected with HIV. The Researcher felt the urgency of studying not only the cases but also felt the necessity of counselling HIV/AIDS patients. Hence is this systematic and scientific case study of HIV/AIDS patients to analyze the problems faced by them to follow the necessary Intervention.

Objectives

1. (a) To Study HIV/AIDS Patients problems in five areas Physiological, Psychological, Financial, Family and Social.
(b) To find out the causes of problems of HIV/AIDS Patients of the sample.
2. To Counsel HIV/AIDS Patients.
3. To get the feedback of Counselling.

Methodology

Case studies of HIV/AIDS Patients in Guntur district were done.

A selective sample of 14 HIV/AIDS patients who were identified and opted for counselling was drawn from a population of the HIV affected in Guntur district. The Sample included seven adult males, five adult females and two male adolescents. The HIV/AIDS patients were interviewed to find out their problem in five areas physiological, psychological, financial, family and social, where they required assistance, using a "Family Study Record" prepared by Professor .Dr.Maruthi Sarma Mannava M.D.

Objective wise analysis and findings

I.(a) Objective

1. It was found that cent percent HIV/AIDS Patients were suffering with both Physiological and Psychological problems.
2. It was found that 71.43 percent HIV /AIDS patients were suffering with financial problems.
3. It was found that 35.7 percent of HIV/AIDS patients were suffering with Family problems.
4. It was found that 35.7 percent of HIV/AIDS patients were suffering with Social problems

I.(b) Objective

1. It was found that cent percent Adolescent HIV/AIDS patients were affected by HIV/AIDS due to their extra marital relations.
2. It was found that 50 percent illiterate Adolescents were affected by HIV/AIDS due to lack of awareness about HIV/AIDS.
3. It was found that 50 percent Literate Adolescents were affected by HIV/AIDS due to lack of awareness about HIV/AIDS.
4. It was found that 80 percent married women got HIV/AIDS from their infected husbands.

5. It was found that 20 percent women were affected by HIV/AIDS due to their Extra marital relations.
6. It was found that 77.77 percent male HIV/AIDS patients were affected by HIV/AIDS due to their Extra marital relations.
7. It was found that 22.23 percent male HIV/AIDS patients were affected by HIV/AIDS due to Blood Transfusion.

II. Objective : Directive Counselling Procedure was followed in this study.

- a) Identification of Problem
- b) Explanations on Problem analysis
- c) Key Intervention designing
- d) Methodology of Implementation
- e) Message carried to restore normal life.
- f) Analysis of Barriers
- g) Feed back

Counselling was given with the following hidden and open messages:

1. Balanced diet makes man a healthy person.
2. Transfusing tested blood only.
3. While Tattooing or injecting use new and separate needles.
4. While shaving out side use new or separate blades.
5. Always use condoms to avoid risk.
6. Be faithful to the partner.
7. Avoid Psychological disturbances, have a busy work schedule.
8. Do Meditation\ Dhyana to improve concentration in work.
9. Devote to God to get faith on future.
10. Avoid wastage of money.
11. Hard work brings money to door steps.
12. Precaution is better than Prevention.

III. Objective-Feed back

1. The Patients could not improve their health condition.
2. They did not have regular medicine to reduce their physical health problem.
3. They were not able to do physical exercises to improve their health condition.
4. They did not take fruits or any fruit juices to improve themselves.
5. They did not practice Meditation / Dhyana every day to reduce their mental tension.

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6. They did not pray God nor did any devotional activities like pooja / dheeksha etc. to gain mental peace.
 7. They did not have any additional work to increase income to reduce their financial problems.
 8. They did not maintain friendly relations with their colleagues, classmates and other co-workers to get help from them.
 9. They did not receive help from any Govt. /Private organizations to reduce their financial problem.
 10. The patients never tried to improve their relations with other family members.
 11. They did not maintain good relations with neighbours and other social groups around them.

Hence further Counselling is being given to HIV/AIDS Patients.

Conclusion

As HIV/AIDS is considered a social stigma by many, while counselling especially when there was a caring enquiry HIV/AIDS patients appeared very much touched; While giving the feedback they were very hesitant to talk about their relation with family members or others. In spite of knowing that HIV/AIDS transmission is only through limited channels people are not entertaining HIV/AIDS patients which very much hurts them more than this killer infection. Can we be more humane in our behaviour towards HIV/AIDS patients?

Environmental Geography Education for Sustainable National Development

Abstract

Environmental Geography Education is the call of the day through which we can ensure sustainable National Development while raising the level of not only awareness but at the same time sensitivity towards our environment. Objectives of environmental based geography education are specified along with procedure to be followed and some suggestions are also specified in the paper.

Key Words : Environmental Geography Education, Sustainable, National Development.

The term national development indicates growth and progress of a nation in a multidimensional and multiphase way experienced through qualitative and quantitative enhancement resulting in improvement of the status and situation. In general, it is being considered in terms of economic prosperity, social uplift and social change. But often, such progress may not be accepted as a real one though may cause some positive development. For example, industrial development may bring economic prosperity due to enhancement in production but if it is causing severe environmental pollution, developmental aspect of it may be nullified with reference to sustainability of development. It is observed well in the case of most of the Indian rivers like Kali at Meerut, Jamuna at Delhi, Ganga at Kanpur, Gomti near Lucknow, Dajora at Bareilly, Damodar between Bokaro and Panchet, Hoogly near Kolkata, Sone at Dalmiyanagar, Cauvery in Tamilnadu and Bhadra in Karnataka which are all severely polluted due to establishment and functioning of many mills, industries power stations etc. Enrichment of aldehydes, ammonia, carbon monoxide, chlorine, nitrogen oxides, sulphur dioxide and suspended particles of ash, soot and smoke, dust etc. in air causing enhancement in its pollution and on account of harmful side effects, mills and industries creating environmental pollution are now being considered as responsible for bringing negative impact on the sustainability of development of our nation in particular and of the whole world, in general. But these means of development may not be denied and ignored in any way. The modern means of transportation are also causing, to some extent the same impact and are labelled as the agents of pollution on account of which now the gaseous fuel is being preferred especially in the metropolitan areas as Doval(1992) noted that the air of New Delhi contained 350-500 micrograms/m³ of suspended particles, 15-20 micrograms/m³ of sulphur dioxide and 10-15 micrograms/m³ of oxides of nitrogen during summer along with an extent of noise pollution much beyond the limits of normal range and scope of tolerance. Similar is the case of cement, leather and other industries. Even

construction of dams and power stations are also not found beyond such disputes causing harm to the natural and consequently socio-cultural environment of human beings. Construction of the Tehri Hydroelectric power project in India has raised the possibilities of causing natural hazards like earthquakes and ecological imbalances. Construction of Narora Atomic Power Plant in the zone of alluvial soil and located in earthquake belt of the country is raising a number of issues like that of radiation during natural hazards.

Thus, we can say that the technological development may provide us with enormous power and ensure economic prosperity undoubtedly but at the same time, may result in unimaginable destruction and human sufferings due to some harmful side effects ranging from global warming, ozone layer depletion, acid rain, soil degradation, deforestation, loss of top soil to disappearance of many plant and animal species from the biodiversity. So, it is understood that due to development of raw resource based, economy in most of the developing countries, there is a severe increase in pressure on their limited natural and other resources of environment as it has been observed causing enhancement in consumption and demands but some authorities like (Chiappo,1978) accepted it well that the present crisis is not due to the lack of resources and its basic scarcity but on account of unjust exploitation and unequal distribution of such resources. It is mainly the result of profit seeking.... The cause of the ecological problems is not essentially hunger but the causes are overconsumption, wastage and short sightedness profit plundering policies of the civilised world as well as economic injustice.

Development

The development of any kind in itself, bears no negative value and impact but the policy behind is of supreme importance. It is the maximum profit targeted policy which has actually raised the issue of environmental crisis before the scientifically advanced and technologically developed society. Schuyler (1983) accepted that the growth rate of population, depletion rate of natural and other non-renewable resources and stress on the environmental assets are constituting the one basic problem whereas Saxena (1996) boldly believed that the kind of development that we have had, can not take us very far and ensure the very survival of human race for a longer duration of time on the globe of the earth. Meadows et.al.(1972) concluded by saying that if the present growth trend in world population, industrialisation, pollution, food production and resource depletion continued without any change, the limits to growth on this planet earth will be reached sometimes within the next one hundred years to cause even sudden decline in both aspects of population and industrial capacities. Thus, they solicited to establish the conditions of economic stability along with ecological consistency, sustainable for future in terms of development. The state of global equilibrium would be designed so that the basic material needs of each and

every person on the earth may be satisfied while one may have an equal opportunity to realise his/her individual human potential, he added.

Sustainable Development

Any development may be termed as sustainable which is favourable to the ecological and economic balance as well as consistence to the nature too. In UNEP (1987) it was specified that sustainable development meets the needs of the present without compromising with the ability of future generation to meet their needs.... On the basis of prudent management of available global resources and environmental capacities as well as the rehabilitation of the environment previously subjected to degradation and misuse. Thus, the TCCN, UNEP and WWP (1991) attempted to define sustainable development as improvement of the quality of human life while living within the carrying capacity of supporting eco-system. The development which may destroy the environment or culture and social traditions in any way, may not be taken as sustainable but that which may conserve and preserve it to produce sustainable benefits and profits, in real sense. In the World Commission Report on Environment and Development (1987), it was specified that within it, the sustainable development contains two key concepts of essential needs of the poor of the world and limitations of technology and social organisations imposed on the ability of the environment to meet the present and future needs. Saxena (1996) mentioned that the development is to be planned in such a manner that it meets the needs of all sections of the society and provides opportunity to all to satisfy their aspiration for better life. Disinger (1990) characterised such development as sustainable which is essentially based on participation, organisation, education and empowerment of people than that of being mere production centred in nature. According to him, it is required to be appropriate to environment, resource and culture, history and social system as well as to technology, equitably fair and just in terms of distribution as well as a balance establisher between freedom and order, groups and individuals, work and leisure and settlements and nature.

Thus, it is obvious that we are not only in need of development which is merely profit and gain oriented in nature but sustainable in terms of ecological balance and existence of human culture and traditions too. For this purpose, education may certainly be considered as a powerful instrument in general and environmental geography education in particular, which indeed is an integrated form of environmental aspects in geography education related with global ecological system.

Environmental Geography Education

To establish an integration between the traditional geography education and the environmental aspects of it in formal and/or in other settings, it was considered as essential

to design curriculum framework in such a way that it may enhance the possibilities of being well adjusted with nature for more harmonious living with environment. Such of a programme, is required to compromise between the two, highlighting over the formal and non-curricular approaches. Nagchowdhary and Bhatt (1987) emphasised upon the balance establishment between technosphere and biosphere which could be achieved by turning away from the technological goals of defence preparedness to the peace oriented, resource conserving developmental targets. Knamiller (1983) suggested environmental education curriculum for sustainable development including skills, concepts and facts especially in the context of local specific environment instead of highlighting over the knowledge based contents more.

To impart such education, cultivation of knowledge and use of the process of scientific observation by the learners may be considered as essential in place of using the good old pattern of cramming of the content matters for mere memorisation of the fact and figures. It is the geography education which plays a significant role in fostering the power of observation, ability to gather relevant information and to examine critically over the possible alternatives to find out solutions of various problems and issues concerned with the community and societies. It is also required to make decisions consciously as well as to follow up those decisions taken through action based plans. Thus, the environmental issue linked geography education may be in a position to replace the existing pattern of knowledge based schooling with the help of activity and action oriented programmes. It is said that without such efforts, the environmental geography education may also be converted into a mere school or university level discipline like others including mathematics and social sciences. In such a situation, central focus may be given to learning of concepts, skill components and some related facts and figures basically, through curriculum dependent activities to be performed in classrooms. The very nature of curriculum dependent education has widened the gap between educational institutions and man and his society which reinsures inculcation of inability to fulfil the environmental prerequisites while encouraging consumer oriented ness. In terms of establishing better ecological balance and promoting interdependent existence through environmental geography education, rigid curriculum and achievement of high academic outcomes through it, may be no longer of any use and thus will certainly be required to be discarded in the new century.

Ecological Existenc

The philosophy behind the concept of environmental geography education is concerned with the existence of human beings in terms of sustainable ecological balance in nature. This may be specified as ecological existence of mankind. Ecology, as Tansley

(1935) defined is the discipline or study of the interrelationship among organisms and between organisms and their environment. Thus, establishment of a balanced interrelationship among various ecological units may be considered as the ecological balance, in a layman's terminology The nature has developed it among the ecosystems, irrespective of its terrestrial or aquatic nature for maintenance of its dynamic harmony within the interacting abiotic components like climatic, edaphic and physiographic factors as well as biotic components such as producers, consumers and decomposers linked through the systems of energy and nutrients or materials flow. For example, the trees, shrubs, plants, etc. are basically the producers, monkeys, deers, elephants etc. are the primary consumers, dogs, cats, leopards etc. are the secondary consumers and lion is the tertiary consumer, in a specific food chain. In this chain of food or food webs of more complicated network, energy flow occurs from producers to the tertiary consumers with diminishing return of the magnitude of energy, as the remaining energy during consumption goes back to the environment again. Any imbalance in the chain of energy flow and elements flow like in the cycles of water, nitrogen, carbon dioxide etc. may cause a disastrous effect upon the existence probability and survival of organisms on the globe of the earth. While saying this, we are inevitably becoming concerned with the physical or bodily existence for which each and every organism used to do some efforts, consciously or sub-consciously. Basically the western philosophers used to consider such existence as of prime importance through the struggle for existence which promotes the theory of survival of the fittest and advocates becoming the fittest and strongest to face the hard competition and life struggles. Certainly, it is important especially in the world of sub-human creatures that are without any ability to think, discuss and acquire knowledge and wisdom. On the other hand, when we consider and believe in the idea of social animal, it is admitted that the human beings are also a sort of animal who used to learn to suppress their animal instincts and behave in a rational and socially approved way. Though this ideology also is not in a position to uplift the human beings from the stage of animal to superior living beings but the concept of social existence is generated through it, as man is expected to consider the expectations and norms of the society to maintain his social existence and certainly to sacrifice his freedom also, up to some extent as and when needed. Here, it is considered that the existence of an organism is dependent upon the members of the group or community. Thus, one should live and let others live with the same dignity and freedom as desired for ones own self which is perhaps, the motto of such sort of existence. Some animals also used to live in groups to form their own community. A number of people, religious groups and nations especially of the South East Asia do believe in this type of philosophy, based on non-violence and peace which is considered as a requirement for the development of group feelings, social outlook and

positive attitude towards life. At this stage of co-existence, man used to act as a civilized animal who not only lives for him/herself but also for others for the sake of enhancement of probability of continuation of life on the earth by more than fifty percent. But in this proposition, man is yet required to cross the level and limits of animals living aside all the passions of selfishness, materialistic gain and achievements, craze for physical and sensual pleasures etc.

This may not thus be the last and ultimate goal of life for mankind. The third and highest order of existence is more close to the nature and in Indian ideology, termed as Natural or Spiritual Existence when one not only aspires to get benefit from all others but also to sacrifice even at the cost of ones own existence. To let others live and prosper at the cost of ones own life and living is the fundamental idea behind such proposition where consumption is not only the target but natural harmony setting and causing of ecological balance may be the ultimate goal. In such a situation, not only the strongest and fittest but the weakest and the least able and unfit one may also be able to sustain ones own existence and enjoy equal rights due to sacrifice of others and of one who is the strongest. The basic idea is related with the belief that each and every living being possess a spiritual realm of existence too besides the external or physical one which is non perishable and of permanent nature. In the society, where the physical and social existence used to be considered as the highest in order ,often the eternal values ,traditions and humanity based considerations are usually being disrupted and degenerated to cause ultimate ecological imbalance and eventually top impose existential challenges before the mankind. It is only possible through sacrifice and love that man can cross the stage and limitations of animal instincts, to realise the spiritual eternity of soul and consequently eternal self.

The environmental geography education is based upon this highest order of spiritual existence and may ensure its acquisition or realisation through training, with the motto of service above self. Recognition of one's own entity and superior existence through scientific approaches and procedures is the basic purpose of implementing this philosophy of environment based geography education, the objectives of which may be specified as :

- ❖ to enable one to be critically aware of the issues concerned with community, society and human rights,
- ❖ to inculcate the ability to make decisions consciously and to take stand accordingly in the process of development,
- ❖ to explore the alternatives for setting the social requirements based issues, actions, norms and activities imposing challenges on ecological needs and realities,
- ❖ to enable one to acquire problem solving ability through the positive attitude formation to serve others including subhuman creatures with equal sense of honour and sympathy,

- ❖ to enable one to be eco-friendly and agent of environmental purification for nature and
- ❖ to develop environmental ethics among the persons concerned.

Procedure

On the basis of the above objectives, the steps to act may be defined as identification of the problem/issue, analysis of its various aspects, enquiring into those aspects and situations, gathering of facts and figures concerned with ecology and environment, recording and analysing information and data collected for the purpose of having a concluding solution as well as for the purpose of decision making, investigation based learning through participation in community activities and actions to set the ecological balance and environmental order, values, ethics etc. To follow the procedure, it is obvious that revitalisation of the existing schooling pattern is inevitable on one hand and of geography education curriculum on the other, through amalgamation of environmental approach and geography education for the service of community and society of human as well as of subhuman level.

Educational Implications

Many educational implications are expected and among them one is related with inculcation of environmental ethics among future generation following its three dimensional model. In this model, it is specified that ethics may possess three main aspects of sensitisation, reverence and affection. To be environmentally ethical, one has to develop a strong sensitivity in ones own self towards environment. Now, people are much aware of environmental issues but rarely sensitive to those issues. One is knowledge bound and the other is action oriented in nature, basically concerned with feelings. Secondly, one must develop a sense of reverence to nature and environment so that one may apply the mental ability of judgement and decision making while taking any adverse decision against it. Affection is related with sense of affection to the nature or environment as one may be used to feeling with ones own children. If all three dimensional aspects are being developed well, one may become ethical towards environment.

Measures Suggested

Through a small group opinion survey, including twenty five geography teachers and teacher educators selected on random sampling basis, to know about the way to implement environmental geography education, the following measures were accounted analytically :

- i. 31 percent of the respondents was in view of setting free and flexible academic and administrative as well as organisational climate to implement environmental geography education in educational institutions while arranging teaching sessions preferably in biosphere rather than in closed classroom setting,

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- ii. 25 percent of them suggested replacing the existing knowledge based curriculum of geography education with provision of learning experience and activity oriented practicum sessions,
 - iii. more than 80 percent of the respondents were found to be in favour of nonformal and supportive audio-visual media based packages to illustrate and explain the philosophy of spiritual existence and the related human values to the learners along with ecological requirements and biodiversity,
 - iv. 35 percent of the experts was of the opinion that some provisions may be there related with training in ecological balance and awareness development activities through environmental geography education while ensuring some measures to control and minimise biocides,
 - v. more than 50 percent of the opinion giving experts considered the use of observation, field exploration and heuristic techniques essential for the study of nature and organisation of intensive programmes through environmental geography education to stress over the significance of preservation and protection of natural vegetation cover on the surface of the earth which is diminishing at a fast rate to serve the greed of human beings much beyond the limit of their needs,
 - vi. Lastly, remodelling of existing teacher education programme was also recommended by the group of experts to enable the prospective geography teachers to serve the needs of future generation through environmental geography education and to motivate them to inculcate environmental ethics among the learners so that observation of environmental rights may be possible.

Conclusions

It may be concluded on the basis of the suggestions and recommendations obtained that the existing geography education is expected and required to be overhauled in tune of the ecological considerations and needs of the society and community of a democratic country while ensuring sustainable development on the way of achievement of quality in educational endeavours. For making such attempts fruitful, implementation of environmental geography education is very much needed so that at the same time, problems of natural consequences and disasters of extreme order may be solved which may impose challenge on the very existence of not only mankind but of all organisms on the globe of the earth in near future. Along with the existence of physical and social nature, one that of spiritual may also be brought into the notice of all members of the society to enable them to be involved in development of proper environmental ethics and establishment of the motto of service above self.

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EFFECT OF YOGA ON THE STRESS LEVELS OF WOMEN

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Today the world is plagued by stress and strain. Humanity is suffering from many ills generated by itself. Strained inter-personal relationships, ego battles at the work place, petty issues at home, have become common in today's lifestyle of most people. A steadily rising workload and an intense competitive environment have left people with very little time to nurture and cultivate their relationships and for regular introspection.

Stress is a normal physical reaction that occurs when we feel threatened or overwhelmed. With increasing demands of home and work life, many people are under enormous stress. Stress in one setting can effect stress levels in the other.

In small doses, stress can be a good thing as it adds flavor. It can give the push we need, motivating us to do the best and to stay focused and alert. But when, life's demands exceed our ability to cope, stress becomes a threat to both our physical and emotional well-being.

Furthermore, the causes of stress are highly individual. What one considers stressful depends on many factors like the personality, general outlook on life, problem-solving abilities, and social support system. Something that's stressful to one may be neutral or even enjoyable to someone else. For example, commuting in the morning may make one anxious and tense because he worries about the traffic that will make him late. Others, however, may find the trip relaxing because they allow more than enough time and enjoy playing music while they drive.

Without stress, life would be dull and unexciting. However, too much stress can seriously affect our physical and mental well-being.

It is not a new idea that stress is the cause of 80% of illnesses. Over two thousand years ago Plato said "all diseases of the body proceed from the mind or soul."

An ounce of prevention is worth a pound of cure is an old saying. It seems to have lost its meaning in the present day world. We have no time for leisurely walks, we have no time to listen to the morning bird's sing, no time just to stand and stare, and no time for age old YOGA. We have forgotten that 'An apple a day keeps the doctor away' and "early to bed, early to rise makes a man (or woman) healthy, wealthy and wise."

Recurrent physical and psychological stress can diminish self-esteem, decrease

interpersonal and academic effectiveness and create a cycle of self-blame and self-doubt. It is important for our health that we have to find the optimal level of stress that we can learn to manage effectively.

Signs and Symptoms of Stress

Stress affects the mind, body, and behavior in many ways. The specific signs and symptoms of stress vary from person to person, but all have the potential to harm one's health, emotional well-being, and relationships with others. Given below is a partial list of stress signs and symptoms that a person undergoing stress might experience.

- Headaches.
- Digestive problems.
- Muscle tension and pain.
- Sleep disturbances.
- Fatigue.
- Chest pain, irregular heartbeat.
- High blood pressure.
- Weight gain or loss.
- Asthma or shortness of breath.
- Skin problems.
- Decreased sex drive.
- Eating more or less.
- Sleeping too much or too little.
- Isolating yourself from others.
- Neglecting your responsibilities.
- Increasing alcohol and drug use.
- Nervous habits (e.g. nail biting, pacing).
- Teeth grinding or jaw clenching.
- Overdoing activities such as exercising or shopping.
- Losing your temper.
- Overreacting to unexpected problems.

Need of the Study

Yoga is a way of life. It is predominantly concerned with maintaining a state of equanimity at all costs. All **yoga schools** of thought emphasize the importance of the mind remaining calm, because as the saying goes, only when the water is still you can see through it. Yoga Darshan or **Yoga Philosophy** also happens to be a valid discipline of Indian metaphysics (Brahma Vidya). It is the result of human wisdom and insight on physiology, psychology, ethics and spirituality collected together and practiced over thousands of years for the well being of humanity.

The most important benefit of yoga is physical and mental therapy. The aging process, which is largely an artificial condition, caused mainly by auto-intoxication or self-poisoning, can be slowed down by practicing yoga. To get the maximum benefits of yoga one has to combine the practices of yogasanas, pranayama and meditation.

Regular practice of asanas, pranayama and meditation can help such diverse ailments as diabetes, blood pressure, digestive disorders, arthritis, arteriosclerosis, chronic fatigue, asthma, varicose veins and heart conditions. Laboratory tests have proved the yogi's increased abilities of consciously controlling autonomic or involuntary functions, such as temperature, heartbeat and blood pressure

According to medical scientists, yoga therapy is successful because of the balance created in the nervous and endocrine systems which directly influences all the other systems and organs of the body. Yoga acts both as a curative and preventive therapy. The very essence of yoga lies in attaining mental peace, improved concentration powers, a relaxed state of living and harmony in relationships.

A woman in modern times has different roles to play as she occupies a pivotal role in all fields, be it domestic, social, political, scientific, and technical areas. The modern woman is a lot more educated and adorns multiple roles like mother, home-maker, employer, employee and so on, thanks to widespread education and allied opportunities. The present day woman is not what she used to be hundred years ago. In addition to the traditional roles as a mother, home-maker, a new role has emerged, i.e. occupational role. In the present scientific era, women are becoming conscious, competent, responsible and educated in all walks of life. Today no field is untouched by them. Everywhere woman has proved her versatile talent and efficiency. It is a matter of pride that woman can stand on par with man in diverse and demanding fields such as development, production, marketing and so on which require more knowledge and efficiency. There is a change from traditional to modern. But the 'modern' has approached without completely rooting out the 'traditional'. The traditions still linger. Thus the modern woman is a mixed bag of what is traditional plus the newly emerged 'modern'. With the acceptance of all these multiple roles, the modern woman is facing stress in every walk of life. Thus the investigator intended to find out the effect of yoga on the stress levels of women.

It is quite amazing to know that yoga, which had its origin nearly four thousand years ago in India is becoming highly relevant in this present hi-tech world, in facing the challenges of stress. Yoga techniques coupled with proper understanding help us to use our high sensitivity and sharpness to calm the mind, stabilize the emotions, improve the

quality of life and bring health and harmony in the society. The eight limbed astanga yoga yama, niyama, asana, pranayama, pratyahara, dharana, dhyana, samadhi develops the personality physically, mentally and emotionally from a holistic perspective and also offers a total and comprehensive approach to the challenges posed by stress by eliminating the root cause.

a) Statement of the problem : Effect of yoga on the stress levels of women

b) Definitions of the key terms

Stress : stress is an internal state of pressure one feels in day to day life, which can be caused by the strain of ones emotions, thought process and physical conditions.

Yoga training : systematic training of yogasanas, pranayama and dhyana by making the trainees healthy physically, mentally and spiritually.

c) Methodology

quasi-experimental method was adopted on the sample

d) Sample

A sample of 20 women of different ages , was taken from Rattu Ramana Maharshi Yoga School and Research Centre ;Guntur

e) Objectives

1. To find out the number of stressors in day to day life of women and classify them.
2. To find out the level of stress in day to day life of women
3. To find out the effect of yoga training on the stress levels of women.

f) Hypothesis

1. There will be no significant effect in the stress levels of women after practising yoga for one month.

f) Research design

pre test on stress of women - 30 days yoga training - post test on stress of women

Yoga training is given to the sample for 30 days in the evenings. With the help of questionnaire pre and post scores are taken and analyzed.

Yoga training consists of : prayer, suryanamaskarams, yogaasanas, pranayama, meditation, yogic diet, and philosophical discourses,

Regular practice of asanas helps to keep our body fit, controls cholesterol level, reduces weight, normalizes blood pressure and improves heart performance. Physical fitness

thus achieved leads to reduction of physical stress and greater vitality. Asanas harmonize our pranic ability and flow of mental energy by clearing any blockages in the subtle body leading to mental equilibrium and calmness. They make the mind strong thus enabling our human body to suffer pain and unhappiness stoically and with fortitude.

‘Pranayama’ is a compound term (‘prana’ and ‘yama’) meaning the maintenance of prana in a healthy state throughout one’s life. More than a breath-control exercise, pranayama is all about controlling the life force or prana. Ancient yogis, who understood the essence of prana, studied it and devised methods and practices to master it. These practices are better known as pranayama. Since breath or prana is basic to life, the practice of pranayama helps in harnessing the prana in and around us, and by deepening and extending it, pranayama leads to a state of inner peace.

Dhyana is the state of meditation, when the mind attains the ability to sustain its attention without getting distracted. Strictly speaking, unlike the other six limbs of yoga, this is not a technique but rather a state of mind, a delicate state of awareness. This state rightfully precedes the final state of samadhi.

Satvic diet : The diet consists of more fresh fruits and vegetables, cereals, millets, dals, sprouts, milk, curd, foods with less oils, fats, sugars, chillies, salts, philosophical discourses, etc.

Regular philosophical discourses consisting of lectures about the way of living, as proposed by the great seers and sages, the purpose of living - which is not merely self-centered, law of karma - accepting the life in its natural course which is inclusive of difficulties, pleasures, upsets, joys and so on instead of expecting as desired. All these classes are conducted with a sense of humour in a simpler way with different examples quoting the evidences..

g) Research Tools

Daily Stress Inventory was developed by the investigator keeping in view the day to day life situations, It was given to a sample of 100 people. After a month again it was given to the same sample. Reliability was found to be 0.9995.

The Daily Stress Inventory consisted of 90 statements of stress causing factors in the daily life. Primarily the respondents had to check whether each was a stressor or not and then respond in terms of its extent.

Scoring is done with the following weightages. 1 score is given if it is a stressor and 0, if not. control score ;when there is complete control, score is given as 1, if it is partial control, it is given 2; for no control it is given 3

Objective wise Analysis of results and discussions

Objective 1 : To find out the number of stressors in day to day life of women and classify them

Table 1

Range of scores	Category	Number of women	Percentage of women
0 - 15	very few	2	10
16 - 35	few	1	5
36 - 55	considerable	8	40
56 - 75	many	4	20
76 - 90	too many	5	25

From the above table 1, it is found that the highest percentage of women are having moderate number of stressors; one fourth of the sample are having too many stressors and one fourth is having many stressors.

Objective 2 : To find out the level of stress in day to day life of women

Table 2

	Sample	Mean	S. D.	Mean %
Pre test score	20	109.75	61.30	40.64
<i>Level of stress</i>				
Very low stress	0 - 50			
Low stress	51 - 105			
Moderate stress	106-165			
High stress	166 - 220			
Very high stress	221 - 270			

From the above table, we can know that there is moderate stress in women.

Result 2 : There is considerable extent of stress in women.

Discussion : In the present day living, most of the women in general are shouldering all the responsibilities as a wife, mother, daughter, daughter-in-law in the home front .apart from giving a supporting hand to the husband in all the matters by working outside or at home, .paying all the bills in time ,managing the accounts, doing the outside shopping,etc. The modern woman with shades of tradition is an facing many challenges. With all these multiple roles., there is an increase in the stress levels of women. It is a tough period for the present day women to get along with out stress.

Objective 3

To find out the effect of yoga training on the stress levels of women.

Table 3 a

	Total Stress Score	Mean	S.D.	t - value
Pre test score	2195	109.75	61.30	3.617***
Post test score	1057	52.85	34.56	

It is found that there is significant effect of yoga training on the stress levels of women.

Table 3b

Pre-test Score	Post test score	Reduced stress	% of Reduction
199	76	123	61.8
211	79	132	62.55
85	72	13	15.29
81	79	2	2.46
188	103	85	45.21
75	37	38	50.66
39	26	13	33.33
145	86	59	40.68
60	5	55	91.66
200	112	88	44
5	1	4	80
20	2	18	90
117	61	56	47.86
93	49	44	47.31
86	15	71	82.55
120	82	38	31.66
69	17	52	75.36
150	25	125	83.33
169	60	109	64.49
83	70	13	15.66

It is found that there is stress reduction or increased control in every case. The range of reduction is from the minimum of 2 % to the maximum of 92 %. Half of the sample had more than 50% of stress reduction.

Result 3 : There is significant effect of yoga training on the stress levels of women

Discussion : The regular practice of yoga asanas, suryanamaskarams, pranayama, meditation, satwik diet and philosophical discourses made them pleasant and stress free.

Conclusion

The investigator after conducting yoga training for 30 days on a sample of 20 women, found that there is significant effect of it on the stress levels of women. The investigator suggested them to follow the same training regularly to avoid stress in life for a happy and healthy living.

ATTITUDE TOWARDS COMPUTER EDUCATION OF SECONDARY SCHOOL TEACHERS IN MACHILIPATNAM

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Introduction

Computers have invaded virtually every field of human endeavour. This achievement can be attributed to the labour of human endeavour. The immense growth and development can be attributed to qualities of accuracy, precision, speed and information storage. Effective computer usage is believed to have potential, contribute to improved performance, particularly in an era, characterised by rapid technological advancements. Computers are one of the most versatile developments, which have not only brought revolution in other areas but also in the areas of behavioural and educational research. It is extremely useful, obedient reliable and is a fascinating and powerful analytic tool. It acts as a handy tool in education and used for following purposes.

1. Educational Management
2. Instructional / Learning Tool
3. Computer Managed Instruction (CMI)
4. Programming
5. Computer Aided Instruction (CAI)
6. Educational Research.

Today computers are considered an integral part of the school curriculum. In the near future if one cannot work on a computer one might be labeled as an illiterate person. Information technology is rapidly expanding and being applied in almost all the fields of life. It has therefore, become necessary to introduce computers in our schools and colleges and at the same time we have to offer teacher orientation to make them able to present computer education to the students on a sound base.

The success of using computer in education at school level depends on the managers of the classroom teaching learning, teachers and their attitudes. If the teachers do not have knowledge of or a favourable attitude towards using computers they cannot successfully integrate and transfer learning from one situation to another. It requires the ingenuity of

teachers to see great potential in various technologies and adopted them to their advantage. Be it the simple postal technology of the more popular broadcast modes, the teachers soon appreciated their utility in improving their own performance and there by brought about richer learning experiences in their pupils. A teacher of computer education should have a mastery of his subject matter, knowledge of teaching practices and a good attitude towards computer education.

Objectives of the Study

1. To find out the attitude of teachers towards computer education and classify them.
2. To find out the influence of variables (a) Gender (b) Type of management (c) Medium of instruction (d) Qualification (e) Teacher Training on the attitude of teachers towards computer education.

Hypotheses of the Study

To test the statistical significance of selected variables the following hypothesis were formulated.

- ❖ **Hypothesis 1** : There would be a significant difference between male and female teachers in their attitude towards computer education.
- ❖ **Hypothesis 2** : There would be a significant difference between the government and private school teachers in their attitude towards computer education.
- ❖ **Hypothesis 3** : There would be a significant difference between the Telugu/English medium teachers in their attitude towards computer education.
- ❖ **Hypothesis 4** : There would be a significant difference between the graduate and post graduate teachers in their attitude towards computer education.
- ❖ **Hypothesis 5** : There would be a significant difference between trained and untrained teachers in their attitude towards computer education.

Variables of the Study

The following were the variables identified for the present study.

<i>Dependent Variable</i>	<i>Independent Variable</i>
Attitude of Secondary School Teachers towards computer educations	Gender of teachers Type of school management Medium of Instruction in school Qualification Training

Method of Investigation

The method that was adopted to study the problem was Descriptive Survey Method. Descriptive or normative survey describes and interprets “what it is .. it is concerned with conditions and relationships that exist, opinions that are held, processes that are going on, effects that are evident, or trends that are developing. The main objective of this study was to find the attitudes of teachers towards computer education. The data obtained by the survey method is to be analysed in terms of descriptive statistics mean, median, standard deviation, t-test and percentages.

Sample of the Study

A sample of 100 secondary school teachers was randomly selected from the Machilipatnam area.

Tools used in the Study

An attitude scale was prepared by the investigator to find the attitudes of teachers towards computer education. The attitude scale was divided into 2 sections.

Section A: It solicited the personal data from the teachers. Questions were related to their name, institution, qualification, address, gender, experience in school and experience with computers.

Section B: This section consists of the attitude scale on computers. It comprised of 40 questions and attitude measurements and 25 items check list on peripherals/ components of computer. In consultation with experts repetitive and extraneous items were deleted. In the final form 65 items were retained. The test was administered to a group of 10 teachers and reliability was calculated by split half method. The reliability coefficient was calculated and obtained value was 0.64. Hence the reliability and validity was taken care of.

Data Analysis

- 1) Whole sample attitude towards Computer Education

Table 1

From the data it can be inferred that secondary school teachers have relatively high attitude towards computer education. It argues well that the ‘future citizen’ moulders are abreast with the latest innovations in the field of communication technology and computer education.

1) Classification of Teachers on the basis of their attitudes towards Computer Education.

Table 2

S.No.	Classification	Range	N
1.	Poor Attitude	< 130	23
2.	Moderate Attitude	Between 130 and 170	63
3.	Good Attitude	> 170	17

It is rather satisfactory that a vast majority of teachers lie in the category of moderate attitude towards computer education. Yet there is no room for complacency and there is a perceived need for modification of computer education curriculum. It also calls for conduct of inservice programs in computer education.

1) Influence of Variables on Attitude towards Computer Education of Secondary School Teachers

Table 3

S.No.	Variable		N	Mean	S.D.	SED	't'
1.	Gender	Male	39	150.89	21.35	2.503	8.78*
		Female	61	148.85	18.18		
2.	Type of School	Private	65	150.19	18.73	4.06	0.41 ^{NS}
		Government	35	148.5	19.84		
3.	Medium of Instruction	Telugu	57	148	15.71	3.71	1.12 ^{NS}
		English	43	152.17	20.19		
4.	Qualification	Graduate	48	151.16	17.46	3.86	0.88 ^{NS}
		Post-Graduate	52	147.76	21.09		
5.	Teacher Training	Trained	60	144.5	18.7	3.70	3.41*
		Untrained	40	157.25	18.05		

Conclusion of the Study

From the data analysis and findings identified the following are ten conclusions of the study.

1. The overall attitudes of secondary school teachers towards computer education is relatively high.
2. The sample is distributed heterogeneously and it can be concluded that a vast majority of teachers lie in the moderate attitude range.
3. Male teachers have a slightly higher attitude towards their Computer Education than their female counterparts.
4. Private and Government school teachers don't differ in their attitude towards Computer Education.
5. Medium of instruction of the teachers does not influence the attitude of secondary school teachers towards Computer Education.
6. Level of Educational qualification is not casting its influence on attitude of secondary school teachers towards Computer Education.
7. The untrained teachers have a greater attitude towards the computer education than the trained teachers from secondary schools.

Educational Implications

- ☞ Educating the teachers in Computer fundamentals and MS-Office must be accorded top priority and access to Internet must be strengthened.
- ☞ Teachers should be encouraged to prepare power point presentations.
- ☞ Accessibility and independence in utilizing the Computers, LCD's and other equipments should be ensured.
- ☞ Teachers should be provided periodical in-service training programme through which provision can be made to enrich their computer knowledge from one level to another.
- ☞ Teachers should be made aware of the effectiveness and the strategy that these modern teaching aids facilitate in the classroom teaching - learning process and of the innovative trends in teaching - learning processes.
- ☞ Teachers should use computers in innovative ways throughout the school Curriculum, so that students who are not necessarily drawn to the Computer lab might have their interest in Computing sparked in say, a language class
- ☞ Educational planners and administrators should be given a proper orientation and practice in the use of computers, so that they can benefit from it.

- ☞ In this jet age of competition students want to get the latest information not only in the field of academics but also in all areas. So the teachers should motivate them to access different sites for latest information.
- ☞ Teachers of every stream (Arts, Science, Commerce) have to be made to understand the importance of this modern facility, which helps them to explore various aspects, in depth.
- ☞ On going assessment procedure of Computer skills for prospective teachers has to be designed.

Findings of the Study

The following are the findings that could be drawn on the basis of the data analysis.

1. The overall Distribution on Attitude towards computer education of secondary school teachers percentage of mean is 74% and the mean, standard deviation are 149.80, 19.71%
2. The classification of teachers on the basis of their attitude towards computer education is done in three ranges. 23% of teachers have low attitude 63% of teachers have moderate attitude, 17% of teachers have high attitude towards computer education.
3. The mean, and SD of 39 male teachers towards computer education is 150.89, 21.35 and that of 61 female teachers is 148.85, 18.18 respectively.
4. The 't' value for significance of mean difference between male and female teachers is 8.78 which is significant at 0.05 level.
5. The main attitude towards Computer Education of private and Government school teachers are 150.19 and 148.5 and the SD are 18.73 and 19.84
6. The 't' value for the significance of mean difference between private and government school teachers 0.41 which is not significant at 0.05 level.
7. The attitude towards Computer Education mean of Telugu medium and English medium school teachers is 148 and 152. 17 with SD being 15.71 and 20.19 respectively.
8. The 't' value of significance for mean difference between Telugu and English medium school teachers is 1.12 which is not significant at 0.01 level.
9. The mean, and SD of Urban teachers is 152.48 and 18.43 and for Rural teachers is 142.19 and 18.70 and obtained 't' value for this is 2.42 which is significant at 0.05 level.
10. The mean, and SD of Graduate teachers is 151.16 and 17.46 and for post graduate teachers is 147.76 and 21.09
11. The 't' value of Significance of mean difference between the qualification is 0.88 which is not significant at 0.05 level.

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12. The Mean and SD of attitude of trained teachers is 144.5 and 18.70 and for untrained teachers is 157.25 and 18.05 respectively towards Computer education.
 13. The 't' value of Significance of mean difference between the trained and untrained teachers is 3.41 which is significant at 0.01 level.
 14. The mean of the groups languages, Science ,Mathematics, Social and other teachers is 145.8, 153.95, 147.76, 149.2 and 159.8. The F-value is 3.19 which is significant at 0.05 level
 15. The mean of 5 groups based on their experience with computer is 148.41, 152.63, 152, 143.52, 150.12 respectively. The F-value is 0.41 which is not significant at 0.05 level.

Conclusion

The modern net-age world, which is said to be a world of amazing achievements, is also a Global village because computers are playing a powerful role in the world. So computer education is essential and should be introduced in all schools. Only if the teachers have a thorough knowledge and a positive attitude towards computer education, will computer instruction succeed. Thus, it is not surprising that interest in the computers has been rising, in the present century which can be appropriately called, the "Era of Computers".

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