

# A Study of Environmental Awareness And Teaching Competency among Secondary School Teachers

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## **ABSTRACT**

*Environmental Awareness seeks to develop the ability to assess environmental situations and the causal chains of relationships leading to environmental damage; the interaction among social, economical, physical and educational factors: mutually related and overlapping developments, networks and feedback responsibility for future generation' economy and care in the use of all recourses; respect to revolution, nature and life; recognition of the limits of nature, human action and self restriction; and re-acquiring the ability to perceive nature. Teaching competency of secondary school teachers can be a true weapon to bring environmental awareness to the students. Objectives are to find out the level of environmental awareness among male and female secondary school teachers, to find out the level of environmental awareness in secondary teachers of arts and science branch, to find out the level of teaching competency of male and female secondary teachers, to find out the level of teaching competency of arts and science secondary school teachers, to find out the relationship between environmental awareness and teaching competency of secondary school teachers. Sample for the present study consists of 300 secondary school teachers from different schools of Lohardaga and Gumla Dist. State, Jharkhand. Environmental Awareness Scale, by Parveen Kumar Jha, and Teaching Competency Scale, by Thomas Vargese. Mean, SD, t-test and Pearson Product moment correlation was used to analyze the data. Findings of the study revealed that there is no significant difference in the level of Environmental Awareness of male and female secondary school teachers, there is no significant difference in the level of environmental awareness of arts and science secondary school teachers, there is no significant difference in the level of teaching competency of male and female secondary school teachers, there is no significant difference in the level of teaching competency of arts and science secondary school teachers, there is no significant relationship between environmental awareness and teaching competency of secondary school teachers.*

**Keywords-** Environmental-Awareness, Teaching, Competency.

## **I INTRODUCTION**

Environment etymologically means surroundings. It is the natural world of land, sea, air, plants, and animals that exist around us. According to Douglas and Holland "The term Environment is used to describe, in the aggregate, all the external forces, influences and conditions, which affect the life, nature, behavior and the growth, development and maturity of living organism". Environmental Awareness is that which provides power and understanding to take decisions individually and collectively and initiate action for social, cultural, and economic survival, growth and development and for conservation of nature and natural resources", Belgrade International Workshop (1975).

The awareness towards environment should be aroused from childhood, as the children are the future decision makers. They should be aware of their responsibilities and duties towards the social and ecological environment. Since teachers play a vital role in education of the children it is their responsibility to acquaint themselves with environmental awareness education.

The importance of environmental awareness cannot be over emphasized. We must understand that, to improve the environment is to improve the quality of life. It is not the question of air and water pollution. It includes elimination of diseases, hunger, malnutrition and poverty, destruction of forest and wild life, erosion of soil and accumulation of waste. Hence there is an urgent need for proper management of environment. People must be educated about the different aspect of ecology and how to apply it in the daily life. Our whole

attitude towards the mother earth and the natural resources will have to be change drastically. The need to take care for our plant is very real. Every form of life depends upon every other form. We must stop destroying the earth's soil, plants, animal, water, air. Natural cycles must be adhered to if all of us work together, we can preserve our habituate for all life and future generation. If we ignore the warming of nature, then future is doomed. There is only one earth-one future.

### **(a) Environmental awareness through environmental education in the schools: -**

Environmental education is a comparatively new area of the discipline of the education. It is a new source of concern for education, teacher and students. As education is the process of development, environment is the aggregate of all the external condition and influences affecting the life and development of man, and the living organism, Education deals with the various problems and principles governing the relationship between students and their environment.

### **(b) Three important approaches are included in environmental awareness of the teachers:-**

**(i) Surroundings-** Understanding of the teachers about the environmental awareness begins close at home, so that he/she may encourage and explore their immediate surroundings. Such knowledge help in understanding the larger system, broader issues and a life time of learning about causes, connections and consequences.

**(ii) System-** The idea of systems makes sense of a large and complex world. A system has parts that can be understood separately, but the whole cannot be understood completely without recognizing the relationships and its parts. The human body can be seen as a system, so can galaxies. Organizations, individual cells, communities of animals, plants and their families, can be understood as systems and are nested within other systems.

**(iii) Interdependence-**The teacher of a responsible attitude can enlighten the students about the interdependence of every part/species in given system especially, human beings should recognize that they are only a part of the system. Human societies, Education, Politics, Economics, Cultural activities and Technologies affect the systems and the cycle of the rest of nature. Since we are “in” the system part of nature rather than outside it, we are challenged to recognize ramification of our independence. (Reddy K.P., Environmental education, 2002)

### **(c) Principles of environmental awareness**

**(i) Simple to complex:** - Environmental awareness helps in programming learning experiences from simple to complex. The principle of simple to complex does not embrace only one but the entire gamut of inter-related facts from all subjects or an ensemble of knowledge. It is this principle that makes environmental awareness of secondary teachers a medium for learning different subjects.

**(ii) Infinite to definite ones:**-Environmental awareness helps the children to proceed from infinite ideas to definite (ideas) ones. Environmental Awareness helps in sharpening the development of these observational skills and hastens the transition of definiteness. Thus environmental awareness helps teachers to correct the perceptions of the children and to proceed them from indefiniteness to definiteness.

**(iii) Concrete to abstract:** - Environmental Awareness helps children to proceed from concrete to abstract. Environmental Awareness helps teacher to clarify difference in teaching learning process and clear the confusion of the differences and classification of the plants, animal etc.

**(iv) Empirical to rational:** -- Environmental Awareness helps teachers to direct children the ordering of learning experiences from empirical to the rational, Fundamentals of Environmental education, Singh S.K., 2010).

**(v) Environmental Awareness and teaching competency of secondary teachers:-**

The investigator likes to draw attention of the secondary school teachers to these given competencies-

Swami Vivekananda says- the competent teacher is he who can immediately come down to the level of the students and transfer his soul to the students and see through and understand his mind. Such a teacher and none else can really teach.

Teachers need to develop a high level of professional knowledge as teaching competency to impart information regarding new facts, relationships, threats and conflicts in the environment. Teachers need to nurture critical intellectual, ethical and emotional capacities that are likely to help and create a meaningful response.

The most important part of any education is the teacher standing in front of the students. It is time to take teaching interesting. Interest in profession by creating a excitement in the pupils through different environmental programs like –Street skits, dance drama, puppet show, workshops, seminars etc. to put the strong impact on the message “one people one environment.”

Teacher’s third competency is attitude towards children is important for making children interested in saving mother earth from destruction in any way. Teacher needs change her attitude from narrow thinking to broad vision and help the children understand the meaning of ‘there is only one earth-one future’.

It is always good to inculcate the sense of adaptability in different situations of life. The secondary teachers have a significant role to play. Teachers do not go into education to make money. They want that their children to succeed in life. It is their duty to give the tools to become environmental awareness communicators through activity oriented approach in teaching –learning process.

## **II NEED & OBJECTIVE OF THE STUDY**

### **(a) Need of the study**

Environmental awareness and teaching competency among secondary school teachers is the need of the day. Students lack positive attitude towards environmental awareness. It is a challenge for the teachers to innovate new ways of orienting students towards the limits of nature, human action and self restriction; and re-acquiring the ability to preserve nature.

### **(b) Objectives of the study**

The main objectives of the study were-

- (i) To find out the level of environmental awareness among male and female secondary school teachers.
- (ii) To find out the level of environmental awareness of arts and science secondary teachers.
- (iii) To find out the Level of teaching competency of male and female secondary teachers.
- (iv) To find out the level of teaching competency of arts and science secondary school teachers.

(v) To find out the relationship between environmental awareness and teaching competency of secondary school teachers.

### III METHODOLOGY

In this study, the Investigator used survey method.

(a) **Sample Techniques** -Sample for the present study consist of 300 secondary school teachers from different schools of Lohardaga and Gumla Dist. State, Jharkhand.

(b) **Tool used-** Environmental Awareness Scale, by Parveen Kumar Jha, and Teaching competency scale, by Thomas Vargese.

(c) **Data Analysis-** Mean, SD, t-test and Pearson Product moment correlation were used to analyses the data. Findings of the study revealed that-

(d) **Testing of Null Hypotheses**

(i) **Null Hypotheses – 1**

There is no significant difference in the level of Environmental Awareness of male and female secondary school teachers.

TABLE-1

DIFFERENCE IN THE LEVEL OF ENVIRONMENTAL AWARENESS OF SECONDARY SCHOOL TEACHERS WITH RESPECT TO GENDER

Sex	N	Mean	SD	df	t-ratio	Level of Significance
Male	111	29.99	9.48	298	3.20	S
Female	189	33.64	9.60			

For df 298, at 5% Level of significance the table value = 1.97

From table- 1, it is concluded that there is significant difference in the level of Environmental Awareness of male and female secondary school teachers.

(ii) **Null Hypotheses – 2**

There is no significant difference in the level of environmental awareness of arts and science secondary school teachers.

TABLE -2

DIFFERENCE IN THE LEVEL OF ENVIRONMENTAL AWARENESS OF ARTS AND SCIENCE SECONDARY SCHOOL TEACHERS WITH RESPECT TO SUBJECT

Subject	N	Mean	SD	Df	t-ratio	Level of Significance
Not Science	160	32.46	8.99	298	0.31	NS
Science	140	30.1	10.47			

For df 298, at 5% Level of significance the table value = 1.97

From table- 2, it is concluded that there is no significant difference in the level of environmental awareness of arts and science secondary school teachers.

(iii) **Null Hypotheses – 3**

There is no significant difference in the level of teaching competency of male and female secondary school teachers.

TABLE -3

DIFFERENCES IN TEACHING COMPETENCY OF SECONDARY SCHOOL TEACHERS WITH RESPECT TO GENDER

Gender	N	Mean	SD	df	t-value	Level of Significance
Male	144	270.40	29.04	298	1.50	Not Significant (At 5% Ls)
Female	156	265.36	28.80			

For df 298, at 5% Level of significance the table value = 1.97

From table-3, it is concluded that there is no significant difference in the level the level of Teaching Competency of male and female secondary teachers.

(iv) **Null Hypotheses – 4**

There is no significant difference in the level of teaching competency of arts and science secondary school teachers.

TABLE-4

DIFFERENCE IN TEACHING COMPETENCY OF SECONDARY SCHOOL TEACHERS WITH RESPECT TO SUBJECT

Subject	N	Mean	SD	df	t-value	Level of Significance
Arts	160	264.25	28.81	298	2.43	Significant (At 5% Ls)
Science	140	272.28	28.27			

For df 298, at 5% Level of Significance table value = 1.97

From table-4, it is concluded that there is significant difference in the level the level of Teaching Competency of arts and science secondary school teachers.

(v) **Null Hypotheses – 5**

There is no significant relationship between Environmental awareness and teaching competency of secondary school teachers

TABLE -5

RELATIONSHIP BETWEEN ENVIRONMENTAL AWARENESS AND TEACHING COMPETENCY OF SECONDARY SCHOOL TEACHERS

Environmental Awareness	Teaching Competency			N	Correlation Value (r)	Level of significance
$\sum X$	$\sum X^2$	$\sum Y$	$\sum Y^2$	$\sum XY$	300	0.998
120	49020	221	16551	90074		
576	216	545	9673	522		

For 300 sample, at 1% Level of significance, Table value of correlation = 0.148

From table: 5, it is concluded that there is significant relationship between environmental awareness and teaching competency of secondary school teachers.

#### IV CONCLUSIONS

On the basis of data analysis of data significant different was found. It can be said that the female teachers have higher environmental awareness than male teachers. Female folk is more sensitive towards environmental awareness because they are more close to practical living.

The environmental awareness of arts and science secondary school teachers is positive direction. This is healthy sign. The 21<sup>st</sup> Century is the age of computer, internet, and new technologies; today men and women both have the equal right to be educated; in the progressive era, everybody-he/she has right to get educated. Hence there is no effect on the level of environmental awareness of arts and science secondary school teachers.

The similarity in teaching competency shows that male and female both are acquainted with the skills. Skilled teachers reflect the best teaching competency in his/her profession but through life.

The significant difference in subject shows that science teachers have better hold on the subject than the arts teachers. Practical and project work help the teacher and the student in understanding, widening and strengthening the knowledge. in science subject makes learning easier.

In spite of differences in few areas there is significant relationship between environmental awareness and teaching Competency of secondary school teachers because teachers are well equipped with current environmental problems and the need to solved which can only be help through education and the serious effort of secondary school teachers.

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