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A Study of Scientific Attitude of Viii Class Students With Caste and Mother Education

Education

KEYWORDS : Scientific Attitude, caste, mother education and VIII class students.

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ABSTRACT

The teaching of science at this stage should emphasize on the acquisition of knowledge along with the ability of logical thinking and drawing conclusions for taking decisions at a higher level. At this stage a disciplinary approach of teaching science is favoured instead of an integrated science teaching. The main objective of the present study is to study the influence of caste and mother education on the scientific attitude of VIII class students. The scientific attitude questionnaire developed by Banal Hari Babu (2014) was adopted for the present study. A sample of 320 VIII class students representing all categories of secondary schools in Y.S.R. Kadapa District by following the standardized procedures. 't' and 'F' – (ANOVA) tests were employed for analysis of the data. There is significant influence of caste and mother education at 0.01 level of significance on the scientific attitude of VIII class students.

INTRODUCTION

To attain universal enrolment and to pre-empt dropouts, improvement in both the environment as well as the quality of education imparted are to be treated as a quintessential ongoing process. The learning process, being neither uniform nor mechanical, allowances need be made for individual students who may differ from the majority. Teaching and learning of science should be so designed as to respect the basic rights of each and every student. Science education at the elementary level should not overwhelm children with loads of information but should instead aim to open their hearts and minds to the joy of learning.

Science and mathematics curricula for secondary level should help inspire conscious internalization of a healthy work ethos. This will provide valuable man power fuelling economic growth even while moulding ideal citizens who can adapt effortlessly to a society based on science and technology.

Providing effective Science education is possible only with scientific attitude, a positive attitude towards science and creative ability to develop them among the children. Scientific attitude and attitude towards science will confuse the common reader by appearing same but they are two different variables of teaching science.

Creativity and scientific attitude are to be nurtured and nourished in our class room. It requires complete involvement of the students in the subject, welcoming their ideas, providing them which an intellectual atmosphere - free to do experiments, observe, think, discuss, infer and express.

Education has always been a key public-agenda item because the economy of any country requires changes in educational policies to match the changes in economic growth. Teachers, therefore, need to be constantly aware of new skills and be receptive to learning these skills so as to impart them to their students. Rapid changes in a knowledge-based and an information technology environment have led to urgency in revolutionizing some of the ways educational training has been for centuries. Creativity in education is addressed as a way to help educators in their journey into the next century.

REVIEW OF LITERATURE

Padma Latha (2002), Prasanth (2003), Vali (2005), Venugopal Dasari (2011), Shabbeer Hussain, S. (2012) and **Banal Hari Babu (2014)** reported that caste of individuals do have significant difference on scientific attitude. However, **Nagarjuna (2002)** and **Husna Banu, SK. (2013)** reported that caste of individuals do not have significant difference on scientific attitude.

Nagarjuna (2002), Venugopal Dasari (2011), Shabbeer Hussain, S. (2012) and **Banal Hari Babu (2014)** reported that mother education of individuals do have significant difference on scientific attitude. **Padma Latha (2002), Prasanth (2003), Vali (2005)** and **Husna Banu, SK. (2013)** reported that mother education of individuals do not have significant difference on scientific attitude.

Scope of the Study: The main intention of the present study is to find the relation of scientific attitude of VIII class students with caste and mother education.

Objective of the Study: To study the impact of caste and mother education on the scientific attitude of VIII class students.

Hypotheses of the study

There would be no significant impact of 'caste' on the scientific attitude of VIII class students.

There would be no significant impact of 'mother education' on the scientific attitude of VIII class students.

Tools for the Study

The scientific attitude test was adopted from **Banal Hari Babu (2014).** The tool was highly reliable for the investigation. The total items of scientific attitude questionnaire have 48 items in that 24 items are negative remaining 24 items are positive. For the purpose of scoring numerical values (weightages) were assigned to each of the five categories namely Strongly Agree (S.A.), Agree (A.), Doubtful (D.), Disagree (D.A.) and Strongly Disagree (S.D.A.) based on the **Likert (1932)** method. Each students score are marked on the right top corner of the sheet.

Personal data regarding the student – 1. Name, 2. Caste, 3. Mother education.

Data Collection

The sample for the investigation consisted of 320 VIII class students in Y.S.R. Kadapa district. The stratified random sampling was applied in three stages. The first stage is management i.e. Government and Private and second stage is locality i.e. rural and urban and third stage gender i.e. boys and girls. It is a 2X2X2 factorial design with 320 sample subjects. The investigator personally visited schools with the permission of the head masters of the schools. The VIII class students who attended to the school on the day of collection of data are considered for the purpose of the investigation. It was provided to the concerned VIII class students of the schools. The VIII class students were given necessary instructions about the instruments and motivated to respond genuinely to all the items. The scientific attitude questionnaire and personal data sheet were administered. The data on each variable in the investigation is properly coded to suit for computer analysis. The analysis was carried out on the basis of objectives of the investigation and hypotheses formulated by employing appropriate statistical techniques. The inferential statistical technique 't' and 'F' (ANOVA) tests were employed to test hypotheses.

RESULTS AND DISCUSSION

1. Caste

The relationship of scientific attitude of VIII class students with their caste is studied in the present investigation. On the basis of caste, the students are divided into three groups. Group – I is formed with OC students, Group – II formed with BC students and Group – III is formed with SC and ST students. The corresponding scientific attitude of VIII class students of the three groups were analyzed accordingly. The mean values of scientific attitude of VIII class students for the three groups were tested for significance by employing 'F' - test. The following hypothesis is framed.

Hypothesis – 1

There would be no significant impact of 'caste' on the scientific attitude of VIII class students.

The above hypothesis is tested by employing 'F' - test. The results are presented in **Table – 1.**

Table – 1: Influence of caste on the scientific attitude of VIII class students

S. No.	Caste	N	Mean	S.D.	'F' – Test
1.	OC	130	197.69	22.16	14.148**
2.	BC	100	187.67	17.72	
3.	SC and ST	90	184.76	15.47	

** **Indicates significant at 0.01 level**

It is clear from **Table – 1** that the computed value of 'F' for the scientific attitude of VIII class students is (14.148). It is greater than table value of 'F' (4.680) for 2 and 317 df at 0.01 level. Hence **Hypothesis – 1 is rejected** at 0.01 level of significance. It is concluded that the caste has significant influence on the scientific attitude of VIII class students.

2. Mother education

The relationship of scientific attitude of VIII class students with their mother education is studied in the present investigation. On the basis of mother education, the students are divided into two groups. The mother education is illiterate form with Group – I and Group – II forms with mother education is literate. The corresponding scientific attitude of VIII class students of the two groups were analyzed accordingly. The mean values of scientific attitude of VIII class students for the two groups were tested for significance by employing 't' - test. The following hypothesis is framed.

Hypothesis – 2

There would be no significant impact of 'mother education' on the scientific attitude of VIII class students.

The above hypothesis is tested by employing 't' - test. The results are presented in **Table – 2.**

Table – 2: Influence of mother education on the scientific attitude of VIII class students

S. No.	Mother education	N	Mean	S.D.	't' - Test
1.	Illiterate	162	187.10	19.13	3.536**
2.	Literate	158	194.84	19.99	

** **Indicates significant at 0.01 level**

It is found from the **Table – 2** that the computed value of 't' (3.536) is greater than the critical value of 't' (2.58) for 1 and 318 df at 0.01 level of significance. Hence the **Hypothesis – 2 is rejected** at 0.01 level. Therefore it is concluded that the mother education has significant influence on the scientific attitude of VIII class students.

Findings: There is significant influence of caste and mother education at 0.01 level of significance on the scientific attitude of VIII class students.

Conclusions: In the light of the findings, the following conclusions are drawn. Caste and mother education have significant influence on the scientific attitude of VIII class students.

EDUCATIONAL IMPLICATIONS

The findings of the present research have raised some important questions related to the educational needs of the students with special reference to their scientific attitude of VIII class students.

Caste is the highly influenced in scientific attitude of VIII class students. OC students have positive attitude than the SC and ST students. The administrators to provide facilities for SC and ST students.

Mother education is highly influenced in scientific attitude of VIII class students. Literate mothers' group students have positive attitude than the Illiterate mothers' group students. The administrators to provide educational facilities for illiterate mothers.

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