

A study of the curiosity level of girls and boys of primary school having EDUSAT

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Abstract: *Universalization of elementary education has been an ambiguous goal. Despite sustained efforts, the Indian elementary school system remained apparently far away from the goal of universalization. During the last several planned efforts, we could see remarkable increase in the enrolments, due to provision of a school within the reach of the learners and the community. However, the satisfactory levels of increased enrolments were pre-empted by the high dropout rates. For instance, in the state of Andhra Pradesh, the gross enrolment ratios are found to be 100 and above in several districts for the 6 to 10 years age group. However, for the classes I to V, it is observed that about 32 per cent children dropout in between classes I and V. The object of provision of school in all the areas and to all communities could not be realized since we could not contain the appalling dropout rates. Hence, there is a need for a retrospective look at the reasons for the children dropping at the primary or elementary stage.*

Key words: EDUSAT, school education, primary schools, Curiosity.

1. INTRODUCTION:

India has made tremendous strides in the expansion of educational facilities from independence. The literacy rate of 5 per cent in 1901 that grew to about 19 per cent in 1951 (in the first 50 years of British reign) grew to more than 65 per cent during the next 50 years. Compared to a few million students in 1951, Indian education now reaches out to more than 196 million students. This enormous gain in enrolment, largely gets reduced by massive drop out at various levels especially between grades I and VIII. Also, students' performances are far from satisfactory level. Combining the two elements of drop out and performance, what we achieve is: out of 100 children admitted in class I, only about 26 appears for grade X examination; 13 pass out; and only about six complete XII grade examination; a large majority of them pass in the third division. We need a quantum jump in improvement of quality of education. President A.P.J. Abdul Kalam, in his address to the Parliament emphasized the need to build quality in education fast. Technology provides that empowerment towards building quality in education.

Examine this from our day-to-day experiences. Quality of student learning and performance depends largely upon the quality of teaching in the classroom. There is wide variation in the quality of teachers and teaching from one school to another. Students have restricted access to a good teacher. In a school, some have access to an excellent teacher of mathematics, but not in Geography or English language; and yet some in other institution, reverse may be the case. Technology network overcomes that important limitation. For teaching say, Mathematics, or Physics or History from the teaching end (uplink station), we need only about 10 excellent teachers who may be strewn around in the schools. Such excellent teachers can be brought together to teach from the uplink stations, and every learner can have access to the best of the teacher, the system has got. Also, students will have access to interacting with such excellent teachers. Further, because of digital recording and possibility of retrieval, such lessons can be revisited again for reinforcement. This process will naturally enhance the quality of learning. "In March 1995, the White House challenged the telecommunication industry to connect every classroom, library, clinic and hospital to the information super highway by the year 2000". The above quotes should suffice to make Indian schools realize the importance of multimedia in schools.

2. REVIEW OF LITERATURE:

Kumar.S(2001) in his study entitled, "the usefulness of interactive radio counseling" on IGNOU students, he founds that respondents considered interactive radio counseling an excellent opportunity to interact with faulty and experts and to clarify doubts on study materials.

Rochman (2003) in his extensive research **found** that the teaching through EDUSAT is highly effective for the students and teachers and EDUSAT should so use in teaching.

Sharma and Chander.U(2003) conducted a study on "Gyan Vani radio programmes" stated by IGNOU. Researchers revealed that 43% learners preferred discussion based programmes and 40% learners preferred to quiz based shows. Overall 62% respondents highlight the need for interactivity in Gyan Vani programmes.

Prabhak, B.(2004) in his project “The performance of the EUDSAT – VICTER (virtual classroom technology on EDUSAT for rural school) network established in kerla ”. He reported that the state has set up the first interactive broadband network on EDUSAT for school education in India.

De, Minakshi(2004) in his paper entitled , “EDUSAT – the Indian satellite for education”. She found that the utility of EDUSAT in India such as satellite can establish the connectivity between urban educational with adequate infrastructure imparting quality education besides supporting formal education satellite systems can facilitate dissemination of knowledge to the rural and remote population about important aspects of health, hygiene and personality development and allow professionals to update their knowledge base as well.

Sharma and Jasola(2005) in study entitled, “satellite –based distance education in INDIA.” Research reported that satellite supported Distance Education: EDUSAT has demonstrated that it can provide two-way videoconference, on-line multimedia, and video programming on demand. Virtual communities of learners and educators are already sharing those information resources that are growing exponentially over the internet and will grow even faster with a more extended international information infrastructure.

3. RESEARCH METHODOLOGY:

3.1 Objective:

To compare the curiosity level of girls and boys of primary school having EDUSAT.

3.2 Hypotheses

There exists no significant difference in the curiosity level of girls and boys of primary schools having EDUSAT.

3.3 The Population:

Population refers to any collection of specified group of human beings or of non-human entities such as objects, educational institutions, time units, geographical area, prices of wheat or salaries drawn by the individuals. Some statisticians call it universe. Population in the present study comprises of the primary schools of the state Haryana.

3.4 The Sample:

Sample is a small unit of a large whole or smaller representation of a whole population or universe. We can also say that a sample is a true representative of its population. The investigator went through the sample of 600 primary students studying in various primary schools of Haryana. In order to keep to study manageable enough, a purposive sampling procedure adopted in the study. The schools in each zone of area have been taken from the list available in the DEO Office, to be used for the selection of schools for the sample. 300 students (150 girls and 150 boys) from the primary schools having EDUSAT and 300 students (150 girls and 150 boys) from the primary schools not having EDUSAT, constituted the sample.

In the study effect has been seen by comparing the students of primary schools having and not having EDUSAT. Students of Class IV were the part of study.

3.5 Tools Used:-

After selecting the sample, the next step was to choose the suitable tools for the collection of data. The investigator selected the following tools for collecting authentic information from the respondents.

- Dr. Rajiv Kumar, Children’s Curiosity Scale (CCS) Hindi/English
- Researcher’s self-made Achievement Test

Tool No. 1 - Children’s Curiosity Scale (Rajiv Kumar, Children’s Curiosity Scale (CCS) Hindi/English)

The children’s curiosity scale was constructed and standardized by Dr. Rajiv Kumar in 1992, published by Ankur Psychological Agency, Lucknow. The copy of the children curiosity scale has been enclosed vide appendix-I.

3.6 Construction of the Scale

TABLE I. Collection of the items - The objective was to develop a self-rating instrument by collecting the items measuring some sort of attitudes logically considered to indicate some aspect of curiosity as defined. Initially 50 such items, stated in positive or negative terms, were collected. Most of the items were collected from the self-rating instrument developed by Maw & Maw and translated in simple Hindi. Other items were prepared by the investigator using his own experience and general observation together with the consultation of the experts of the field.

Preliminary evaluation of the items - At this stage, the items were thoroughly screened and edited. A few items were entirely changed, a few re-worded, and others were slightly modified so as to make them suitable to Indian conditions. In particular, the following criteria were followed in screening and editing of the statements :

Fig. 1. As far as possible, statements were retained in the form of simple sentences, avoiding words which may not be understood by the subjects.

Fig. 2. Statements were clear, brief and precise.

Fig. 3. Statements having more than one meaning and those with double negatives were not used.

Fig. 4. Statements reflecting the present attitude of the subjects rather than past were framed.

The scale thus developed was a four point scale having four categories of responses, namely, ‘Never’, ‘Sometimes’, ‘Often’ and ‘Always’.

(iii) Pre-try out - After preliminary screening and editing of the statements, the scale was pre-tried out on 20 students in order to find out the difficulties of the students in answering the questions and understanding the language

of the statements. After this preliminary administration of the test, minor changes were made in the language and sentence construction in some of the items.

(iv) Try out - After pre-try out, the test was administered on a sample of 200 students. Under this step of actual try out, item-analysis was done. Keeping in view the applicability of the method and the limitation of time and resources, the investigator applied 't' test for item discrimination. First of all, 27% upper and 27% lower cases were selected from the sample for item-analysis. Then the responses of the high and the low groups were evaluated for all individual statements. To find out the extent to which a given statement differentiates between the high and low groups or to find out the discriminating values of the items, mean was used on the basis of the formula-1 proposed by Edwards. Table-1 presents the item-wise discriminating values. To find out the significance of these f-values, the way suggested by Edwards was followed. According to Edwards, "As a crude and approximate rule of thumb, we may regard any 't' value equal to or greater than 1.75 as indicating that the average response of the high and low groups to a statement differs significantly, provided we have 25 or more subjects in the high group and also in the low group."

4. DATA ANALYSIS:

Table 1.1 Discriminating values of different items of Curiosity Test computed in terms of t-values

Item No.	t -value	Item No.	t -value	Item No.	t -value
1	4.33*	18	5.28*	35	4.81*
2	1.43	19	0.42	36	6.86*
3	5.56*	20	5.27*	37	1.80*
4	2.56*	21	0.32	38	3.12*
5	5.86*	22	6.28*	39	3.61*
6	4.31*	23	6.12*	40	4.25*
7	5.44*	24	4.83*	41	5.18*
8	1.75*	25	5.20*	42	6.21*
9	0.31	26	4.33*	43	6.54*
10	1.76*	27	3.00*	44	4.16*
11	3.69*	28	5.00*	45	4.71*
12	2.47*	29	4.37*	46	4.07*
13	1.79*	30	0.32	47	11.23*
14	5.65*	31	4.21*	48	2.82*
15	1.75*	32	4.59*	49	2.19*
16	5.53*	33	0.58*	50	5.93*
17	5.44*	34	4.05*		

* Significant.

Hence, the items having f-values 1.75 or more were considered to be discriminating between the high and the low group and included in the final form of the test. Six items which did not discriminate between the subjects with high and low total scores, were removed. Thus, the final form of the test contained 44 statements. Instructions and scoring procedure were finalized at this stage

The final form of the test - It is a four point scale to study some attitudes and habits of the children. The scale consists of 44 items. Each of the items has been selected to measure some aspect of curiosity behaviour as defined. The items are in simple Hindi to enable the children of Hindi-speaking areas to answer them without being influenced by proficiency in language. All the items have four alternatives - 'Kabhie Nahin' (Never) 'Kabhie-Kabhie' (Sometimes), 'Adhiktar' (Often) and 'Hamesha' (Always). Items numbered 1-4, 6-11, 13-22, 24-32 and 34-44 are stated in positive terms, and items numbered 5, 12, 23 and 33 are stated in negative terms. The test can generally be used on school going children of 9-14 years of age of Hindi-speaking areas of India.

4.1 Administration

This test is primarily a group test but it can also be used in an individual situation. The responses are to be given on the scale form itself as it has consumable booklet. The instructions are printed on front page of the scale. There is no time limit to complete the test. However, the test can be administered conveniently in a period of 40 minutes in a classroom situation.

4.2 Scoring

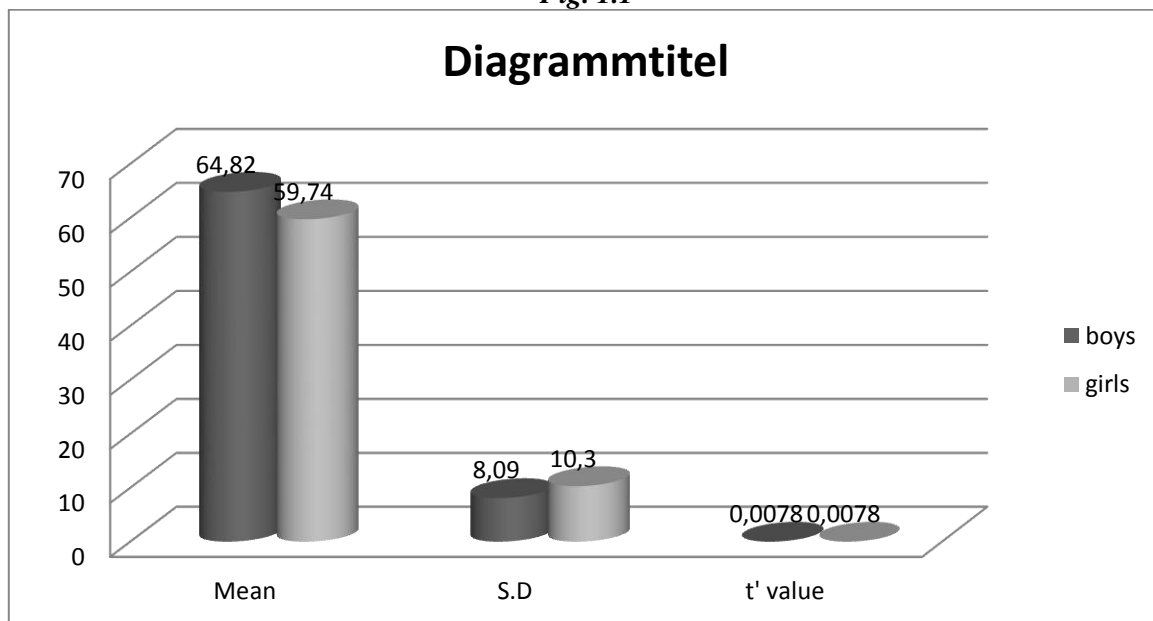
The responses on the scale form can be scored conveniently by giving scores 0, 1, 2 and 3 to responses 'Never', 'Sometimes', 'Often' and 'Always' respectively in case of all the positive items and scores 3, 2, 1 and 0

respectively to these responses in case of negative item Nos. 5, 12, 23 and 33. Then the total scores are found out by summing the scores obtained by the subject in each item. This total score becomes the raw score of the subject.

Table 1.2 Significance of Difference Between Curiosity Level of Girls and Boys of primary schools having EDUSAT.

Group	N	Mean	S.D.	't' value	Remarks
Girls	50	64.82	8.09	0.0078	Not significant
Boys	50	59.74	10.3		

Fig. 1.1



4.3 Interpretation: It is observed that the mean of curiosity of primary school girls having EDUSAT is 64.82 and SD is 8.09. The Mean the curiosity of primary school boys is 59.74 and SD is 10.30. The curiosity of primary school girls are more than the curiosity of primary school boys. The computed t-value 0.0078 is less than the tabulated t-value of 1.96 at 0.05 level and 2.58 at 0.01 level of significance. Hence the difference between mean of curiosity of primary school girls and boys having EDUSAT is not significant. The null hypotheses "There exists no significant difference in the curiosity level of girls and boys of primary schools having EDUSAT" is accepted.

5. FINDINGS:

In order to find out significance of difference between curiosity level of girls and boys of primary schools having EDUSAT, 't' value is computed. And it is found out that there is no significant difference between the scores of curiosity levels of girls and boys of primary schools having EDUSAT. In fact the computed mean value of girls is slightly higher than that of boys. It may be due to the reason that both boys and girls are from same type of school, same classes and same age group.

In order to find out significance of difference between curiosity level of girls and boys of primary schools not having EDUSAT, 't' value is computed. And it is found out that there is no significant difference between the scores of curiosity levels of girls and boys of primary schools not having EDUSAT. Further it is found out that the computed mean value of girls is slightly higher than that of boys. It may be due to the reason that both boys and girls are from same type of school, same classes and same age group.

6. CONCLUSION:

Curiosity, Achievement play an important role in the overall development of primary school learners in the light of the findings of the present study it has its implications for parents, teachers, administrators are as well as for learners in general. The study has its implication to meet the needs of learning groups. During the study some specific observation based on survey requires strategic planning to improve learning condition through effective

implementation of EDUSAT. Teaching at the primary schools, mostly concentrates on giving information which is not the sole objective of teaching along with giving information. The objectives of primary school teaching are :

- to develop study habits
- to develop self concept
- to develop love for learning.
- to develop understanding level
- to develop comprehension and reading ability
- to develop vocabulary at initial level

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