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STUDY OF HIGHER MENTAL ABILITIES OF SECONDARY SCHOOL STUDENTS

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ABSTRACT

As children move from elementary to middle to high school, the ability to think in more than one way becomes more and more important. Most of us don't think about thinking. But with all the new emphasis on accountability and increased student achievement educators parents and legislators have been thinking more about thinking. As children move up in grade level, teachers ask them to do more and more things with the information that is stored in their brains they may ask students to write a new ending for a book they have been reading or they may ask why a certain character in the story behaved in particular way. These kinds of thinking require what is called higher order thinking or HOT. This study is related to HOTS i.e. Higher mental abilities of secondary school students.

KEYWORDS: HOT, Higher Mental Abilities, Secondary Students.



1. INTRODUCTION :

Education should cover the entire gamut of child life. It must be considered as a process for the all-round development of child's personality child must be helped to develop his intellectual, social & moral qualities through a systematic & organized efforts. It is now generally accepted that, the major task of education in present society is to develop creative potential among children so that they may successfully respond to & take appropriate action in a variety of situations resulting from quick & successive changes taking place in his surroundings.

According to the "National policy of Education (1996) special emphasis is given to Mathematics & Science education. There is no denying the fact that these two subjects, which if taught properly in the early years of child's life can lay the foundation of thinking reasoning & imaging mind.

2. OBJECTIVES OF THE STUDY

1. To study the higher order thinking ability i.e. higher mental abilities of secondary school students of Solapur

city.

2.To study the difference between boys and girls with respect to their higher level thinking abilities.

3. HYPOTHESES OF THE RESEARCH

1. Higher mental abilities of secondary school students are normally distributed.
2. There is no significant difference in mean score of higher mental abilities of secondary school students with respect to gender for boys & girls.

4. NEED AND SIGNIFICANCE OF THE STUDY:

The basic aim of education is to provide the right inputs to help children grow up into painstaking individuals, fundamentals to make the right choices in life.

Traditional Behavioral Paradigm with its emphasis on methods of Teaching is being questioned Today all across. In today situation majoring of required learning skills which in turn leading a passive society. Now a days we are realizing that educating our on traditional education system is not enough. This can be achieved by imparting cognitive, social and emotional thinking skills.

5. REVIEW OF THE RESEARCHES:

1. Research work of Susani Shah throws light on the fact that, thinking skills can be taught it also focuses on the importance of development of thinking skills.
2. Chhotray B. (1983) studied effect of schooling on cognitive processes in self- development planning future perceptions this research focuses on the importance of school environment on cognitive development school plays a very vital role in the cognitive development of a child. Schooling influences the dreams of children.
3. Jaikhani neeja (1988) Development an enrichment programme for development of IQ scores of lower class children's. The finds shows that the experimental group gained significantly more IQ scores but not the control group.
4. Chaka Sheela (2009) studied effect of concept mapping on the cognitive process & scholastic performance in general science for standard VII students. This research is helpful for designing hypothesis as well as for selecting content for the research the result showed that the concept mapping is a good teaching technique for science teaching.

6. METHODOLOGY FOR THE STUDY:

1. Research Design Descriptive Research design was used for this research based on adoption of survey method.
2. Researcher used descriptive method to collect the data about higher mental abilities. Researcher selected "THMAS" test for studying level of higher mental abilities.
3. For this research work researcher has used purposive sampling method. Students from Dayanand kashinath Ashava School were selected for data collection.
4. Total 40 students i.e. 20 boys and 20 girls were selected for calculation of higher mental abilities.
5. Data Analysis Method: The data collected from the sample was analyzed by using descriptive statistics. The Independent T- test was used for analysis of data.

7. RESULTS AND DISCUSSION:

- I. First objective was to study level of higher mental abilities of secondary school students.

Table: 1 Distribution of Students According to test Score

Sr. No	Class Interval	No of Students	% of Students
1	0-10	11	27
2	11- 20	23	58
3	21-30	06	15
	Total	40	100

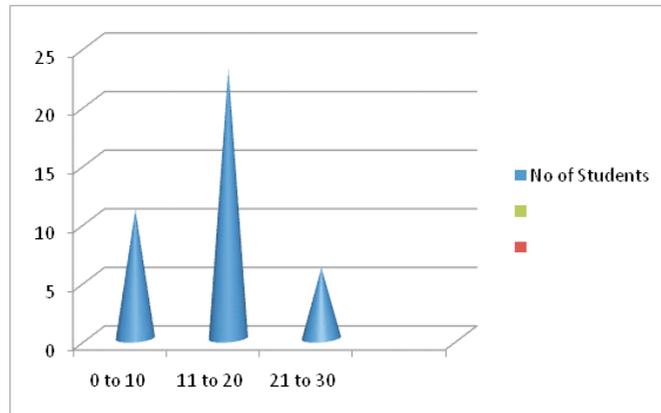


Figure 1 Graph showing students marks in THMAS test

CONCLUSION:

From above graph it is clear that scores of students are normally distributed. 58 % Students are having scores in the interval 11 to 20. 27 % Students are having scores in the interval 0 to 10. 15 % Students are having scores in the interval 21 to 30.

II. Second objective was to study the difference between boys and girls with respect to their higher level thinking abilities.

Table 2: Girl’s & boys achievement values

Group	N	Mean	Standard Deviation	r	T	df
Girls	20	6.4	$\sigma_1 = 1.18$	r = 0.84	12.635	38
Boys	20	5.4	$\sigma_2 = 1.81$			

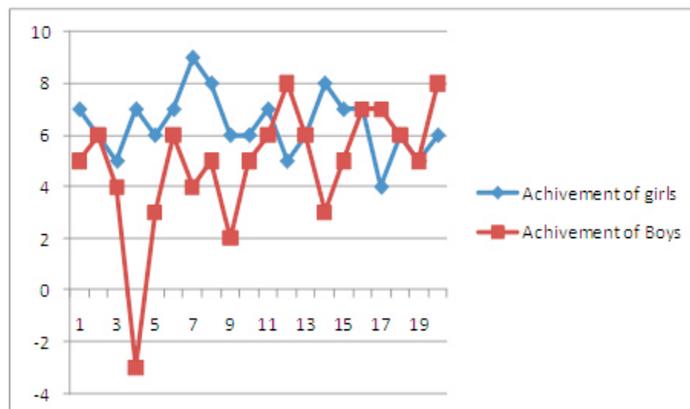


Figure 2: Comparison of Achievement of girls and boys

CONCLUSION:

As per the 't' value calculated is greater than table 't' value, so difference in the mean is significant. There is significant difference in the achievement of secondary school students with respect to gender for boys & girls. Achievement of girls is more than boys.

DISCUSSION:

School time table is so much busy that it is not possible to keep separate periods for development of higher order thinking. Development of higher order thinking is very much essential for cognitive development. So it is necessary to format our lesson plans and make them more thinking oriented.

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