

# EFFECT OF HARITHA VIDYALAYAM PROJECT ON PRODUCTIVE THINKING ABILITY OF UPPER PRIMARY SCHOOL STUDENTS OF KERALA

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**Abstract:** The protection and preservation of the environment is one of the major issues of the countries. It is the responsibility and duty of all first world nations. The awareness about the surroundings is that which provides power and understanding to take decisions individually and collectively and initiate actions for social, cultural and economic survival, growth and development and for conservation of natural resources. This will make the individual as an eco friendly man. The knowledge about our environment helps the individual to make environmental friendly objects and particles which will not adversely affect the environment. The green approach to school provides remarkable benefits including ranking as a mechanism for learning, a leader for sustainability and accommodating learning and teaching needs. It is preparing students to productive and creative thinkers who are confident to champion of sustainability of the world and its environment. Productive thinking is an insight or enhancement of fresh ideas and is the key to success. Viewing from a new perspective or perhaps just perceive more clearly from a familiar perspective helps to inspire the inventing of new ideas. The Haritha Vidyalayam Project contribute for the development of students productive thinking ability for the concern about the environment and a friendly behaviour to the nature Man becomes a potent factor in modifying the environment is at a place up setting natures balance endangering their own existence. The Haritha Vidyalayam Project empowered the student's community and helps to realize the value of preserve and protection of the nature. The awareness of various environmental issues and problems gives value guidance for our natural resources and in our natural affairs. It offers excellent solutions to most of our social, natural and political affairs. Through Haritha Vidyalayam project (Green School Project) the pupils can develop their productive thinking ability and a friendly nature to the environment. In this study the investigator found out that the Haritha Vidyalayam Project (Green School Project) has great effect on the development productive thinking ability of the upper primary students of Kerala

**Key words:** Haritha Vidhyalayam Project (Green School), Productive Thinking and Creative Thinking

## I. INTRODUCTION

Education is a process of continual adjustment of one to oneself, to society and to his environment. It makes one sensitive to one's surroundings, enables one to cherish values on life and inculcates a universality of outlook and promotes self-reliance and is self supporting. Education has always been regarded in India as a source of illuminations and power which transforms and enables our nature by progressive and harmonious development of our Physical, Mental, Intellectual and Spiritual powers and facilities.

Environmental education is a way of implementing the environmental protection Environmental education is a kind of education which will seeks to make pupils fully aware of the problems connected with their environment. So that they will be able to take the environmental related problems with a sense of responsibility and with the skills which enables them to contribute their community. This can be done by inculcating the impressionable minds of children, and awareness about the different types of environmental destruction occurring around them, developing a sense of responsibility towards nature and its various life forms. A suitably oriented system of education can facilitate and promote this keeping in mind the importance of educating the students about environmental destruction and its protection.

As the investigator strongly feels that education has a vital role in preventing and solving environmental problems. The investigator conducts an investigation in to the productive thinking ability of students concerned with the aspects of environmental problem and how can it solve through productive thinking ability school students. The investigator wanted to assess the initiatives of productive thinking ability of school students of Kerala. There are many environmental studies in students but no studies have been found in relation to Haritha Vidhyalayam project and its role in inculcating productive thinking ability. Hence the study has its own significance.

Here the investigator explores the effect of the project on the productive thinking ability of school students of Kerala. Hence the study is entitled as the "EFFECT OF HARITHA VIDYALAYAM PROJECT ON PRODUCTIVE THINKING ABILITY OF UPPER PRIMARY SCHOOL STUDENTS OF KERALA"

## II.HYPOTHESES

- 1) There is a significant difference between Productive thinking ability scores of upper primary students in Haritha Vidyalayam (Green School)
  - a) Participation
  - b) Gender
  - c) Locale
  - d) Type of Management
- 2) There is a significant difference between productive thinking ability scores of upper primary students in Normal School(Schools not participating in Haritha Vidyalayam project) based on
  - a) Gender
  - b) Locale
  - c) Type of Management
- 3) There is a significant difference between productive thinking of upper primary students in Haritha Vidyalayam and Normal School(Schools not participating in Haritha Vidyalayam project)

## III.OBJECTIVES

- 1) To compare the Productive Thinking Ability scores of Upper Primary Students in Haritha Vidhyalayam based on
  - a. Participation
  - b. Gender
  - c. Locale
  - d. Type of Management
- 2) To compare the Productive Thinking Ability scores of Upper Primary students of Normal Schools (School not participating in Haritha Vidhyalayam Project) based on
  - a. Gender
  - b. Locale
  - c. Type of Management
- 3) To find out the significant difference between the Productive Thinking Ability of Haritha Vidhyalayam and Normal School Students(School not participating in Haritha Vidhyalayam Project)

## IV. METHODOLOGY

The present study was initiated to assess the Effect of Haritha Vidyalayam Project on Productive Thinking ability of Upper Primary School Students of Kerala . The Productive thinking Ability among upper primary school pupils were measured and analyzed to compare productive thinking ability of participant students and non participant students of Haritha Vidhyalayam Project. The subsamples were also compared for these variables. The required collection of the relevant data, the essential processing of the same, and the objectives of the study are well brought out.

**METHOD:** The investigator adopted a Normative Survey Method for conducting the survey.

**SAMPLE:** The investigator selected a representative sample by stratified random sampling method. The investigator selected a sample size of 350 students of 5 schools in Kerala. The present study also includes 5 schools other than Haritha Vidhyalayam Project for a comparative study.

**TOOL:** The tool for the present study

- Productive Thinking Ability Test (PTAT)

## V. VARIABLES:

Independent Variable: Haritha Vidhyalayam Project.

Dependent Variable: Productive Thinking

**VI. STATISTICAL TECHNIQUES:** The techniques used for statistical analysis includes

1. Mean
2. Standard Deviation
3. t-test

## VII.RESULTS AND DISCUSSION

### 1. Analysis of Productive Thinking Ability of Upper Primary School Students and Comparison of Relevant Sub-Samples with Respect to Their Scores

In this part of analysis, an attempt is made to examine the Productive Thinking Ability of Upper Primary school students of Kerala, considering both total sample and sub-samples based on the pupil's participation in Haritha Vidhyalayam.

#### 1.1 Productive thinking of UP school students of Kerala

The important statistical indices such as Mean (M) and Standard Deviation (SD) of Productive Thinking Ability scores were computed and presented in Table.1.1

Table.1.1 : Statistical Indices Relating to Productive Thinking Ability of U P School Pupils

Statistical Indices	No.of Students [N=350]
Mean	15.68
Standard Deviation	5.70

## 2. Comparison of productive thinking ability of the subsamples

In this section of analysis is based on the scores obtained in the productive thinking ability test. The sub samples were compared using the test of significance of the difference between the means and critical ratios were found.

### A) Comparison of productive thinking ability of the sub samples based on the Haritha Vidhyalayam Project.

Relationship between the scores based on Haritha Vidhyalayam project was done to find out whether there exists significant difference between these two groups. The details of the comparison with respect to these groups are presented in table 2.1

Table.2.1: Data and Results of the Test of Significance of the difference between Mean of Productive Thinking Ability Scores of Haritha Vidhyalayam Project and Non-Haritha Vidhyalayam Project.

Productive Thinking Ability	N	Mean	SD	CR	Level of Significance
Haritha Vidhyalayam Project	175	20.92	4.08	21.34	0.01
Non-Haritha Vidhyalayam Project	175	11.38	3.83		

From the above table 1.3, it seems that the mean scores of Haritha Vidhyalayam Project and Non-Haritha Vidhyalayam Project group of students are 20.92 and 11.38 with Standard Deviation (SD) 4.08 and 3.83 respectively. This means that, in this sample the mean difference in scores of Harithe Vidhyalayam and Non-Haritha Vidhyalayam group of students are statistically significant in the whole population. Hence it is clear that the participation in the Haritha Vidhyalayam Project create high Productive Thinking Ability among students.

Hence the hypothesis formulated in this regard is Accepted

The graphical representation of mean scores of pupils participating in Haritha Vidhyalayam project and those do not participate in Haritha Vidhyalayam project are given in Fig. 1

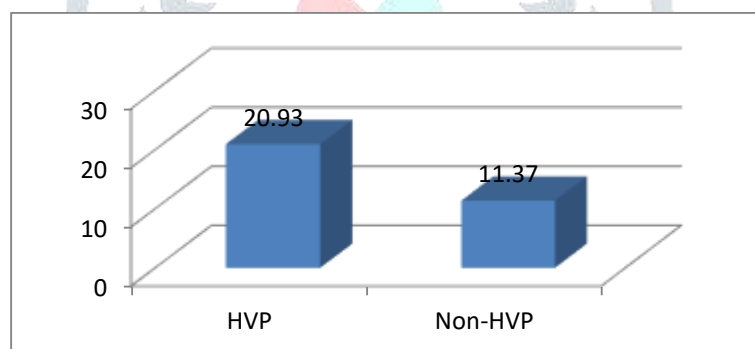


Figure.1 Bar diagram showing the mean productive thinking ability scores of participant and non-participants of Haritha Vidhyalayam project

### B. Comparison of Productive Thinking Ability Scores of Subsamples based on Gender

In this part of analysis, it is aimed to find out whether there is significant difference exists between male and female students. The data were computed for mean and standard deviation, and results presented in Table 2.2

Table 2.2 Data and results of the test of significance of the difference between mean of Productive Thinking Ability Test scores of Male and Female Students

Class	N	Mean	SD	CR	Level of Significance
Male	74	20.92	4.08	2.44	0.05
Female	101	19.49	3.75		

From the table 2.2, it is revealed that, the mean scores of male and female students are 20.92 and 19.49 with standard deviations 4.08 and 3.75 respectively. It shows that the male and female students are statistically differ in their productive thinking ability in the [Critical Ratio=2.44]. It can be concluded that gender is an influencing factor on the productive thinking ability.

Hence the hypothesis formulated in this regard is accepted

The graphical representation of mean scores of male and female students is given below the Fig 2.

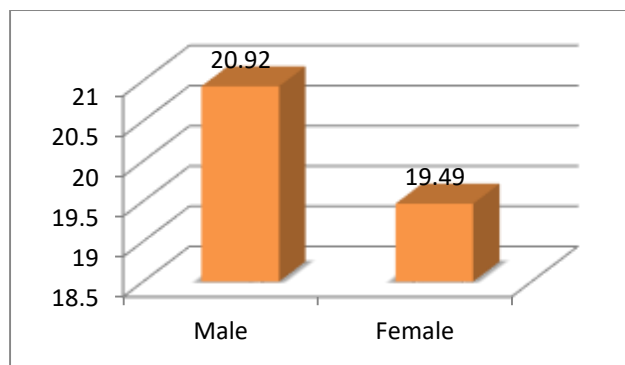


Figure 2. Bar diagram showing the mean scores of Productive Thinking Ability of Male and Female students

**C. Comparison of productive thinking ability test scores of students based on the sub sample locale**

Comparison of scores based on the locality [rural and urban] was done to find out whether there exists any significant difference in productive thinking ability based on the locale and data were computed and tested for significance using t-test are presented in the table 2.3

Table 2.3 Data and Results of test of significance difference between mean scores of Productive thinking ability based on the subsample Locale

Locale	N	Mean	SD	CR	Level of Significance
Rural	58	20.03	3.98	0.36	Not Significant
Urban	117	19.75	4.15		

From the table 2.3, it is clear revealed that the mean scores of Rural and Urban students are 20.03 and 19.75 with standard deviations 3.98 and 4.15 respectively. This shows that there is no significant difference in productive thinking ability test of the subsamples based on locale [Critical ratio=0.36]. Hence it is evident that the locale is not an influencing factor for determining the productive thinking ability of students.

Hence the hypothesis formulated in this regard is rejected

The graphical representation of the mean scores of rural and urban pupils are given in the Fig.3

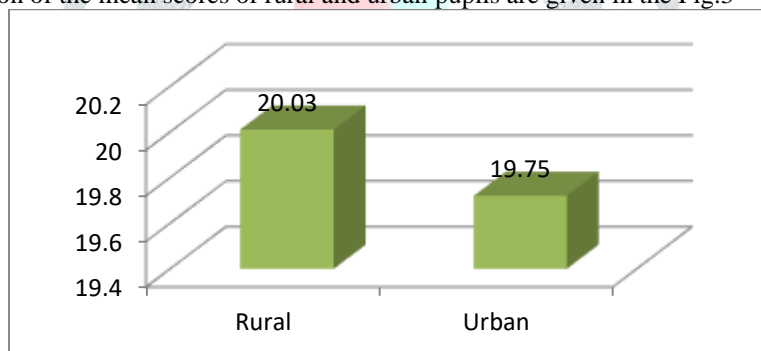


Figure 3. Bar diagram showing the mean scores of productive thinking of rural and urban school students

**D. Comparison of productive thinking ability Scores based on type of management [Government and Aided]**

Comparison of productive thinking ability scores based on Type of Management [Government and Aided School Students] was done to find out whether there exists any significant difference between the two groups. The data and results are presented in the table 2.4.

Table 2.4 Data and Results of the test of significance of the difference between mean productive thinking ability scores of Government and Aided school students

Management	N	Mean	SD	CR	Level of Significance
Government	58	20.30	4.32	0.5	Not Significant
Aided	117	20	3.71		

From Table 2.4 show that the mean scores of Government and Aided pupils are 20.30 and 20 with standard deviation 4.32 and 3.71 respectively. This shows that the two groups of student’s government and aided school students are similar in their ability of productive thinking. Hence it is evident that the type of management does not influence student’s productive thinking ability.

Hence the hypothesis formulated in this regard is rejected

The graphical representation of the mean scores of government and aided school pupils are given in the Fig.4



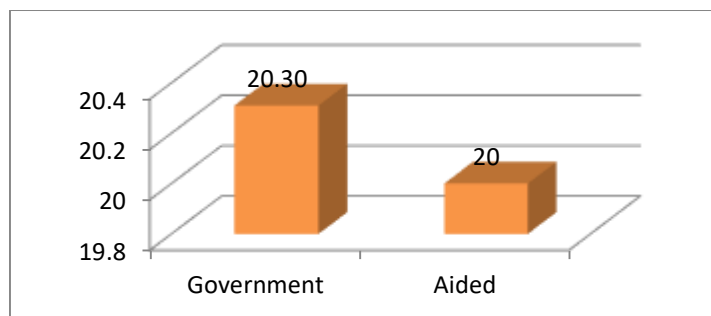


Figure 4. Bar diagram showing the mean of productive thinking ability scores of government and aided school pupils

### 3. Comparison of productive thinking ability scores of the sub sample based on non participating School on Haritha Vidhyalayam project

In this section of analysis is aimed to find out whether there is any significant difference exists between the scores obtained in the productive thinking ability test. The subsamples were compared by using test of significance.

#### A. Comparison of Productive Thinking Ability Test Scores based on Gender

In this part of analysis, it is aimed to find out whether there exists any significant difference between productive thinking scores of students based on the sub sample gender. The data were analyzed using t-test and results presented in Table 3.1

Table 3.1 Data and results of the test of Significance Difference in the mean scores of Productive Thinking Ability Test of Male and female students in Normal School

Class	N	Mean	SD	CR	Level of Significance
Male	72	11.22	3.98	0.38	Not Significant
Female	103	11.45	3.78		

From the Table 3.1, it is showed that the mean scores of male and female students are 11.22 and 11.45 with standard deviations 3.98 and 3.78 respectively. It is revealed that both male and female students are performing similar, ie, two groups are statistically not significant, ie,  $CR=0.38 < 0.05$  level of significance. Hence gender has no influence on the productive thinking ability.

Hence the hypothesis formulated in this regard is rejected

#### B. Comparison of Productive Thinking Ability Scores of Students based on Locale

In this part of analysis the investigator aimed to find out the productive thinking ability scores of students based on the sub sample: locale – rural and urban. The data were computed and tested for significance by using t-test. The data and results of comparison are presented in Table 3.2

Table 3.2 Data and Results of the test of significant difference in the productive thinking ability scores of Rural and Urban students in Normal School

Locale	N	Mean	SD	CR	Level of Significance
Rural	80	10.66	3.96	3.42	0.01
Urban	95	12	3.14		

From the Table 3.2 it is showed that the mean scores of Rural and Urban students are 10.66 and 12 with standard deviations 3.96 and 3.14 respectively. This revealed that there is a significant difference in the mean scores of productive thinking exists between the sub samples based on locale [Critical Ratio=3.42]. Hence it is evident that the locale is an influencing factor for determining the productive thinking ability of the students.

Hence the hypothesis formulated in this regard is accepted

#### C. Comparison of Productive Thinking Ability Scores based on type of Management [Government and Aided]

Comparison scores based on Management [Government and Aided] were done to find out whether there exists any significant difference between these groups. The details of the significant difference done with respect to these groups are presented in Table 3.3

Table 3.3 Data and Results of significance of difference between mean productive thinking ability scores of Government and Aided school students

Management	N	Mean	SD	CR	Level of Significance
Government	80	10.46	3.51	2.74	0.01
Aided	95	12.05	3.96		

Table 3.3 shows that the mean scores of Government and Aided school students are 10.46 and 12.05 with standard deviation 3.51 and 3.96 respectively. This shows that there is significant difference in the mean scores of productive thinking exists between the sub samples based on the Type of management [Critical Ratio=2.74]. Hence it is evident that type of management is an influencing factor for determining productive thinking ability of students.

Hence the hypothesis formulated in this regard is accepted

### 4. Analysis of the test of significant difference between the productive thinking ability of harithavidhyalayam project and normal school students

In order to find out whether there exist any significant difference between these groups. The details of the comparison done with respect to these groups are presented in Table 4.1

Table 4.1. Test of significant difference between the Productive thinking ability of students in Haritha Vidyalayam Project and Normal School

Productive Thinking Group	N	Mean	SD	CR	Level of Significance
Haritha Vidhyalayam Project Students	175	20.13	3.92	21.36	0.01
Normal School Students	175	11.34	3.86		

The obtained 't' value is 21.36, and is greater than the table value of 0.01 level of significance. So it may be concluded that there is High significant difference between Haritha Vidhyalayam Project and Normal School students. It is significant at 0.01 levels.

Hence the hypothesis formulated in this regard is accepted

### VIII. IMPLICATIONS OF THE STUDY

➤ The findings of the study have the attention of pupils to the significance of supporting green initiatives in the school. They need to understand that Haritha Vidhyalayam programme carries a most important mission to educate the next generation of youngsters to build a better world for the future by protecting its environment.

➤ The Normal school should be participated in Haritha Vidhyalayam project. It will helps to develops the students productive thinking ability and awareness about the protection and preservation of the environment..

➤ The Normal school should be participated in Haritha Vidhyalayam project. It will promote the students to get a good environmental practices and maintenance the environmental resources.

➤ The Haritha Vidhyalayam programme is to get the students involved by offering an environmental program in the school curriculum. Students can be directed to developing their love for earth and nature. Environmental projects such as planting trees, starting a vegetable garden, raising a small animal farm or constructing a nature trail are meaningful activities to get them started and the production of environmental friendly objects. It is important to educate children at any early age to understand that Haritha Vidhyalayam programme is not for saving money but for saving natural resources.

➤ The local school that make decisions concerning about Haritha Vidhyalayam Programme it helps to understand the pupil's basic knowledge and skills for producing, creating and sustaining environmental friendly activities.

➤ Special programme, orientation courses should be organized for teachers for the effective implementation of environmental friendly activities in schools.

➤ Celebrating the environmental days will create positive attitude in the pupils about the protection of our environment.

### IX. CONCLUSION

From the above analysis and the discussion, it is found that the Hariha Vidyalayam Project have influenced much in productive thinking ability of students those who have participants of Haritha Vidyalam project than the Non-Haritha Vidyalam Project. That is there exists a significant difference among the upper primary students on their productive thinking ability. Haritha vidyalayam Project have a great effect among the participant students which leads them as a productive and creative thinker and which helps to make them aware about the importance of the protection and preservation of the nature.

### X. ACKNOWLEDGEMENT

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