ORIGINAL RESEARCH PAPER

Education

EFFECTIVENESS OF GYANKUNJ PROJECT IN GOVERNMENT PRIMARY SCHOOLS OF GANDHINAGAR CITY

KEY WORDS: Gyankunj Project, Technology in Education, Teacher Education, ICT.

Kuvad Tarunkumar Balabhai

Research Scholar, lite Gandhinagar

The Gyankunj project is the initiative of Government of Gujarat to boost the education through technology. The Gujarat government launched the Gyankunj project as a means of advancing education. The main goals of this research report were to evaluate the facilities, learn about the academic standing of the students, and gauge how they felt about the Gyankunj initiative. With the use of the survey approach, the researcher discovered the outcomes of a quantitative study with a sample of 10 schools and 97 students. The hypotheses based on variables are the academic performance of the children in the schools where the Gyankunj programme is implemented and the schools where it is not implemented differs significantly. Additionally, there is a strong association between academic success and students' opinions at the school where the Gyankunj programme is offered. For evaluating the tested hypotheses, there was the Reaction Scale, the Achievement Test and Checklist. The Achievement test comprises 40 questions that are based on Gyankunj programme elements. The results finds that the Correlation Between Achievement Scores and Reactions of Students related to the Gyan Kunj Project was 0.435959. which shows a partial positive correlation. The significant difference between the mean scores of students studying in Schools running the Gyankunj Project and Schools not running the Gyankunj Project in Gandhinagar City was found 5.503 at 0.1 level. The result shows that the achievement score of students in schools without the Gyankunj project is comparatively less. Students who got more scores on the Achievement test gave more positive reactions to Gyankunj Project. And it is also remarkable to note is the most of the schools, the equipment provided in this project is working properly and care is taken by the school staff.

INTRODUCTION

"Education is what remains after one has forgotten what one has learned in school."

-Albert Einstein

In order to raise the level of education in post-independent India, the governments of that time have implemented five-year plans for development in various sectors during their tenure. That also included various sectors like industry, farming and technology and the provisions for the development of education which made in the five-year plans. The government issued such provisions in which all education campaigns and Samgra Shiksha Abhiyan were advocated. The question is whether it is necessary to know if the benefits are reaching beneficiaries the provided in the government's five-year plan, and if so, to what level does it benefit the beneficiaries? Whether the scheme is fully compensated, as much as it is necessary to implement such schemes.

Generally, schooling comes through books, black boards, lexical descriptions, etc. The learning environment is more useful to the student in learning, to getting the knowledge given by the lecturers who rely only on books. In today's digital age, it is a good thing to have a new generation of education through digital electronic devices as well as to involve the student through oral and audio-visual method with verbal description.

The role of citizen's literacy and education in the overall development of the entire nation along with the quality and development of social life and personal life is fundamental. The state government is committed to ensuring that every child gets the highest level of education and government involve plans in today's ever-changing age, there is a tremendous amount of change in all sectors due to technology. Schools are equipped with equipment's which utilizes modern technology in education to maximizes the readiness of the teachers, and also encourage arrangements to provide high-level facilities to the state of Gujarat.

The Government of Gujarat has implemented the Gyankunj project through a new initiative in the field of education in this direction. Apart from the information and knowledge provided through books in the school classrooms, a new project started from the teacher's day to teach live audio-

visual media is called "Gyankunj Project". Projector, infrared camera, laptop, speaker, smart board and with the help of a WIFI router, the teaching and learning process is transformed into classroom interactive smart boards.

The initiative of "Gyankunj" project has been launched by the Hon'ble Chief Minister of Gujarat on 5th September, 2017 - Teacher's Day to accelerate the efforts of Government of Gujarat in the area of digital education inspired from the vision of Digital India.

Through the Sarva Shiksha Abhiyan, the Gyankunj project is implemented in a total of 1609 schools in 33 districts and 3 municipalities in the state.in which 1,609 Government primary schools (1500 schools + 109 Kasturba Gandhi Balika Vidyalaya) having interactive e-class developed with smart boards using technology in 3173 classrooms of class V to VIII. Total 2.85 Lakh students of Class V to VIII are taking advantage of this initiative. Hudda (2019)

Statement of Problem:

"Effectiveness of Gyankunj project in government primary schools of Gandhinagar city"

Objectives of the Study:

- To check the facilities available in schools having Gyankunj project.
- To measure the effectiveness of Gyankunj Program on student's academic achievement.
- To measure the effectiveness of Gyankunj project by Reaction of Students.

Hypothesis:

H1 – There is significant difference between the academic achievement of the students of the schools in which the Gyankunj program is run and the schools which do not run the Gyankunj program.

H2 – There is significant co-relation between achievement and opinion of students studying in school which runs Gyankunj program.

Variables of the Study:

Independent Variables: Gyankunj Project

DependentVariable:

- Achievement score of students is a dependent variable.
- · Opinions of the students is a dependent variable.

AttributeVariable:

School type: Government Primary School.

Type of Research:

The Type of Research is Applied Research and the present study measures the Effectiveness of Gyankunj Project that includes the quantitative aspect; Thus, this is Quantitative Research.

Research Method:

The Survey research method is used by the researcher.

Sample of the Study:

The researcher had selected the representative sample from school of Gandhinagar city. Researcher selected the sample of the study through the simple random probability sampling for the administrating the Achievement test & Reaction scale, the researcher randomly selected total 10 schools of Gandhinagar city where 97 students from schools running Gyankunj Project and 55 students from schools without Gyankunj project out of the total 41 Government schools of Gandhinagar city.

Table 1 Distribution Of Student According To Strata

| No. | NAME | Address | Number of Students |
|-----|----------------------------------|----------------------------|-----------------------|
| 1 | Government Primary School | Sector - 6 Gandhinagar | 24 |
| 2 | Government Primary School -1 | Sector - 13 Gandhinagar | 14 |
| 3 | Government Primary School | Sector - 20 Gandhinagar | 18 |
| 4 | Government Primary School - 2 | Sector - 24 Gandhinagar | 23 |
| 5 | Government Primary School | Sector -27 Gandhinagar | 12 |
| 6 | Government Primary School - 2 | Sector - 13 Gandhinagar | 5 |
| 7 | Government Primary School - 1 | Sector - 28 Gandhinagar | 13 |
| 8 | Government Primary School - 1 | Sector - 24 Gandhinagar | 20 |
| 9 | Government Primary School | Sector - 15 Gandhinagar | 11 |
| 10 | Government Primary School - 2 | Sector - 28 Gandhinagar | 12 |

Tool

In present study researcher use the self-made tool for data collection. Total three tool were developed and used for data Collection

- 1. Reaction Scale
- 2. Achievement Test
- 3. Checklist

These scales are developed on Likert Method.

This Scale & Achievement Test was constructed by the researcher. This scale includes total 20 statements from different component of opinion in which some are positive and some are negative statements. Component wise scale covers six components are as listed below.

Table - 2 Reaction Scale Covers Six Components

| Name of Component | Number of Statement |
|-------------------|-------------------------------------|
| Awareness | 3 |
| Familiarity | 3 |
| Understanding | 5 |
| Adaption | 2 |
| | Awareness Familiarity Understanding |

| 5 | Learning environments | 3 |
|---|-----------------------|---|
| 6 | Creative application | 1 |
| 7 | Technology capacity | 1 |
| 8 | Accountability | 2 |

Achievement test Appended in (Appendix B) covers five components are as listed below.

- 1) Objectives
- 2) Knowledge
- 3) Reasoning
- 4) Application

Test consist 40 questions. The details of distribution of question of test are listed in the table

Checklist was developed to check the available equipment in present condition i.e., Working or Not working.

 ${\bf Table-3\ Questions\ Of\ Achievement\ Measurement\ Test}$ According To Component.

| No. | Component | No. of question | Total Marks |
|-----|-------------|-----------------|-------------|
| 1 | Objectives | 5 | 5 |
| 2 | Knowledge | 7 | 7 |
| 3 | Reasoning | 8 | 8 |
| 4 | Application | 20 | 20 |
| | Total | 40 | 40 |

Data collection

For the present study data collection carried out during academic year 2020 – 2021. Sample derived from students of standard 8th studying in Government Primary schools of Gandhinagar city. Plane for the Data collection was scheduled in working days of school, keeping in mind that examination of school, holyday and other circumstances may not interrupt data collection schedule.

After putting all the instructions, the students were asked to answer the questions given in Achievement Test and also the students were asked to give their opinions in Reaction Scale by Marking in respective Box. When students didn't understand, the researcher helped them individually and in group. Good cooperation was received by all the students.

The checklist was filled by the principal of every school running Gyankunj project.

Data Analysis:

The raw score obtained directly after scoring the test booklets constituted simply a long list of numbers without any order. Therefore, in order to make meaningful interpretation and draw conclusions raw scores were reorganized, subjected to appropriate statistical analysis and summarized. This was achieved using MS Excel. The researcher applied suitable statistical techniques for analyzing the quantitative data in accordance to the nature of variables involved and the objectives of the study. Both inferential and descriptive technique were used. t-test was applied to evaluate the significance of difference for the two hypotheses.

RESULTS:

According to data collected three schools have all equipment's available and in working conditions and two schools have also equipment's available and working except digital pen, in one school pen is not available and in other school pen is not in working condition. From this, we can conclude that schools take care of equipment's and use them properly.

1. Effectiveness of Gyan Kunj Program on student's academic achievement:

It has been clearly found that the achievement of students studying in schools running Gyankunj Project is significantly higher than the students of schools not running Gyankunj Project in Gandhinagar city from table 4.

Table - 4 Significance Difference Between Mean Scores Of Students Studying In Schools Running Gyankunj Project And Schools Not Running Gyankunj Project In Gandhinagar City.

| Type of | N | Mean | S.D | SED | Value of | Level of |
|----------|----|--------|-------|-------|----------------|----------------|
| School | | | | | Critical ratio | Significance |
| With | 97 | 21.618 | 6.234 | 1.331 | 5.503 | Significant at |
| Gyankunj | | | | | | 0.01 level |
| Without | 55 | 14.290 | 8.687 | | | |
| Gyankunj | | | | | | |

2. Correlation between Achievement score and Reactions of students regarding Gyan Kunj Project

Correlation between values of Achievement score and Reaction of student regarding Gyan Kunj Project. Obtained values of correlations is listed below.

Table - 5 Correlation Between Achievement Score And Reactions Of Students Regarding Gyan Kunj Project

| Between | Correlation |
|--------------------------------|-------------|
| Achievement score and Reaction | 0.435959 |

According to table 5 correlation between Achievement score and Reaction of student regarding Gyankunj Project obtained 0.435 is partial positive correlation between Achievement score and Reactions of students regarding Gyankunj Project.

CONCLUSIONS

Implementation of Gyankunj Project showed impact on achievement of students positively. Achievement score of students in schools without Gyankunj project is comparatively less. Students who get more score in Achievement test gave more positive reaction on Gyankunj Project. In most of the schools, equipment's provided in this project is working properly and care taken by the school staff. Concept of Gyankunj project should be implemented in more and more schools. These types of projects should also be implemented in higher classes. Teachers should be trained and motivated for experiments in classroom learning. The initiative of government in the form of Gyankunj project is found to be effective in 5 schools of Gandhinagar city which implies that such type of initiative should be enhance in order to make teaching, learning process much effective.

REFERENCES:

- [1] Gordon O. Ouma, Fredrick M. Awuor & Benjamin Kyambo (2013), "Evaluation of Elearning readiness in public secondary schools in Kenya", World Applied Programming (WAP Journal), 3(10), 493-503.
- [2] Lee-Ann Burke & Elizabeth Murphy (2006), "'Female Students' Experiences of Computer Technology in Single-Versus Mixed-Gender School Settings", eJournal of Instructional Science and Technology, 9(1), 1-11.
- Rajsekar's and Vaijaypuri Raja P, (2007), "Technology planning- a roadmap to successful technology integration in schools", Computers & Education, 49(4), 943-956.
- [4] Sibien K.K. Annaraja PL. studied Teachers (2006), "Implementing Computer Technologies: Teachers' Perceptions and Practices". Journal of Technology and Teacher Education, 14(1), 173-207.
- [5] Vandana Mehra, (2006), "Development of Multimedia Instructional System on Computer Education for B.Ed. Pupil Teachers", Ph.D. thesis, Shivaji University, Kolhapur.
- [6] Angel Rathnabai, S (2014), "Effectiveness of ICT Infused Instructional Design IIID in methodology of teaching mathematics at secondary level". Ph.D. thesis, Regional Institute of Education, NCERT, Mysore district, IT for Change Case Study, www.itforchange.net
- [7] B. B., Singh, R., T. K., & N., O. J. (1998). "Perceived Challenges to Effective ICT Integration in Teacher Education in South-Eastern Nigeria. Paper Presented at the 3rd International Conference on Leadership & Learning in the Asian Century. University Sains Malaysia Penang. 17-19