



A Critical Study of ICT Scheme Implemented by the Popular Government at Secondary School: Focus on Vidarbha

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Abstract:

Since India is a developing country, which is struggling and adapting to plan out a national system of education for twenty-first century which may transform its social order from traditional to a modernized, forward- looking and progressively affluent society in the age of modernization. Even today, our country is facing many challenges for preparing their social, educational and economic development of different societies. As well as governments tries for globalization and the information communication revolution. Education system plays an important role in the age of globalization. The main purpose of the scheme is popular in universe of computer literacy and development of the smart school. The study was planned to see the effect of ICT scheme in relation to the development of technical knowledge and creativity and the changes in the academic achievement of the student.

Introduction

The system of education was started by British and is still continuing in India. Tremendous efforts are being made to develop a sound national system of education which can help India uplifting its social order. In our Indian society some students are enjoying educational facilities and others have remained out of the charmed circle of education. The present education system is trying to eradicate illiteracy and introduce universal compulsory elementary education. Moreover, secondary education is going on along with introducing the vocational development. Several studies have been made in this regard. Souvick Nayek (2021) has conducted a study on Review of Policies and Programmed Regarding ICT in education. In his study the various policies and programs related to ICT in education which introduced by the Popular government after independent of nation are more useful for the educational development. This experience of ICT will facilitate the students to take the challenges of education. Sumit kumar, Kajal Manhas, (2023) conducted a study, Implementation of ICT at school scheme: A case study. The current research study evaluate the ICT policy and assesses its implementation at school level in terms of effectiveness towards mass education of UT, J & K. it recommends suitable measures for improvement in monitoring. Vinayak. G. Hegade (2021) conducted study on a new digital initiative in virtual teaching and learning during lockdown period in India, the result indicate that online teaching and learning has drastically evolved and changed the face for modern education. Online learning is one of the most life changing innovations of the present study during pandemic time.

Simin Ghavifekr, Ahmad Zabidi Razak (2019) the main focus of this paper is on effectiveness of ICT integration in education. The main objective of this paper is to identify the level of ICT integration in teaching learning process by primary school teacher. The findings of this study indicate that most of the teachers in the Klang valley are more likely to use ICT application and resources for educational purposes.

Sood Manju (2014) undertook a study on ICT school of Punjab State and evaluative study, the objective of the study was to evaluate provision of ICT, infrastructure, software availability in ICT lab etc. the findings of the study support to claim of government of Punjab. The study focused some the lacuna like infrastructure facility, provision of ICT training, provision for regular internet connectivity.

Therefore, ICT program is more helpful for secondary education, so that this program should be enhanced to a great extent to take the challenges of quality education in the age of modernization to scale new heights and assimilate in the new winds of change.

Concept of ICT Scheme:

The centrally sponsored scheme “Information and Communication Technology (ICT) in school” was launched in December 2004 to provide opportunities to secondary stage student to develop ICT skills and also for the ICT aided learning process. The scheme provides support to state/UTs to establish computer lab on a sustainable basis. It also aims to set up smart schools in Kendriya Vidyalaya and Navodaya Vidyalaya to act as “technology demonstrators” and to lead in propagating ICT skill among student of a neighborhood school.

The scheme currently is being implemented in both governments aided secondary and higher school. Information and communication technology is universally acknowledged as an important catalyst for social and national progress. Understanding and leveraging ICT is therefore critical for countries. For the ICT scheme the union government would provide 75% and the balance 25% of the fund would be contributed by the state government.

Recently, the Government of India providing different schemes for the development of secondary education. Such as,

- Rashtriya Madhyamik Shiksha Abhiyan (RMSA).
- The Welfare of the girl’s child.
- Incentives to girls for secondary education.
- Setting up of 6000 model school at block level
- Community mobilization.
- Jawahar Bala Arogya Raksha.
- Information and Communication Technology in schools (ICT)

Objectives of the study

The study was conducted in view of following specific objectives:

- I) To review the implementation of ICT scheme at a secondary level.
- II) To compare the computer literacy of boys and girl.
- III) To compare the computer literacy of urban and rural students.
- IV) To study the attitude of male and female teachers towards implementation of ICT scheme

Hypothesis of the study

Following hypotheses were formulated by the investigator.

Firstly, it was hypothesized that there is no any significant difference will be found in the scores of Computer literacy between boys and girls student

There will be no any significant difference found between urban and rural students in their computer Literacy.

There will be no any significant difference found between the male and female teachers in their attitude regarding implementation of ICT scheme at secondary school.

Methodology:

The most commonly used descriptive research method was applied in the present study. The population of the study was the students of state secondary schools and their teachers, from the Vidarbha region of Maharashtra. For the present study, stratified random technique was used to select the students and teachers from different state secondary schools. In the present study, 120 State secondary schools were randomly selected from six districts of Vidarbha region namely, Amravati, Akola, Nagpur, Bhandara, Gadchiroli and Chandrapur. Inthe present study, 400 teachers and 500 students including IX classes were selected randomly.

Research Tools Used:

The following self-designed research tools were used for the data collection:

- Attitude scale was administered for collecting the data from male and female teachers.
- Achievement test were used for boy and girl students.
- ICT Activities Format was observed and recorded accordingly.
- Checklist

Analysis and Interpretation of Data:

Analysis is a vital process of research. The data were analyzed using the descriptive analysis and Inferential techniques.

One of the objectives of the study is to compare the computer literacy of boys and girls. The academic Achievement of 250 boys and 250 girls of secondary school students in computer literacy have been Comparatively presented in table number 1 and the interpretation of data are as follow:

Table 1
Academic achievement of boys and girls in computer literacy

Variables	Number	Mean	SD	t- ratio	Significant 0.01 level
Boys	250	10.34	2.358	1.122	P>.01
Girls	250	10.11	2.216		

From the above table, it is observed that obtained t-value (1.271) is less than the table t-value at 0.01 level of confidence. Therefore, there does not exist statistically significant difference between means of academic achievement in computer literacy of boys and girls in computer literacy.

Table 2
Academic achievement of the urban and rural students in computer literacy

Variable	Number	Mean	Standard Deviation	t- ratio\	Significant
					0.01 level
Urban students	250	11.06	2.088	8.84	P<.01
Rural students	250	9.38	2.173		

From the above table, it is observed that obtained t-value (8.84) is more than the table value at 0.01 level of confidence. Therefore, there exists a statistically significant difference between means of academic achievement in computer literacy of urban and rural students in computer literacy.

Analysis of Attitude of Male and Female Teachers towards Different Factors of ICT Scheme:

One of the objectives of the research is to study the attitude of male and female teachers towards implementation of ICT scheme. The attitude of 400 male and female teachers towards implementation of ICT scheme have been comparatively presented in table number 3 and the interpretation of data are as follow:

Table 3

Combined mean difference in the attitude of male and female teachers towards different aspects of ICT scheme

Factor	Variable	Sample	Mean	Standard Deviation	t-ratio	Significant 0.01 Level
Consciousness about ICT	Male Teachers	200	56.42	6.273	4.436	P>.01
	Female Teachers	200	58.98	5.219		
Teaching Learning and ICT	Male Teachers	200	55.38	6.257	4.07	P>.01
	Female Teachers	200	57.89	6.048		

ICT Scheme	Male Teachers	200	32.55	3.468	2.184	P>.01
	Female Teachers	200	33.76	7.041		
School Organization and ICT	Male Teachers	200	37.17	4.931	4.285	P>.01
	Female Teachers	200	39.24	4.732		
Barriers to ICT use	Male Teachers	200	28.81	4.283	0.129	P<.01
	Female Teachers	200	28.76	3.377		

From the above table, it is observed that obtained t-values for four factors namely consciousness about ICT, teaching-learning & ICT, ICT Scheme, and school organization & ICT is more than the table t-value at 0.01 level of confidence indicates that the mean difference in this comparison is significant. Therefore, there exist a statistically significance difference between the attitude of male and female teachers towards the four factors namely is consciousness about ICT, teaching learning & ICT, ICT Scheme, and school organization & ICT. Whereas, that obtained t-value (0.129) for the factor barriers to ICT is less than the table value at 0.01 level of confidence indicate that the mean difference is not significant. Therefore, there does not exists statistically significant difference between the attitude of male and female teachers toward barriers to ICT.

The formulated hypotheses were tested on the basis of above analyzed data.

Our hypothesis states that there is no significant difference between the computer literacy of boys and girls:

From the table number 1, it is revealed that obtained t-value (1.271) is less than the t-value on 0.01 level of confidence. Therefore, no any significant relation was found computer literacy of boys and girls. Hence above null hypothesis, is accepted on 0.01 level of confidence.

There is no significant difference between the score of computer literacy of urban and rural students.

From the table 2, it is observed that obtained t-value (8.84) is more than the table value (2.58) on 0.01 level of confidence. Therefore, there exists a statistically significant difference between means of academic achievement in computer literacy of urban and rural students in computer literacy. Hence the above null hypothesis is rejected on both levels of significance.

The null hypothesis states that there is no significant difference between the attitude of male and female teachers towards implementation of ICT scheme at secondary schools:

From the table 3, it is observed that obtained t-values for four factors namely consciousness about ICT, teaching-learning & ICT, ICT Scheme, and school organization & ICT are more than the table t-value at 0.01 level of significance indicates that the mean difference in this comparison is significant. Therefore, there exist a statistically significant difference between the attitude of male and female teachers towards the four factors namely is consciousness about ICT, teaching learning & ICT, ICT Scheme, and school organization & ICT. Hence the above null hypothesis for four factors namely consciousness about ICT, teaching learning & ICT, ICT Scheme, and school organization & ICT is rejected on 0.01 level of confidence. Whereas, that obtained t-value (0.129) for the factor barriers to ICT is less than the table value on 0.01 level of confidence indicate that the mean difference is not significant. Therefore, no any significant difference was found between the attitude of male and female teachers toward barriers to ICT. Hence the above null hypothesis for the factor namely barriers to ICT is accepted at 0.01 level of confidence.

Findings of the Study:

On the basis of analysis of data, following allied findings of the study drawn:

1. There is statistically significant difference between means of academic achievement in computer literacy of urban and rural students in computer literacy. Whereas there is no statistically significant difference between means of academic achievement in computer literacy of boys and girl's students.
2. There is statistically significant difference between the attitude of male and female teachers towards the four factors namely consciousness about ICT, teaching learning & ICT, ICT Scheme, and school organization & ICT in implementing ICT scheme at secondary school level. Whereas, there is no significant difference between the means toward the barriers to ICT
3. In some of the schools the negligence and irresponsible behavior of the Principals and the associated staff was observed. The systems appeared to be not used for a long and the lab was lying in dirt and filth.
4. The agencies concerned were supposed to train at least five teachers in the school including the Headmaster. But this doesn't appear to be achieved in many of the schools.
5. It is also found that the number of computers are inadequate. According to Manju Sood Ph.D. study, the government of Punjab provided computer system in the ratio of one computer system for two students. But in present study it is found that the ratio of one computer system for four or five students. It is comparatively improper.
6. It is observed that the government has just set up a physical structure with a hollow backbone during the implementation of the ICT scheme.

Research Through Innovation

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