

Functioning of ICT@7500 School Programme as perceived by the Head masters of secondary schools

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Abstract

ICT@School programme introduced by the government of India at National wide from 2004 onwards. Technology is used as one or the other form of educational process from LKG onwards. Technology hasn't penetrated as much as it should be even at secondary school level due to various reasons. Utilization of technology in the schools has become necessity in the present context as the whole world is technodiven for providing quality education and smooth governance. The study investigated the perception of headmaster on computer education programme. For this selected 20 Head master from 15 Zilla parishat and 5 Government secondary schools of five different mandal from Waranagl district at randomly. A questionnaire was developed and validated through expert judgement. Findings confirm that the 41% of computer not functioning in the school, Insufficient no of computer, electricity problem, no funds for repairs & maintainace, not qualified instructor for this programme. Just above 50% of the schools are running the computer education programme satisfactorily. Based on the finding some suggestion they were made which include it should be implemented from the primary level onwards. Number of computer supplied is not sufficient for the students, as per the student strength it should be provided @ the ratio of 1:5. Computers can be used not only for imparting basic skills of computer but also teaching and learning process. Now- a- days E-learning and M-learning are taking place all over the world. High speed Internet connection should be provided to all the schools to meet the requirements of the computer education programme. Instead of buying Desktop, good quality laptops/palmtops may be supplied to overcome the electric city problem, space and threatened problems. In view of the explosion of Information and Communication Technology (ICT), every student needs to become a computer-literate and the Govt has to consider the computer education programme as a priority programme and necessary instructions need to be given to all the states that each teacher should be a computer literate and the usage of computer for teaching and learning process in the class rooms is must.

Keywords: head masters, secondary schools, information and communication technology (ICT), priority programme

Introduction

Computer education is a boon for pupils, who are studying in the rural Government schools. Technology is used as one or the other form of educational process from LKG onwards. Technology hasn't penetrated as much as it should be even at secondary school level due to various reasons. Utilization of technology in the schools has become necessity in the present context as the whole world is techno driven for providing quality education and smooth governance. Keeping in view the global changes occuring in education, the Govts cannot escape from introducing the technology in the schools as a first step to strengthen the educational programmes. Now the breakthrough has come with the recognition of importance of introducing computer education programme in the schools for imparting basic skills among the students in computer. Govt of India

constituted the National Task Force on Information Technology and Software Development (IT Task Force), in July-1998 and it made specific recommendations on introduction of Information Technology in the education sector, including schools for making computers accessible through the Vidyarthi Computer Scheme, Shikshak Computer Scheme and School Computer Schemes.

School Computer Education Programme

2010-11 census indicated that 1,28,370 Secondary schools are working in India of which 18,776 schools are in located in the Telangana and Andhra Pradesh. At present only 6300 secondary schools are implementing ICT@School programme in both the Telugu states.

Table 1: Number of school education institutions in Andhra Pradesh and India (as per the 2010-2011 census)

Sl. No	School Education Institutions	Number of Schools In Andhra Pradesh	Number of Schools In India
1	Secondary Schools	18776	128370
2	Upper Primary Schools	15421	447600
3	Primary Schools	66834	748547
	Total	101031	1324517

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The school computer education programme was launched in 2004 and in the initial year 500 schools were provided with the facility. Further 200 schools were connected with computer education programme during 2006 - 2007. Later the ICT@5000 scheme was launched by the Government of India and the ICT

@ 5000/1300 Schools Computer Education Project is running on the BOOT (Build, Own, Operate and Transfer) Model in Andhra Pradesh by the seven agencies. The number of schools connected with the computer education are given in table 2.

Table 2: Year wise approval of computer education programme in Andhra Pradesh and India

S. No.	Academic Year	Number of schools approved in Andhra Pradesh	Number of schools approved in India
1	2004-2005	500	650
2	2005-2006	Nil	2720
3	2006-2007	200	1110
4	2007-2008	5000	21080
5	2008-2009	2000	25150
6	2009-2010	Nil	10435
7	2010-2011	4031	19482
8	2011-12	Nil	14062
9	2012-2013	Nil	2255
10	No of smart schools	5	63
Total		11736	97007

From the above table, it could be observed that there was no approval for establishing computer education project in the secondary schools in Andhra Pradesh during 2005-06. Similarly during 2009-10, 2011-12 and 2012-13 the approval was not accorded for setting up computer education project in the schools. It could be observed that 11736 schools are provided with computer education programme in Andhra Pradesh against 97007 schools in India. District wise details of the computer education programme are given in table 3.

Table 3: Number of Schools covered under ICT@5000 / 1300 Scheme: District wise & Agency wise in Andhra Pradesh

Sl.	District	Agency	ICT @	ICT @	Total
1	Prakasam	ECIL	186	63	249
2	Visakhapatnam	Educomp	228	53	281
3	Anantapur		251	70	321
4	Mahabubnagar		248	71	319
5	Adilabad		163	60	223
6	Chitoor		237	72	309
7	Kadapa	Everonn	168	58	226
8	Srikakulam	IEG	156	47	203
9	Vizianagaram		145	44	189
10	Ranga Reddy		246	46	292
11	Hyderabad		84	19	103
12	Nizamabad		177	45	222
13	Khammam		223	54	277
14	East Godavari	NIIT	321	66	387
15	West Godavari		225	54	279
16	Krishna		226	58	284
17	Nellore		248	54	302
18	Kurnool		247	62	309
19	Medak		198	53	251
20	Karimnagar		277	63	340
21	Warangal		263	58	321
22	Guntur	Social	203	64	267
23	Nalgonda	Terasoft	280	66	346
Total			5000	1300	6300

The ICT@School programme started in the year 2004 under BOOT model (built, Own, Operate, Transfer). So far in United Andhra Pradesh, 500 schools in 2004-05, 5000 schools in 2008-09 and 1300 schools during 2009-10 are covered under this project.

Although the computer education programme is grounded in a good number of schools, still single study is not conducted on

the functioning of the programme. Huge amount was invested on the project and big man power was appointed as such there is a need to examine the functioning of the programme to understand its strengths and weaknesses. Therefore an attempt is made by the investigator to study the programme.

Statement of the Problem: Functioning of ICT@7500 School Programme as perceived by the head masters of secondary schools

Rationale of the Study

The children of today are growing up with Information and Communication Technology (ICT) as essential and natural part of their daily life. As they grow, they are expected to become active and selfdirected members in their own communities. Technology creates versatile possibilities for acquisition and creation of information, for self-expression, communication and interaction with other people locally, nationally, and worldwide. Even though Information Technology (IT) is used widely, utilization of Information Technology in education specifically in teaching and learning process is minimal in Indian school sector. Therefore to use the Information Technology as tool of instruction, there requires meticulous planning and integration of technology in education. It may be a tremendous challenge to the technologists and educationists for developing it pedagogically innovative and quality practice for technologically-enhanced education (Kankaanranta, 2004; Kozma, 2003) ^[1, 2]. Secondary education promotes the development of a skilled and knowledgeable citizenry with access not only to the national but also to the global economy (Lewin and Cailods, 2001) ^[10].

According to Teo, Lee and Chai (2007) ^[5], the success of any initiative to integrate technology in an educational system depends strongly upon the support and attitude of educators. Administrators in school such as head teacher act as a mediator to integrate technology into education system by playing a key role in encouraging, supporting and helping the teachers to use computers in the teaching and learning process. The success of integrating information and technology into teaching and learning interaction depends on the support provided by the head teacher of the school (Samuel & Zaitun, 2006) ^[6]. Then the disposition of head teacher can either be a hindering factor or a facilitator for computer integration in education. Due to inadequate preparation of head teachers for their new role as technology leaders, integration of computers in teaching and learning process in Kenyan schools is still not streamlined properly. Dinham (2005) ^[5], asserts that leadership is important in developing effective, innovative schools and in facilitating quality teaching and learning through computers. The role of the head teacher is crucial in providing the guidance, encouragement and conditions necessary to enhance the use of computers in the teaching profession. According to Schiller (2003) ^[8], school leadership has a responsibility for initiating and implementing change through use of computers to facilitate decisions about integration of computers into learning and teaching. The vision of getting the school ready and up to date with use of computers in classroom cannot be accomplished without the commitment, willingness and readiness of head teacher. Walsch (2002) ^[9], posits that technology integration could be achieved in school only if head teachers are totally committed over a period of time, actively supports it and learns as well. Head teacher who take an active approach and has positive disposition to innovation can foster an environment that

has greater benefits for their students and staff. Thus efforts of integrating computer use in schools are seriously threatened unless head teachers become active technology leaders in school. Majority of the studies focused on the influence on of technology on the achievement of the children and studies related to the present ongoing computer education programme is negligible. Further the studies highlighted indicated the necessity for the introduction of computer education programme in education.

Objectives of the Study

1. To know the infrastructure created for computer education programme in secondary schools.
2. To study the functioning of the computer education programme in secondary schools
3. To know the overall performance of the program in the schools.

Population of the Study

In the present study, the population comprised of headmasters of Government and ZillaParishad schools of Warangal district.

Sample of the Study

A stratified random sampling technique was employed for collecting the data. In Warangal district 52 mandals are there, of the 52 mandals, 10% of the mandals are selected, from each mandal and at this ratio 4 schools are selected from each school which accounts for 20 schools and the data was collected from each Headmaster of those schools.

Table 4: Selection of schools for Computer education programme

Location & Management of schools	No of schools selected
Rural & ZPHS	16
Urban & GHS	4

Tool

Questionnaire to Headmasters for assessing the present position of computer education programme was developed by the investigator and it was developed to seek information from the Headmaster as to how the computer education programme is being conducted in the school. While developing the tool, the experts in the school computer education programme were consulted and the field visits were made and interacted with the Instructors and Headmaster and noted down the discussions and finally the tool was developed with 28 items on which the Headmaster has to answer. While developing the tool, the literature was also consulted developed on school computer education programme. All these items related to the computer education programme from its launching stage to the present level of functioning were considered. The questionnaire consisted of general School information, relating to computer lab, facilities available in the lab, number of computer instructors and number of trained teachers so far in school, number of students in school, how far they are using the computer in teaching learning process and administration, listing out the problems faced while implementing the programme in school, to run the programme, what are remedial measures to be taken, suggestions for strengthening the programme and opinion on the overall performance of the computer education programme in school. The preliminary form of the tool was administered twice with a gap of one week between the first test

and the second test, and the responses were studied carefully and brought in changes in the items for better clarity of the clients, and the finalized tool was administered to the headmasters. Thus, developed tool has the face validity as the expert views were considered and the literature support was considered for finalizing the tool and thus it has the content validity. The responses of a few headmasters received on the two occasions were equally good therefore the tool possessing reliability.

Data collection

The data was collected from the 20 secondary school head masters of Warangal district by taking prior permission from the higher authorities. Besides collecting the data through the questionnaire, interaction and observations were also formed part of the study for eliciting the proper response from the head masters as far as the functioning of the computer education programme. The responses are analysed on the basis of the objectives set for the study and the results are presented below.

Results of the Study

1. The selected 20 schools of Warangal district, Computers are supplied by the NIIT agency under the computer education programme.
2. 13 and 7 schools are started the computer education programme during the year 2008-09 and 2010-2011 respectively.
3. Under this programme 2 Servers and 11 Monitors, one Printer, Internet Modem, UPS, Generator, Tables, Chairs are supplied to each and every school.
4. Only 59% of the computers are in working condition in both Rural and Urban secondary schools.
5. 41% of the computers are not in working condition in Government and Zillaparishad schools.
6. All the schools are supplied with Honda company generator and one printer. It is observed that 30% of generators are not functioning, 45% of printers are not working.
7. As per the guidelines of programme, every school is supposed to have internet connection in the lab. Out of 20 schools only 15 schools are having internet connection. Out of 15 schools, internet Modem is in working condition only in 40% of the schools.
8. In each school two instructors are appointed, they change regularly, because their salary is very meager.
9. It could be observed in schools that 69% subject teachers are trained in basic operational skills of computers. 31% of school teachers are not trained in this program.
10. As per the headmaster opinion, 60% (12) instructors able to deal computer theory classes efficiently.
11. The study disclosed that 65% of the school teachers have the ability to conduct computer-practicals to the students.
12. The study revealed that 20% (4) of the schools conducted the computer test/exam to the students, 80% (16) of the schools have not conducting any kind of test in computer programme.
13. The data revealed that 100% (20) Headmasters are not issuing the certificates/progress report to the students.
14. 100% head masters opined that, a few skills such as booting the computer, shutting down the computer, M.S word, paint are acquired by the students under this ICT@School programme.poor students pay attention in the computer education

15. On each Computer 20 to 30 students are getting hands on experience which appears to be poor way of conducting the programme.
16. Data revealed that 70% of the School Headmaster is using the ICT@School computers for office administration and correspondence. 30% of the school headmaster are not using even for office work and correspondence.
17. As per the head master responses, 100% of the school teachers are not using the ICT@School Computers for the preparation of Lesson Plans, question paper setting and creating students' data base and class room teaching
18. Data revealed that, 50% of the headmasters are opined that the time (periods) allocated for computer teaching program for each class is sufficient.
19. 100% of the Headmasters noticed that ICT@School programme not provided any educational CD/DVDs for the classroom teaching learning process.

The above observations/findings reveal the pathetic condition of the computer education programme in the secondary schools.

Problems faced for running the Computer education programme

Less number of computers in the lab, Electricity problem, Lack of qualified teachers, Hard ware problems, Non supply of teaching materials like Compact Disk & Digital Versatile Disk, Lack of provision for generator use, Insufficient time allotted to the computer lab, Computer repairs, Non supply of projector for class room teaching, Lack of Internet facility are appeared to be major problems faced by the schools with regard to the implementation of Computer education programme according to the Headmasters.

Overall Opinion of Headmasters on ICT @ School programme

The headmasters graded the schools on the basis of the functioning of the computer education programme considering working condition of computers, utilization of the computers by the students, facilities provided by the schools and the results are given in 5.

Table 5: Gradation of the schools by the headmaster for CEP

Excellent	Good	Average	Poor
0	13	7	0

From the above table, 65% (13) headmasters graded the schools on the basis of functioning of the computer education programme as good, 35%(7) headmaster graded the schools as average. This means just above 50% of the schools are running the computer education programme satisfactorily.

Suggestions for strengthening the computer education programme

The following suggestions are offered by the Headmasters for strengthening the computer education programme.

- a) Recruitment of regular instructor.
- b) Supply of computers as per the strength of the school.
- c) Supply of educational CDs & DVDs.
- d) Encouraging the regular teachers to use the computers.
- e) Provision for the maintenance of the laboratory.
- f) Need of High configuration systems.
- g) Supply of LCD projectors

- h) In time Repair of computers
- i) Updating of software and hard ware.
- j) Allotment of time in the regular time table daily for each class
- k) Enhancement of the remuneration of the computer instructors
- l) Strengthening the UPS or Solar energy.
- m) Attending to the repairs regularly.
- n) Providing Internet facility.
- o) A separate laboratory may be constructed for conducting the computer programme
- p) Frequent evaluation and supervision

Conclusion

The head master's leadership is important for the implementation of computer education programme successfully. As per the recommendation of the IT Task force this programme was implemented in Indian secondary schools and it is a boon for poor village students. According to the study modifications are to be brought in the implementation of the programme. It should be implemented from the primary level onwards. Number of computer supplied is not sufficient for the students, as per the student strength it should be provided @ the ratio of 1:5. Computers can be used not only for imparting basic skills of computer but also teaching and learning process. Now- a-days E-learning and M-learning are taking place all over the world. High speed Internet connection should be provided to all the schools to meet the requirements of the computer education programme. Instead of buying Desktop, good quality laptops/palmtops may be supplied to overcome the electric city problem, space and threatened problems. In view of the explosion of Information and Communication Technology (ICT), every student needs to become a computer-literate and the Govt has to consider the computer education programme as a priority programme and necessary instructions need to be given to all the states that each teacher should be a computer literate and the usage of computer for teaching and learning process in the class rooms is must.

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