



To Study the Role of Parents in Developing Computer Awareness among Schools Going Children in Pune City

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Abstract. The National Policy on Education 1986, as modified in 1992, stressed the need to employ educational technology to improve the quality of education. The policy statement led to two major centrally sponsored schemes, namely, Educational Technology (ET) and Computer Literacy and Studies in Schools (CLASS) paving the way for a more comprehensive centrally sponsored scheme – Information and Communication Technology @ Schools in 2004. The comprehensive choice of ICT for holistic development of education can be built only on a sound policy. The initiative of ICT Policy in School Education is inspired by the tremendous potential of ICT for enhancing outreach and improving quality of education. A parent is primary helper, monitor coordinator, observes, record keeper and decision maker for the child. The most important duty of parents is to look after their children and to take interest in their welfare and progress. "Successful parenting entails both effective components in terms of commitment, empathy and positive regard for children."

1. Introduction

The National Policy on Education 1986, as modified in 1992, stressed the need to employ educational technology to improve the quality of education. The policy statement led to two major centrally sponsored schemes, namely, Educational Technology (ET) and Computer Literacy and Studies in Schools (CLASS) paving the way for a more comprehensive centrally sponsored scheme – Information and Communication Technology @ Schools in 2004. Educational technology also found a significant place in another scheme on upgradation of science education. The significant role ICT can play in school education has also been highlighted in the National Curriculum Framework 2005 (NCF) 2005. Use of ICT for quality improvement also figures in Government of India's flagship programme on education, Sarva Shiksha Abhiyan (SSA). Again, ICT has figured comprehensively in the norm of schooling recommended by the Central Advisory Board of Education (CABE), in its report on Universal Secondary Education, in 2005. With the convergence of technologies, it has become imperative to take a comprehensive look at all possible information and communication technologies for improving school education in the country. The comprehensive choice of ICT for holistic development of education can be built only on a sound policy. The initiative of ICT Policy in School Education is inspired by the tremendous potential of ICT for enhancing outreach and improving quality of education. This policy endeavours to provide guidelines to assist the States in optimizing the use of ICT in school education within a national policy framework.

2. Role of Parents

A parent is primary helper, monitor coordinator, observes, record keeper and decision maker for the child. The most important duty of parents is to look after their children and to take interest in their welfare and progress. "Successful parenting entails both effective components in terms of commitment, empathy and positive regard for children." ¹⁶. Parenting begins during or before pregnancy and continues through a balance of lifespan. Parenthood plays a crucial role in the process of development of a child and also to the development of the society through long term investment in children. Parents are first and lifelong teachers and guide of every child. The main task of parents in each generation is to prepare children of the next generation for the physical, social, economic and psychological situations in which the children have to survive and grow. Parental involvement is defined as a "positive interaction between a parent and their child." Parental involvement includes a wide range of activities but generally refers to parents and family members use and investment of resources in their children's schooling. Such investments take place in or outside of school, with an intention to improve learning of children. At home parental involvement includes such activities as helping in doing homework, reading with children, discussion about developments in school etc. Involvement at school includes parents volunteering in the classroom, attending plays, sports and other events organized by school etc. Involvement at school includes parents volunteering in the classroom, attending plays, sports and other events organized by schools. It also includes school based involvement, focused on such activities as driving on a field trip, staffing a concession booth at school games, coming to school for scheduled conferences or informal conversations, volunteering at school and serving on a parent- teacher advisory board. ¹⁷

The foundation of a child's future is laid in the family. In later life it becomes difficult to demolish or reconstruct these foundations. The infant begins his life under the fostering affection and care of his parents and other near and dear ones who are closely associated with his family. As he grows, he receives the first lessons of life in his family and tries to imbibe habits, ideals and patterns of behavior of family members". Thus the family has a deep influence on him. The various

activities of family and need for intercommunication make the child to equip itself with a working of vocabulary. He receives his first lesson of speech in his family. Extensive research activities conclude that the Home environment is the most important influence on academic performance of a child. Parental or family involvement is beneficial to parents, teachers, students and the community at large. "The most common learning modalities are kinesthetic learning based on hands on work and engaging activities, visual learning based on observation and seeing what is being learned and auditory learning based on listening to instructions. The brain develops according to the quality and quantity of motivation the children receive from their parents." Many of the values later transmitted by the school are first inculcated in the child at home. So home environment influences the study habits of the students. The good study habits depend upon the responsibilities of the parents.

Parent involvement includes parent child interactions that communicate positive attitudes about school and importance of education to the child. "Parental involvement affects student achievement because these interactions affect students' motivation, their sense of competence and the belief that they have control over success in school". Parents can be involved by checking homework, communicating with the teacher and attending school functions. "When schools and families work together to support learning, every one benefits, students do better in school and in life, parents become empowered, teachers moral improves, schools get better and communities grow stronger (NCIPIE 2002). Parents should take care to raise a well behaved child who is willing to learn , parents should provide an-encouraging home atmosphere so that child's commitment to learn will increase Epstein (2001) has concluded that there are six types of parent involvements, which are parenting, communicating, volunteering, learning at home, decision making and community involvement. Psychologists and educators agree on the importance of early years in developing habits that are preserved by the child. A child should come to school with qualities of character that are valued by his family, school and community. "These qualities include honesty, respect caring about others, following directions of teacher and school rules, taking responsibility and making good moral choices." The main role of parents is to provide care, love and training to their children." "The parents' involvement is absolutely essential to a child's eventual success." The parental influence is the most important factor for any achieving child. A child develops according to the quality and quantity of the stimuli received by the child from his family members. The positive outlook of every member of the family and favorable environment molds child to prepare to study and have a good character. Most of the parents take care of physical needs of the child, but at the same time they should take care about their children's intellectual, emotional and spiritual development. Uneducated and poor parents need to be trained by the schools and the government.

3. Research Methodology

The main objective of the present study is to study the computer awareness among school going children in Pune city. The necessary data was collected from the secondary and primary sources.

4. Secondary Data

1. Available data from the reports of various committees publish by the Government department, relating to the computer education (ICT awareness) of the school, students in India and Maharashtra state.
2. Research papers/ Articles on the subject of computer education for school student published abroad and in India in various journals and magazines.
3. Books, Ph.D thesis relating to computer education for school students, publish abroad and in India.

5. Primary Data

In order to collect primary data it was necessary to determine the sample and the sample size. The data relating to the schools in Pune district was available with Pune Zilha Parishad, Education division (Secondary) which gives the details of medium wise number of secondary schools in Pune district. The section of secondary education under Maharashtra states school education department has been functioning through Zilha Parishad of States. All the government approved secondary schools in a district, included in secondary education department are functioning, which include granted, non-granted, municipal and permanently without grant schools having different medium of instructions. These schools include, schools with standard 5th to 10th, 5th to 12th, standard 8th to 10th and standard 4th to 12th. The administration of the schools is carried out by secondary school division. In all these schools, various schemes for the benefit of the society and students are implemented. According to the governments criteria annually various post in these schools are ascertained and accordingly salaries of the staff in grantable schools are finalized. Educational officers (Secondary Education) are in charge of the wage Board and the secondary education division and their assistance and other employees cooperate in implementing various schemes for reaching upto the ultimate beneficiaries. In the present age of information and technology (computer), secondary education division carries out its work with the help of computer. Hence without considering cost, various circulars, government rules and regulation and information about various schemes relating to the secondary education is declared on the website (<http://www.punezp.org/edumadhyamic.html>). Similarly information about finalized list of employees, provident fund, medical bills etc. is also given on the website. The information about the secondary school in Pune city was as follows for the year 2010-11

Category	No. of Schools
Granted	21
Private Schools	151
CBSE	3
Municipal	5
Total	44

In addition there are school affiliated to the central board like Central Board of Secondary Education (CBSE) and Indian Certificate of Secondary Examination (ICSE) in Pune city. In the year 2010-11, there were 21 CBSE schools and 12 ICSE schools. Thus there were 33 Central Board schools in Pune city. 5 Municipal schools were taken for the study. 440 were the total number of respondent (parents). 10 parents from each school.

Questionnaire

- Name : _____
- Child Name : _____
- Age- 25-35 35-45 45-55
- Educational Qualification: _____
- Your Annual Income :

1) 1 Lac to 2 Lac	<input type="checkbox"/>
2) 2 Lac to 3 Lac	<input type="checkbox"/>
3) 3 Lac to 5 Lac	<input type="checkbox"/>
4) 5 Lac to 10 Lac	<input type="checkbox"/>
5) More than 10 Lac	<input type="checkbox"/>

- Occupation: _____
- Pl. tick (✓) the following

Sr.no	Use of computer	Yes	No
1.	Do you use computer for personal/professional purpose		
2.	Is computer education must for your children		
3.	You have Computer at home for children		
4.	If No, are you thinking to buy for children		
5.	Do you buy latest software and hardware for your child to upgrade his/her technical skills		
6.	Having computer would lead to better utilization of children's time		
7.	Whether school is teaching computer as per the practical needs considering the interest of children		
8.	Do you help your child in gaining knowledge about computer		
9.	Does computer education has positive effect on students academic achievement from elementary school to college		
10.	Do you visit computer stores and exhibitions with your children		
11.	Does your child use computer more to play games than to gain knowledge		
12.	Is your child using computer to download movies ,games , songs		
13.	Are your children aware of latest updates in hardware and software		

- What expectations do you have toward computer education? [Multiple Choice]:

- () To help children to pursue their future career
- () To increase children's social interest
- () To enhance children's knowledge
- () To enhance students with their communication ability
- () To help children to survive in modern society
- () To nurture children's attitude and their power to think
- () To help them better understand truth, good, and beauty
- () To complete the different projects.
- () I. Q Test

- Whether your child learns more about computer through their – (Who is more effective?) **Rank accordingly**

Parents Teachers Friends Relative Books

6. Parents Tables

Table 1 Age wise classification of the parents

Age group of parents	Aided/Granted schools	Central board schools	Private(Non-Aided) schools	Municipal schools	Total schools
25-35 (%)	63 (30.00)	03 (10.00)	12 (8.33)	43 (86.00)	121 (27.50)
35-45 (%)	121 (57.63)	18 (60.00)	88 (58.33)	7 (14.00)	234 (53.18)
45-above (%)	26 (12.38)	09 (30.00)	50 (33.34)	-	85 (19.31)
Total (%)	210 (100.00)	30 (100.00)	150 (100.00)	50 (100.00)	440 (100.00)

(Source: Primary data)

Table no.1 deals with age wise classification of the parents of the students covered by the study. From the table it can be observed that 234 out of 440(53.18%) of the parents were from the age group 35-45 years followed by 19.31% of the parents were from the age group 45 years and above. The parents belonging to the age group 25-35 years were 121 out of 440(27.50%) of the total number of the parents. This pattern of the age group of the parents has been similar in case of aided/granted schools, central boards' schools and private schools. Thus the majority of the parents belong to the middle age group of 35-45 years of age.

TABLE 2. Educational qualifications of the parents

Qualification of parents	Aided/Granted schools	Central board schools	Private(Non-Aided) schools	Municipal schools	Total schools
Undergraduate (%)	188 (82.52)	03 (10.00)	12 (8.00)	50 (100.00)	253 (57.50)
Graduate (%)	13 (6.19)	06 (20.00)	86 (57.33)	-	105 (23.86)
Post-graduate (%)	09 (4.29)	21 (70.00)	52 (34.67)	-	82 (18.63)
Total (%)	210 (100.00)	30 (100.00)	150 (100.00)	50 (100.00)	440 (100.00)

(source : Primary data)

Regarding the educational qualification of the parents, Undergraduate parents accounted for 253(57.50%) of the total 440 parents, where parents of the students of aided/granted schools accounted for 82.52% out of 210, but only 10% out of 30 and 8% out of 150 from the central boards schools and private schools. The percentage of graduates parent was the highest at 57.33% in case of private schools. 21(70%) of the 30 parents from the central boards schools were post-graduate. Thus among total number of parents 253 out of 440(57.50%) were undergraduates and the rest were graduates and post graduates. Also 100 % of parents from municipal school are undergraduates.

TABLE 3. Annual Income of Parents

Annual Income(in lakhs) of parents	Aided/Granted schools	Central board schools	Private(Non-Aided) schools	Municipal schools	Total schools
Up to 2 (%)	68 (32.50)	-	25 (16.67)	50 (100.00)	143 (32.50)
2-3 (%)	115 (55.00)	06 (20.00)	12 (8.33)	-	133 (30.22)
3-5 (%)	11 (5.00)	05 (16.67)	12 (8.33)	-	28 (6.36)
5 and Above (%)	16 (7.50)	19 (63.33)	101 (66.67)	-	136 (30.90)
Total (%)	210 (100.00)	30 (100.00)	150 (100.00)	50 (100.00)	440 (100.00)

(Source: Primary data)

Table No.3 reveals that, out of the total 440 parents, 136 (30.90%) had their annual income Rs. 5 lakhs and above. Out of 30 (63.33%) parents of the students from central Board's schools and 101 out of 150 (66.67%) parents of the students from private school had their annual income of Rs.5 Lakhs and above. 133(30.22%) out of 440 had the income range between Rs.2 – 3 lakhs respectively. In the case of aided/granted schools 183 out of 210 parents (87.14%) were having their annual income up to Rs. 3 lakhs only. Annual income of municipal school parents is up to 2lakhs only. Thus annual income of parents of the

students from aided/granted schools and municipal schools was relatively lower than that of the parents of the students from central board's schools and private schools. In other words, relatively financially better of parents prefer central board's school or private schools.

TABLE 4. Occupation wise classification of the parents

Occupation of parents	Aided/Granted schools	Central board schools	Private(Non-Aided) schools	Municipal schools	Total schools
Professional (%)	95 (45.24)	03 (10.00)	24 (16.00)	-	122 (27.72)
Business (%)	26 (12.38)	15 (50.00)	110 (73.34)	-	151 (34.31)
Service (%)	82 (39.05)	12 (40.00)	16 (10.66)	11 (22.00)	121 (27.50)
Housewife (%)	05 (2.38)	-	-	-	10 (2.27)
Other (%)	02 (0.92)	-	-	39 (78.00)	41 (9.31)
Total (%)	210 (100.00)	30 (100.00)	150 (100.00)	50 (100.00)	440 (100.00)

(Source: Primary data)

Regarding occupation of the parents of the students covered by the study, it can be observed from the table No.4 that 122 out of 440 parents (27.72%) were professionals and 151(34.31%) were from the business sector, followed by 121(27.50%) were from the service sector. Housewives accounted for 2.27% and other 9.31% only. Thus majority of the parents (89.53%) were from the business, profession and service sector.

TABLE 5. Parent's Responses about the use of computers

Sr .no	Parent's Responses	Aided/Granted schools	Central board schools	Private(Non-Aided) schools	Municipal schools	Total schools
I)	Do you use Computer for personal/professional purposes	26 (12.3)	21 (70.00)	100 (66.67)	0 (0)	147 (37.04)
II)	Is computer education is must for your children	200 (95.24)	29 (96.67)	150 (100.00)	50 (100.00)	439 (97.18)
III)	Have you computer at home for children.	47 (22.38)	26 (86.67)	137 (91.67)	0	210 (53.85)
IV)	If not, are you thinking of thinking to buy it for your children?	152 (72.38)	03 (10.00)	12 (8.33)	4 (2.00)	171 (42.82)
V)	Do you buy latest software and hardware for your child to upgrade his/her talents?	42 (20.00)	18 (60.00)	100 (66.67)	0	160 (41.03)
VI)	Having computer would lead to better utilization of children's time?	168 (80.00)	28 (93.33)	125 (83.33)	36 (72.00)	357 (81.11)

TABLE 6. Parent's Expectations about computer subject to their children.

Sr.No	Parent's Expectations about computer subject	Aided/Granted schools	Central board schools	Private(Non-Aided) schools	Municipal schools	Aided/Granted schools
		Yes	Yes	Yes	Yes	%
I)	To help children to pursue their future career	210 (100.00)	30 (100.00)	137 (91.67)	50 (100.00)	89.01
II)	To increase children's social interest.	152 (72.38)	13 (43.33)	88 (58.67)	40 (80.00)	66.59
III)	To enhance children's knowledge.	205 (97.62)	29 (96.67)	137 (91.67)	50 (100.00)	95.68
IV)	To enhance student's communication ability.	153 (72.85)	26 (86.67)	116 (77.33)	16 (32.13)	70.68
V)	To help children to survive in modern society.	126 (60.200)	19 (63.33)	98 (65.33)	19 (38.00)	59.54
VI)	To nurture children's attitude and their power to think.	58 (27.62)	21 (70.00)	113 (75.00)	6 (12.00)	45.00
VII)	To help them better understand truth good and beauty	105 (50.00)	16 (53.33)	50 (33.33)	6 (12.00)	40.22
VIII)	To complete different projects	84 (40.00)	24 (80.00)	125 (83.33)	2 (4.00)	53.40
IX)	IQ – test	142 (67.62)	23 (76.67)	113 (75.00)	2 (4.00)	63.63

(Source: primary data)

Table no 6: Shows the responses of the parents of the students regarding their expectations about computer education to their children. From the data presented in the table the following findings have been arrived at.

1. Almost all the parents covered by the study expected that providing computer education to their children tends to help their children to pursue their future career.
2. 371 out of 440(95.13%) of the parents expected that the computer education to their children tends to enhance children's knowledge.
3. 75.64% of the parents covered by the study expected that the computer education helped in enhancing student communication ability.
4. 71.28% of the parents expected that computer education to children improved their ability in IQ – test.
5. 64.87% of the total parents expected that computer education tends to increase children's social interest. This percentage was 72.38 in case of parents of the students from aided/granted schools.
6. 62.31% of the total parents expected that computer education helps their children to survive in modern society.
7. 59.74% of the total parents expected that computer education helps their children to complete different project. This percentage was 83.33% in case of parents of private school children but 40% in respect of parents of students from aided/granted schools.
8. 49.23% of the total parents expected that computer education helps the student to nurture their attitudes and their power to think also.
9. 43.85% of the total parents expected that, computer education to their children helps them in better understanding about truth, good and beauty. This percentage ranged between 53.33% in case of parents of students of private schools.

Thus it can be concluded that the main expectation of parents about computer education to their children helps in pursuing their career, to enhance children's knowledge, performance in IQ – test, increasing children's social interest helping children to survive in modern society and completing different projects by their children.

7. Parents Response

1. 234 out of 440(53.18%) parent's respondents were from the age group 35-45 years
2. 253(57.50%) of the total parent respondents were undergraduates. 105(23.86%) of parents were graduates.70% of the parents of students from the central board schools were post graduates
3. 133(30.22%) of the total respondents had their annual income in the range of Rs. 2-3 lakhs and 30.90% of parent's had their annual income in the range of Rs. 5 lakhs and above. Majority of the parent's(32.50%) were having annual income upto 2 lakhs of Rupees.
4. 122(27.72%) of parents were professional, 151(34.31%) of the parent's were businessmen followed by 121(27.50%) service sector. Housewives accounted for 2.27% and other 9.31% .
5. Regarding the parent's view about the computer education, 97% of parent's had the view that in modern times computer education is a must for their children.86% of the parent responded that computer education has positive

effect on their children academic performance and 79% of them had the view that having computer led to better utilization of children time.

6. 410 out of 440 (97%) of the parents expected that, computer education helps children to pursue their carrier and 95% parents expected that computer education helps in enhancing children knowledge. 76% of the parents expected that computer education enhances children communication ability. According to 62% of parents computer education helps children to survive and grow in modern society,
7. Majority of the parents (4.89 mean value) agreed that their children learn more about computer from teachers, followed by parents and friends. Hence teacher plays an important role.

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