

ATTITUDE OF SARVA SHIKSHA ABHIYAN (SSA) TEACHERS TOWARDS INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

Research
Paper

ABSTRACT

The main objective of the study was to find out the level of attitude of Sarva Shiksha Abhiyan teachers towards Information and Communication Technology (ICT). The investigator has adopted the survey method. The tool developed by the investigator and P. Annaraja was used to find out the attitude of SSA teachers towards ICT. Percentage Analysis, 't' test, ANOVA and Chi-square analysis were employed for analysis of data. The major findings were that 15.7% of SSA teacher have high level of attitude towards ICT and there is significant difference among boys', girls' and co-education school SSA teachers in their relevancy of using ICT in teaching.

INTRODUCTION

Naik (1979), an eminent educator of our country has said that "the progress of primary education is one index of the general, social and economic development of the country as a whole". A well planned and properly implemented system of education at this stage plays a very significant role in every child's cultural, emotional, ethical, intellectual, physical, social and spiritual development. In order to develop the progress of primary education our government has decided to implement Universalization of Elementary Education (UEE).

The objective of UEE is to ensure, within a period of ten years, minimum education for all children until they complete 14 years of age within the policy-frame of the sixth five-year plan. UEE has proposed that all unenrolled children shall be brought into the fold of education, formal or non-formal, with emphasis on the primary stage and with increasing enrolment, taking care that the incidence of dropouts is be reduced. To enhance the quality of elementary education, the curriculum shall also emphasize environment-based value orientation.

NPE (1986) was the turning point; the Union Government took the important initiative for strengthening primary education. With the ultimate goal of universalization and enhancing quality DIETs have been set up in 424 districts with the target of setting up one in each district to make available the professional support system. The total

literacy campaign has indicated that, given the will and the right choice of strategy, the goals of universalization of elementary education can be achieved. So the government implemented the frame work named Sarva Shiksha Abhiyan (SSA).

SARVA SHIKSHA ABHIYAN

SSA is a programme with a clear time frame for universal elementary education. It is responsible to fulfill the demand for quality basic education all over the country and an opportunity for promoting social justice through basic education. The Sarva Shiksha Abhiyan (SSA) was to provide useful and relevant elementary education for all children in the 6 to 14 age group up to 2010. It provides a wide convergent framework for the implementation of elementary education schemes. It is also a programme with necessary budget provisions for strengthening vital areas to achieve UEE. As a programme, it reflects the additional resource provision for UEE.

SIGNIFICANCE OF THE STUDY

Article 45 of the constitution states that the state shall endeavour to provide free and compulsory education

Dr. A. Michael J. Leo

Assistant Professor in Education

Dr. P. Annaraja

Reader in Mathematics,

St. Xavier's College of Education, Palayamkottai.

Sequencing Sound

The child may be unable to tell which sound was heard first if the two sounds are reasonably close in time of onset. Moreover the child may have difficulty in learning names of the days of the week, the alphabet and one's home address. Another type is word finding difficulty.

Language Components

The child may have difficulty recognizing and comprehending the necessary components.

Listening

The child may be unable to comprehend all that the teacher is saying, if there are other sounds or movements in the classroom.

Sound Localizing

The child may have difficulty localizing sound immediately requiring a longer time to locate sound in space.

Reading

The child may have difficulty learning to read.

Speech and language development

At early school age and beyond, there will still be evidence of receptive and expressive language problems and articulation problems.

BEHAVIOR

The child may show signs of low frustration tolerance, short attention span, withdrawal, irritability, hyperactivity, poor self-concept and inconsistency etc. If any of these behaviors are noted the child may have central auditory processing disorders and there is a need for appropriate testing. Some of the tests are 1. Behavioural tests 2. Dichotic speech tests and 3. Temporal patterning tests etc. which help to assess the various auditory function deficiencies of the brain.

The above factors may influence the development of the child's total auditory capability and thereby other aspects of his mental and physical development.

INTERVENTION

Weakness in one or two of the above characteristics will not lead to any central auditory processing problem. The child with only one or two of these characteristics

can compensate using the remainder of his central auditory system which is **Article** normal. If the child has several of these characteristics he is at a risk to achieve his potential in the emotional, intellectual and physical spheres.

Hence intervention is necessary for optimal development of the child. The first essential stage is to determine whether the child has central auditory processing problem. Evaluation will be done by a number of specialists as follows.

1. Audiologist to determine central auditory processing ability of the child
2. A speech and language pathologist to determine competency in receptive and expressive language function.
3. A psychologist to determine the intellectual function and areas of strength and weakness. It is important to consider the parents' evaluation of their child as they need to be an integral part of the process of evaluation and the therapy.

To help the child to overcome this disorder factors like age of the child, the co-existence of other disabilities, problems and availability of other resources need to be considered. The approaches to remediation fall into three main categories:

1. Enhancing the child's language and cognitive resources
2. Enhancing the child's auditory perceptual skills
3. Improving the quality of auditory signal.

The following strategies can be followed

- Ø Children can be provided with personal assistive learning devices that will enhance the teacher's voice and reduce the competition of other noises and sounds in the class room.
- Ø Acoustic modifications can be made to the class room like carpeting, acoustic ceiling tiles, and window treatments. This will help to minimize the noise affecting the child's ability to process speech in the educational setting.
- Ø Teachers and parents should speak clearly, providing preferential seating, using visual aids to supplement auditory information.

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to all children up to the age of fourteen years, within ten years from the date of adoption of the constitution. But, our country is yet to achieve the goal of UEE. For that, the government has launched the SSA programme. It provides a wide convergent framework for implementation of elementary education schemes. 2010 is the outer limit of such achievements.

Old pedagogical tools and methodology are becoming increasingly less effective and on their own are no longer suitable for the acquisition of knowledge. So, to create learning environments, in which children are encouraged to discover independent and group work, and to prepare the children for the information society, the implementation of ICT in education is unavoidable.

Therefore SSA programme has formed Block Resource Centers (BRC) / Cluster Resource Centers (CRC) and through these centers it has been giving ICT training for the teachers who are involved in the SSA programme. It is necessary to know the teachers' attitude towards ICT. So the investigator has taken the following topic for his investigation.

STATEMENT OF THE PROBLEM

**Attitude of Sarva Shiksha Abhiyan (SSA)
Teachers Towards Information and
Communication Technology (ICT)**

OBJECTIVE

To find out the level of attitude of Sarva Shiksha Abhiyan teachers towards Information and Communication Technology (ICT)

HYPOTHESES

1. There is no significant difference between male and female Sarva Shiksha Abhiyan teachers in their attitude towards ICT - enthusiasm, anxiety, acceptance, e-mail for classroom learning, negative impact on society, productivity, confidence and relevancy.
2. There is no significant difference among boys', girls' and co-education school Sarva Shiksha Abhiyan teachers in their attitude towards ICT - enthusiasm, anxiety, acceptance, e-mail for classroom learning, negative impact on society, productivity, confidence and relevancy.

3. There is no significant association between the qualification of the Sarva Shiksha Abhiyan teachers and their attitude towards ICT - enthusiasm, anxiety, acceptance, e-mail for classroom learning, negative impact on society, productivity, confidence and relevancy.

METHOD USED FOR THE STUDY

The investigator has adopted the survey method to study the attitude of Sarva Shiksha Abhiyan Teachers towards Information and Communication Technology.

POPULATION AND SAMPLE

The population for the study consists of all Secondary Grade teachers who are involved in Sarva Shiksha Abhiyan scheme in Tirunelveli educational district.

The investigator has used the stratified random sampling technique. The investigator has selected 30 schools and 235 teachers have been randomly selected from those 30 schools.

TOOL USED

As the study aims at the attitude of SSA teachers towards ICT, the investigator has used Information and Communication Technology Attitude Scale (ICTAS) to find out the attitude of SSA teachers towards ICT. The tool was developed by Michael J Leo and Dr.P.Annaraja. The investigator selected only eight important dimensions as enthusiasm, anxiety, acceptance, attitude towards e-mail for classroom learning, attitude towards negative impact on society, productivity, confidence, and relevancy.

STATISTICAL TECHNIQUES USED

Percentage Analysis, 't' test, ANOVA and. Chi-square analysis were employed for analysis of data.

**Table 1
LEVEL OF ATTITUDE OF SSA TEACHERS
TOWARDS ICT**

Dimensions of attitude towards ICT	Low		Moderate		High	
	N	%	N	%	N	%
Enthusiasm	31	13.2	171	72.8	33	14
Anxiety	51	21.7	149	63.4	35	14.9
Acceptance	36	15.4	162	68.9	37	15.7
E-mail for classroom learning	41	17.4	151	64.3	43	18.3
Negative impact on society	33	14	163	69.4	39	16.6
Productivity	38	16.2	154	65.5	43	18.3
Confidence	29	12.4	154	65.5	52	22.1
Relevancy	24	10.2	157	66.8	54	23
Attitude towards ICT	30	12.8	168	71.5	37	15.7

It is observed from the table that 12.8% of SSA teachers have low, 71.5% of SSA teachers have moderate and 15.7% of SSA teachers have high levels of attitude towards ICT.

Table 2

DIFFERENCE BETWEEN MALE AND FEMALE SSA TEACHERS IN THEIR ATTITUDE TOWARDS ICT

Dimensions of attitude towards ICT	Male (N=89)		Female (N=146)		Calculated 't' value	Remarks at 5% level
	Mean	S.D	Mean	S.D		
Enthusiasm	28.84	4.19	28.45	3.66	0.74	N.S
Anxiety	27.01	4.00	26.25	4.25	1.39	N.S
Acceptance	26.97	2.85	26.22	3.10	1.89	N.S
E-mail for classroom learning	27.29	5.18	27.40	4.74	0.16	N.S
Negative impact on society	25.63	3.93	24.45	3.90	2.23	S
Productivity	28.94	4.60	28.51	4.59	0.71	N.S
Confidence	27.39	3.67	27.49	3.33	0.20	N.S
Relevancy	30.34	3.80	30.48	3.25	0.29	N.S
Attitude towards ICT	222.42	23.24	219.23	21.99	1.04	N.S

(At 5% level of significance, the table value of 't' is 1.96)

It is inferred from the above table that there is no significant difference between male and female SSA teachers in their attitude towards ICT and its dimensions such as enthusiasm, anxiety, acceptance, e-mail for classroom learning, productivity, confidence and relevancy, but there is significant difference between male and female SSA teachers in their negative impact on society.

Table 3

DIFFERENCE AMONG BOYS', GIRLS' AND CO-EDUCATION SCHOOL SSA TEACHERS IN THEIR ATTITUDE TOWARDS ICT

Dimensions of attitude towards ICT	Source of variation	Sum of squares	Degrees of freedom	Variance Estimate	Calculated value of 'F'	Remark at 5% level
Enthusiasm	Between	46.84	2	23.42	1.56	N.S
	Within	3473.75	232	14.97		
Anxiety	Between	10.28	2	5.14	0.29	N.S
	Within	4076.16	232	17.57		
Acceptance	Between	36.56	2	18.28	2.01	N.S
	Within	2114.19	232	9.11		
E-mail for classroom learning	Between	87.17	2	43.59	1.81	N.S
	Within	5580.81	232	24.06		
Negative impact on society	Between	22.64	2	11.32	0.72	N.S
	Within	3652.91	232	15.75		

Productivity	Between	87.05	2	43.52	2.07	N.S
	Within	4882.72	232	21.05		
Confidence	Between	60.41	2	30.2	2.54	N.S
	Within	2761.78	232	11.9		
Relevancy	Between	93.19	2	46.59	3.96	S
	Within	2732.27	232	11.78		
Attitude towards ICT	Between	1401	2	700.5	1.38	N.S
	Within	117871	232	508.06		

(At 5% level of significance the table value of 'F' is 2.99)

It is inferred from the above table that there is no significant difference among boys', girls' and co-education school SSA teachers in their attitude towards ICT and its dimensions such as enthusiasm, anxiety, acceptance, e-mail for classroom learning, negative impact on society, productivity and confidence but there is significant difference among boys', girls' and co-education school SSA teachers in their relevancy of using ICT.

Table 4

ASSOCIATION BETWEEN THE EDUCATIONAL QUALIFICATIONS OF THE SSA TEACHERS AND THEIR ATTITUDE TOWARDS ICT

Dimensions of attitude towards ICT	Degrees of freedom	Calculated value for 'x ² '	Remark at 5% level
Enthusiasm	4	3.27	N.S
Anxiety		6.00	N.S
Acceptance		11.17	S
E-mail for classroom learning		3.68	N.S
Negative impact on society		1.10	N.S
Productivity		2.58	N.S
Confidence		3.60	N.S
Relevancy		3.25	N.S
Attitude towards ICT		9.61	S

(At 5% level of significance, the table value of 'x²' is 9.49)

It is inferred from the above table that there is no significant association between the educational qualifications of the SSA teachers and their attitude towards ICT in the dimensions such as enthusiasm, anxiety,

e-mail for classroom learning, negative impact on society, productivity, confidence and relevancy but there is significant association between the educational qualifications of the SSA teachers and their attitude towards ICT and acceptance in using ICT.

FINDINGS

1. 15.7% of SSA teacher have high level of attitude towards ICT.
2. There is significant difference between male and female SSA teachers in the dimension negative impact on society but there is no significant difference between male and female SSA teachers in the dimensions such as enthusiasm, anxiety, acceptance, e-mail for classroom learning, productivity, confidence, relevancy and attitude towards ICT.
3. There is significant difference among boys', girls' and co-education school SSA teachers in their relevancy of using ICT in teaching, but there is no significant difference among boys', girls' and co education school SSA teachers in their attitude towards ICT and its dimensions such as enthusiasm, anxiety, acceptance, e-mail for classroom learning, negative impact on society, productivity and confidence.
4. There is significant association between the educational qualifications of the SSA teachers and their attitude towards ICT in their relevancy in using ICT, but there is no significant association between the educational qualifications of the SSA teachers in the dimensions of attitude towards ICT and its dimensions such as enthusiasm, anxiety, e-mail for classroom learning, negative impact on society, productivity, confidence and relevancy in using ICT.

CONCLUSION

't' test results reveal that, male SSA teachers are better than female SSA teachers in the dimension negative impact on society. That is, the female teachers have perceived that ICT has negative impact on society. This may be due to the fact that male SSA teachers get opportunity to browse the texts and figures from the

Internet anytime and they get practical experience. But the female teachers do not have this opportunity and they have this attitude without direct experience. So they may have a few negative concepts which the society has. Further, women in the Indian society are giving importance for the character development of themselves and are responsible for the character development of their children.

'F' test results reveal that, the girls' school SSA teachers are better than boys' school and co-education school SSA teachers in their relevancy in using ICT. This may be due to the fact that the girls' school SSA teachers feel that ICT helps them reduce more manual work and it is suitable for future development of the students. Moreover, the girls' school campus might have given them courage to work with the computers to find out the relevancy. Figg and Candace Balch (2000) of Texas University found that the teachers preferred educational uses of computer-based technologies related to their notions of the importance of students' interest and preferences

The 'x²' value shows that educational qualifications of the SSA teachers influence their acceptance of using ICT and their attitude towards ICT. This may be due to the fact that the SSA teachers might have got computer experience when they earned their qualifications. Therefore their attitude may vary with respect to their educational qualification.

SUGGESTIONS TO EDUCATIONAL ADMINISTRATORS

1. ICT training can be given to all the teachers. It is more essential for female teachers.
2. ICT integrated training programmes can be organized for the SSA teachers.
3. The SSA teachers may be trained to collect the reference materials for their subjects from the websites.
4. ICT integrated pedagogy can be stressed in teaching the subjects.
5. EDUSAT programmes can be made available to all the teachers.

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