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## PERCEPTIONS OF SECONDARY SCHOOL TEACHERS TOWARDS INTEGRATION OF ICT IN SCHOOL CURRICULUM

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### ABSTRACT

Teaching has become one of the most challenging professions in our society where knowledge is expanding rapidly and modern technologies are demanding teachers to learn how to use these technologies. Information and Communication Technology (ICT) can impact student learning to a great extent when teachers are digitally literate and understand how to integrate it with curriculum. As the teacher plays a significant role in the teaching-learning process, teachers should equip themselves with ICT competencies to design new learning environments using the most modern technologies in the field of education. The present study is an attempt to explore the perceptions of secondary school teachers towards integration of ICT in School Curriculum. The researchers used a well prepared and standardized questionnaire as the tool for collection of data from a sample of 1000 teachers (120 Headmasters and 880 School Assistants in English) selected from 120 secondary schools located in the three north coastal districts, viz., Srikakulam, Vizianagaram and Visakhapatnam in Andhra Pradesh using Stratified Random Sampling technique. Mean score values, standard deviations and independent t-tests were used for analysis of data. The findings of the study revealed that the demographic variables – Gender, Age, Marital Status and Length of service of teachers working in Secondary Schools have no influence on their perceptions towards integration of ICT in school curriculum.

**Key words:** *Information and Communication Technology (ICT), integration, perceptions, secondary school teachers, teaching-learning process, school curriculum.*

## INTRODUCTION

Education is an effective means of social reconstruction. It is the process of facilitating learning. It helps in the acquisition of knowledge, skills, values, morals, beliefs and habits necessary for the human living. It helps to increase the productivity, achieve national and emotional integration and accelerate the process of modernization. It cultivates social, moral and spiritual values among people. Teaching has become one of the most challenging professions in our society where knowledge is expanding rapidly and modern technologies are demanding teachers to learn how to use these technologies. Information and Communication Technology (ICT) can impact student learning to a great extent when teachers are digitally literate and understand how to integrate it with curriculum.

Curriculum and Pedagogy are two important aspects in the teaching learning process at secondary level. The curriculum should be transacted applying suitable pedagogy in secondary schools. As the teacher plays a significant role in the teaching-learning process, teachers should equip themselves with the necessary competencies in the use of ICT to design new learning environments using the most modern technologies in the field of education.

## CONCEPT OF 'INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)'

Information and communication technology (ICT) can be understood as a diverse set of technological tools and resources used to transmit, store, create, share or exchange information. These technological tools and resources include computers, the internet (websites, blogs and emails), live broadcasting technologies (radio, television and webcasting), recorded broadcasting technologies (podcasting, audio and video players, and storage devices) and telephony (fixed or mobile, satellite, video-conferencing etc.).

Information and Communication Technology (ICT) in education is the mode of education that uses technology to support, enhance and optimize the delivery of information. Worldwide research has shown that ICT can lead to an improved student learning by adopting better teaching methods. According to the document on **National Policy on Information and Communication Technology (ICT) in School Education (2012)**, Information and Communication Technologies are defined as all devices, tools, content, resources, forums and services; and those that can be converted into or delivered through digital forms, which can be deployed for

realizing the goals of teaching learning, enhancing access to and reach of resources, building of capacities, as well as management of the educational system.

## **NEED FOR THE PRESENT INVESTIGATION**

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 National Policy on Information and Communication Technology (ICT) in School Education-2012 endeavors to provide guidelines to assist the States in optimizing the use of ICT in school education within a national policy framework. The policy aims at preparing youth to participate creatively in the establishment, sustenance and growth of a knowledge society leading to all round socio-economic development of the nation and global competitiveness. The very objective of the policy is to devise, catalyze, support and sustain ICT and ICT enabled activities and processes in order to improve access, quality and efficiency in school education. Hence, it is the need of the hour to take necessary steps by all the stakeholders to integrate ICT in school curriculum.

The investigator, after going through the literature available in the area, proposes to study the perceptions of teachers working in secondary schools towards integration of Information and Communication Technology (ICT) in school curriculum.

## **OBJECTIVES OF THE STUDY**

The main objective of the present study is to find out the perceptions of secondary school teachers towards integration of ICT in school curriculum.

The study also aims at finding out the influence of certain demographic variables such as gender, age, marital status and teaching experience on the perceptions of teachers towards integration of ICT in school curriculum.

## HYPOTHESES OF THE STUDY

The following hypotheses have been formulated for the present investigation:

- (i) There is no significant difference in the perceptions of male and female teachers working in secondary schools towards integration of ICT in school curriculum.
- (ii) There is no significant difference in the perceptions of teachers aged below 40 years and those aged 40 years and above towards integration of ICT in school curriculum.
- (iii) There is no significant difference in the perceptions of married and unmarried teachers working in secondary schools towards integration of ICT in school curriculum.
- (iv) There is no significant difference in the perceptions of teachers with an experience of less than 10 years and those with 10 years and above towards integration of ICT in school curriculum.

## LIMITATIONS OF THE STUDY

The study is limited to find out the influence of four demographic variables, viz., gender, age, marital status and teaching experience on the perceptions of teachers working in the secondary schools located in the three north coastal districts of Andhra Pradesh, viz., Srikakulam, Vizianagaram and Visakhapatnam.

## METHODOLOGY

- (a) **Sample:** The sample of the study consists of 1000 teachers (120 Headmasters and 880 School Assistants) selected from 120 secondary schools located in Srikakulam, Vizianagaram and Visakhapatnam districts of Andhra Pradesh using Stratified Random Sampling technique.
- (b) **Research Tool:** The researchers used a well prepared questionnaire consisting of 40 items as the tool of research for the present investigation. The tool was initially administered to 100 teachers (10 Headmasters and 90 School Assistants) under Pilot study. The measures of reliability, validity and objectivity of the tool have been calculated. Further, the researchers conducted item analysis for the items included in the tool. Out of 40 items selected for the tool, the discriminating power of 35 items has been found positive and is negative in respect of 5 items. The items whose discriminating power is negative have been removed; and the final tool consists of 35 items which are pool proof in all respects.

The final tool has been administered to 1000 teachers (120 Headmasters and 880 School Assistants) working in the Secondary Schools in the three north coastal districts, viz., Srikakulam, Vizianagaram and Visakhapatnam of Andhra Pradesh.

## STATISTICAL INTERPRETATION OF DATA

The data collected has been analyzed using different statistical techniques such as mean score values, Standard Deviations and t-ratios; and are presented in the following table.

**Table showing t-values of different variables relating to the perceptions of Secondary School Teachers towards integration of ICT in school curriculum**

S. No.	Variable		N	Mean	S.D.	t-ratio	Result
1	Gender	Male	460	104.76	34.48	0.54*	*Not Significant at 0.05 and 0.01 levels
		Female	540	105.94	34.25		
2	Age	Below 40 years	660	104.53	33.63	0.45*	*Not Significant at 0.05 and 0.01 levels
		40 yrs. & above	340	103.50	34.69		
3	Marital status	Married	780	103.78	32.48	0.86*	*Not Significant at 0.05 and 0.01 levels
		Unmarried	220	105.95	33.29		
4	Teaching Experience	Less than 10 yrs	620	105.21	33.44	0.64*	*Not Significant at 0.05 and 0.01 levels
		10 yrs. & above	380	103.82	32.90		

## FINDINGS OF THE STUDY

On the basis of the analysis and interpretation of data, the researchers have arrived at the following findings and drawn the conclusions.

1. There is no significant difference in the perceptions of male and female teachers working in secondary schools towards integration of ICT in school curriculum.
2. There is no significant difference in the perceptions of teachers aged below 40 years and those aged 40 years and above towards integration of ICT in school curriculum.

3. There is no significant difference in the attitude of married and unmarried teachers working in secondary schools towards integration of ICT in school curriculum.
4. There is no significant difference in the perceptions of teachers working in secondary schools with a teaching experience of less than 10 years and those with an experience of 10 years and above towards integration of ICT in school curriculum.

## CONCLUSIONS

From the findings of the study, it is concluded that gender, age, marital status and length of service of the teachers working in secondary schools have no influence on their perceptions towards integration of ICT in school curriculum.

## EDUCATIONAL IMPLICATIONS

- (i) The present study helps to make the teachers realize the importance of integrating ICT in school curriculum and its effective use in the teaching-learning process.
- (ii) The opinions expressed by teachers towards the use of ICT tools in classroom teaching provide inspiration for the new entrants into the profession.
- (iii) The study would certainly help the administration to realize the need for providing orientation to the teachers by organizing a number of in-service training programmes on the effective use of ICT tools in classroom teaching.
- (iv) The study highlights the need for the integration of ICT in school curriculum for the benefit of the students in the digital world.
- (v) The teachers realize their role as 'facilitators' in guiding the students in the effective use of ICT tools in the classroom teaching.
- (vi) The study would help the Academic Organizations like SCERTs, IASEs and the State Departments of Education to take necessary steps to integrate ICT in school curriculum.

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