# **Review Of Research**

### **Abstract:-**

This research study mainly related to secondary school teachers attitude towards new technology in relation to their competency of ICT. Attitude towards using new technology scale of Rajasekar, S and ICT competency scale of Mudasiru, O and Modupe R, Balogun was administerd to a sample. The data was analyzed by using mean, standard deviation, coefficient of correlation and t-value.

The conclusions are there is no significant difference in the secondary school teachers attitude towards using new technology in teaching on the basis of gender. And also there is no significant difference in the secondary school teachers competency of ICT on the basis of gender. But there is significant relationship between secondary school teachers attitude towards using new technology in teaching and competency of ICT.

# **Keywords:**

Attitude, New Technology, Competency of ICT.



**Chandrakant Borase** 

Associate Professor in Education, College of Education, Nasik, Maharashtra State.



# SECONDARY SCHOOL TEACHERS ATTITUDE TOWARDS NEW TECHNOLOGY IN TEACHING IN RELATION TO THEIR COMPETENCY OF ICT



### **INTRODUCTION**

The introduction of new technology to the field of education has completely changed the conventional way of teaching-learning process by modifying and making the use of new technology in the field of education. It is essential that the secondary school teachers should understand adequately the dynamics and mechanism of educational technology and provide the best possible education to the students. Also the favorable of teachers towards using new technology in teaching will certainly make teachers use them in appropriate situations in teaching.

With favorable attitude, the secondary school teachers should also be the competent in handling the various ICT equipments for successful use of ICT and integration, secondary school teachers need to engage in conceptual change regarding their beliefs about the nature of learning, the role of the students, and their role as a teacher. Hence the successful integration of ICT into classroom largely depends on secondary school teacher's attitude and belief relating to these.

Attitude of secondary school teachers towards ICT affect teachers use of ICT equipments in the classroom.

Present research study focused mainly on studying secondary school teacher's attitude towards using new technology in teaching in relation to their competency of ICT in terms of basic computer operation, use of application software, use of internet and use of ICT equipments.

### SIGNIFICANCE OF THE RESEARCH STUDY

Attitude of secondary school teacher is crucial. Since it is a tendency which helps them to be favorable or unfavorable towards the use of modern and recent technology when they go for teaching. Present research study will help the secondary school teachers to understand the importance having the proper attitude towards new technologies.

With change in secondary school teacher's attitude, their use of the new technologies in teaching can also change and this can directly benefits to all students in the classroom.

Teachers should be highly competent in order to successfully integrate ICT in teaching. Knowledge about competency of ICT can help to secondary school teachers in finding out various strategies so as to increase the competencies of teachers in regard to ICT.

The outcomes of this research study will help the Head Masters of secondary schools to know the attitudes and competencies of teachers towards ICT and accordingly develop programmes to bring about a change in their negative attitude towards ICT and enhance the positive attitudes.

This will also be helpful to the Head Masters to have a secondary school in which ICT is frequently used due to which the students will be benefitted.

# STATEMENT OF THE RESEARCH PROBLEM

Secondary School Teachers Attitude towards New Technology in Teaching in relation to their Competency of ICT

# **OPERATIONAL DEFINITIONS OF TERMS**

- 1.Attitude: Attitude is a predisposition to respond to using new technology in teaching in a generally favorable or unfavorable way.
- 2. Attitude towards using new Technology: A complex mental state that affects teacher's behavior to respond positively or negatively towards hardware and software.
- 3. Competency of ICT: Is the ability to use digital technology, communication tools and networks as tools to research, organize, evaluate and communicate information in the field of education.

# OBJECTIVES OF THE RESEARCH STUDY

- 1. To study secondary school teachers attitude towards using new technology in teaching.
- 2. To study the competency of secondary school teachers in using ICT.
- 3.To study the relationship between teachers attitude towards using new technology in teaching and competency of ICT.

# **NULLHYPOTHESES:**

- 1. There is no significant difference in the secondary school teachers attitude towards using new technology in teaching on the basis of gender.
- 2. There is no significant difference in the secondary school teachers competency of ICT on the basis of gender.
- 3. There is no significant relationship between secondary school teachers attitude towards using new technology in teaching and competency of ICT.

### **DESIGN OF THE RESEARCH STUDY**

### Methodology

For collecting the data Descriptive Research method was used because as per the objectives of the present research study it is necessary to compare and correlate secondary school teacher's attitude towards using new technology in teaching in relation to their competency of ICT.

### Sample of the Study

were male teachers.

The sample consisted of 186 secondary school teachers from English Medium schools of Nasik. Of this 134 were female teachers and 52 were male teachers. secondary school teachers from English Medium schools of Nasik. Of this 134 were female teachers and 52

### Tools used for the study

### Tools used for the present research study

1.Attitude towards using new technology scale developed by Dr.Rajasekar S. The scale has 30 items, in all out of which 13 are positive items and 17 are negative items. The answers were rated on a five point scale and score ranged from 0 to 5

2.ICT Competency Scale developed by Dr. Mudasiru O, Yusuf and Modupe R Balgum

The scale consists 35 items. The answers were rated on five point scale and score ranged from 0 to 5

### **Testing of Hypotheses**

Hypothesis-1: There is no significant difference in the secondary school teacher's attitude towards using new technology in teaching on the basis of gender.

| Group  | N   | Mean  | S.D.  | t-value | Level of Significance |                 |
|--------|-----|-------|-------|---------|-----------------------|-----------------|
|        |     |       |       |         | 0.05                  | 0.01            |
| Female | 134 | 112.8 | 10.46 | 1.52    | Not Significant       | Not Significant |
| Male   | 52  | 110.3 | 9.29  | 1       |                       |                 |

For df= 184, the table t-value at 0.05 and 0.01 level of significance is 1.97 and 2.60 respectively. The calculated t-value is 1.52. The calculated t-value is less than the table t-values. Hence it is not significant at 0.05 and 0.01 level of significance. Therefore the null hypothesis is accepted. Hence it can be concluded that there is no significant difference in the secondary school teachers attitude towards using new technology in teaching on the basis of gender.

Hypothesis-2: There is no significant difference in the secondary school teacher's competency of the basis of gender.

| Group  | N   | Mean  | S.D.  | t-value | Level of significance |                 |  |
|--------|-----|-------|-------|---------|-----------------------|-----------------|--|
|        |     |       |       |         | 0.05                  | 0.01            |  |
| Female | 134 | 80.11 | 23.69 | 0.58    | Not Significant       | Not significant |  |
| Male   | 52  | 82.07 | 21.83 | 1       |                       |                 |  |

For df= 184, the table t-value at 0.05 and 0.01 level of significance is 1.97 and 2.60 respectively. The obtained t-value is 0.58. The obtained t-value is less than the table t-values. Hence it is not significant at 0.05 and 0.01 level of significance. Therefore the null hypothesis is accepted. Hence it can be concluded that there is no significant difference in the secondary school teachers competency of ICT on the basis of gender.

Hypothesis-3: There is no significant relationship between secondary school teachers attitude towards using new technology in teaching and competency of ICT.

| Variables                        | N   | Coefficient of  | Level of significance |       |
|----------------------------------|-----|-----------------|-----------------------|-------|
|                                  |     | Correlation (r) | 0.05                  | 0.01  |
| Secondary School Teachers        | 186 | 0.179           | 0.138                 | 0.181 |
| Attitude towards New             |     |                 | Significant           |       |
| Technology and Competency of ICT |     |                 | _                     |       |

Coefficient of correlation at 0.05 and 0.01 level of significance is 0.138 and 0.181 respectively. The obtained value of 'r' between secondary school teachers attitude towards using new technology and

competency of ICT is 0.179, which is positive, negligible in magnitude and significant at 0.05 level of significance, Therefore the null hypothesis is rejected.

### **FINDINGS:**

- 1. There is no significant difference in the secondary school teachers attitude towards using new technology in teaching on the basis of gender.
- 2. There is no significant difference in the secondary school teachers competency of ICT on the basis of gender.
- 3. There is significant relationship between secondary school teachers attitude towards using new technology in teaching and competency of ICT.

### **CONCLUSIONS:**

- 1.Male and female secondary school teachers are similar in their attitudes towards using new technology in teaching which indicates that both male and female secondary school teachers have similar perceptions towards using the various new hardware and software available to improve their teaching.
- 2.Male and female secondary school teachers are similar in their competency of ICT which indicates that both male and females have similar level that is moderate level of competence in basic computer operation and issues, use of application software, use of internet resources and use of ICT equipments for enhancing the teaching.
- 3.Secondary school teachers attitude towards using new technology in teaching and their competency of ICT is correlated. The obtained 'r' is positive which indicates that if the secondary school teacher competency of ICT is high they are likely to have a positive attitude towards making use of the new technologies and if the teachers competency is low then the attitude towards new technologies in teaching is negative.

### **EDUCATIONAL IMPLICATION**

Secondary school teachers both male and female teachers have neutral attitudes towards the use of hardware used in the classroom, its feasibility and also the impact it has on the students and remains unaffected by gender. Teachers are moderately competent in the use of ICT for teaching purposes and is unaffected by gender. But there is a significant relation between secondary school teachers attitude towards using new technology in teaching and their competency of ICT.

Secondary schools can frame new strategies, policies, arrange workshops for teachers and different practices for promoting the use of ICT in teaching and also mould the favorable secondary school teachers attitude towards ICT and also develop the high competencies of ICT among secondary school teachers.

# REFERENCES

- 1.Albrini, A. (2006). Teachers attitudes toward information and communication technologies: the case of Syrian EFL teachers. Computers and Education 47, 373-398
- 2.Best, J.W. and Kahn, J.V. (2007). Research in Education (9th ed.). New Delhi: Prentice-Hall of India Pvt. Ltd
- $3. Garrette, H.E.\ (2006).\ Statistics\ in\ Psychology\ and\ Education.\ Delhi:\ Surject\ Publications.$
- 4.Rajasekar,S. (2012).Manual for Attitude towards using new technology scale. Annamalai
- $5. Mudasiru, O\ and\ Modupe\ R, Balogun. (2011) Manual\ for\ ICT\ competency\ scale. Nigeria$